

माध्यमिक शिक्षा (कक्ष १२) को पाठ्यक्रममा आधारीत

विशिष्टीकरण तालिका

(नमुना प्रश्नपत्र समेत)

Test Specification Chart
(Including Sample Questions)



नेपाल सरकार

शिक्षा, विज्ञान तथा प्रविधि मन्त्रालय

पाठ्यक्रम विकास केन्द्र

सानोठिमी, भक्तपुर

माध्यमिक शिक्षा (कक्षा १२) को पाठ्यक्रममा आधारित

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ऐच्छिक विषयहरू

(Physics, लेखाविधि, नेपालको न्याय र कानून प्रणाली, Instructional Pedagogy and Evaluation, मनोविज्ञान, इतिहास, Biology, शिक्षा र विकास, भूगोल, Legal Drafting, समाजशास्त्र, व्यावसायिक अध्ययन, Chemistry, अर्थशास्त्र, मार्केटिङ, Civil and Criminal Justice, संस्कृति, अङ्ग्रेजी, साधारण गणित, Applied Mathematics, Business Mathematics, Library and Information Science, गृह विज्ञान, वातावरण विज्ञान, साधारण कानून, वित्तशास्त्र, Computer Science, सौन्दर्यकला, भाषा विज्ञान)

नेपाल सरकार

शिक्षा, विज्ञान तथा प्रविधि मन्त्रालय

पाठ्यक्रम विकास केन्द्र

सानोठिमी, भक्तपुर

CURRICULUM DEVELOPMENT CENTRE

प्रकाशक

नेपाल सरकार

शिक्षा, विज्ञान तथा प्रविधि मन्त्रालय

पाठ्यक्रम विकास केन्द्र

सानोठिमी, भक्तपुर

© पाठ्यक्रम विकास केन्द्र

यस सामग्रीको सर्वाधिकार यस केन्द्रमा सुरक्षित रहेको छ । लिखित स्वीकृतिबिना यसको पूरै वा आंशिक भाग हुबहु प्रकाशन गर्न, परिवर्तन गरेर प्रकाशन गर्न, कुनै विद्युतीय साधन वा अन्य प्रविधिबाट रेकर्ड गर्न र प्रतिलिपि निकाल्न पाइनेछैन ।

प्रथम संस्करण : २०७८ माघ

मूल्य :

हाम्रो भनाइ

विद्यार्थीको सर्वाङ्गीण विकासका लागि आवश्यक पर्ने ज्ञान, सिप र अभिवृत्ति, मूल्य र तत्परता विकासको विस्तृत योजना पाठ्यक्रम हो । पाठ्यक्रमको सही रूपमा कार्यान्वयन हुन सकेमा मात्र शिक्षाको गुणस्तर अभिवृद्धि गर्न सकिन्छ । पाठ्यक्रमले विषयगत विशिष्ट उद्देश्य, विषयवस्तु, शिक्षणसिकाइ क्रियाकलाप, शैक्षिक सामग्री, शिक्षण विधि र मूल्याङ्कन प्रक्रिया आदिको व्यवस्था गरेको हुन्छ । त्यसैले शिक्षण सिकाइ प्रक्रियालाई उद्देश्यपूर्ण र प्रभावकारी बनाउनका लागि शिक्षकले पाठ्यक्रमलाई मूल आधार वा माध्यम बनाउनुपर्दछ ।

सिकाइ सहजीकरण प्रक्रियालाई प्रभावकारी बनाउन उपयुक्त मूल्याङ्कन प्रणालीको प्रयोग आवश्यक हुन्छ । पाठ्यक्रमद्वारा निर्दिष्ट उद्देश्य केकति मात्रामा प्राप्त भए भएनन् भनेर सही रूपमा मूल्याङ्कन गर्न मूल्याङ्कन प्रक्रियालाई व्यवस्थित र वैज्ञानिक बनाउन आवश्यक हुन्छ । मूल्याङ्कन प्रक्रियालाई वस्तुनिष्ठ र उद्देश्यपूर्ण बनाउन विशिष्टीकरण तालिकाले महत्वपूर्ण सहयोग पुऱ्याएको हुन्छ । त्यसैले पाठ्यक्रमको सही रूपमा कार्यान्वयन होस् र मूल्याङ्कन प्रक्रिया अझ वस्तुनिष्ठ, विश्वसनीय र वैध हुन सकोस् भन्ने अभिप्रायले विशिष्टीकरण तालिका निर्माण गरिन्छ ।

विद्यालय तहका लागि राष्ट्रिय पाठ्यक्रम प्रारूप, २०७६ अनुसार निर्माण भएका माध्यमिक शिक्षा (कक्षा ११ र १२) पाठ्यक्रम, २०७७ शैक्षिक वर्ष २०७७ देखि कक्षा ११ र शैक्षिक वर्ष २०७८ देखि कक्षा १२ मा लागु भएका छन् । उक्त पाठ्यक्रमअनुसार विद्यार्थीको बाह्य मूल्याङ्कन गर्नका लागि कक्षा १२ मा पठनपाठन हुने ऐच्छिक विषयहरूको विशिष्टीकरण तालिका तयार पारी यस रूपमा प्रकाशन गरिएको हो । प्रस्तुत विशिष्टीकरण तालिकाको प्रयोगले परिमार्जित पाठ्यक्रमअनुसार लिइने परीक्षा विद्यार्थीका लागि सरल र सहज भई विद्यार्थीको सिकाइ उपलब्धि प्राप्त दरलाई अभिवृद्धि गर्न सहयोग पुऱ्याउने अपेक्षा गरिएको छ ।

यो विशिष्टीकरण तालिका र नमुना प्रश्नपत्र निर्माण गर्न विषयगत रूपमा शिक्षक तथा विशेषज्ञ सम्मिलित मस्यौदा कार्यदल गठन गरिएको थियो । मस्यौदा कार्यदलले तयार पारेको सामग्रीमाथि शिक्षकहरूको कार्यदलद्वारा थप परिमार्जन गरी सम्बन्धित विषय समिति र समन्वय तथा सम्पादन समितिमा छलफल गरी संशोधन तथा सुधार गरेपछि यस रूपमा तयार पारिएको हो । यहाँ राखिएका प्रश्न पाठ्यक्रमका आधारमा निर्मित नमुना प्रश्न मात्र हुन् । परीक्षा सञ्चालन विशिष्टीकरण तालिकामा फरक नपर्ने गरी अन्य प्रश्न निर्माण गरी प्रयोग गर्नु उपयुक्त हुन्छ । यसको निर्माण कार्यमा सहयोग पुऱ्याउने सम्बन्धित क्षेत्रका शिक्षक, यस केन्द्रका विशेषज्ञलगायत सम्बद्ध विषय समितिका महानुभावहरू एवम् सम्बन्धित सबै पक्षप्रति पाठ्यक्रम विकास केन्द्र हार्दिक धन्यवाद व्यक्त गर्दछ । यसमा कुनै कमी कमजोरी भए औँल्याई यसलाई अझ परिमार्जित र स्तरीय बनाउन सम्बद्ध सबैबाट रचनात्मक सुझावको अपेक्षा गरिएको छ ।

२०७८, माघ

पाठ्यक्रम विकास केन्द्र,
सानोठिमी, भक्तपुर

विषयसूची

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CURRICULUM DEVELOPMENT CENTRE

१. विशिष्टीकरण तालिका (Test Specification Chart) को परिचय

१.१ परिचय

शिक्षाका राष्ट्रिय उद्देश्य परिपूर्ति गर्ने महत्त्वपूर्ण साधन पाठ्यक्रम हो। पाठ्यक्रमको प्रभावकारी कार्यान्वयन हुन सकेमा मात्र शिक्षाको गुणस्तर अभिवृद्धि हुन सक्दछ। पाठ्यक्रमको सही रूपमा कार्यान्वयन गर्नका लागि प्रभावकारी सहजीकरण प्रक्रियाका साथै मूल्याङ्कन प्रणालीको विशेष भूमिका रहेको हुन्छ। तसर्थ पाठ्यक्रमको पूर्ण कार्यान्वयनमा मूल्याङ्कन प्रणाली प्रभावकारी हुनु जरुरी हुन्छ।

पाठ्यक्रमका निर्दिष्ट सक्षमता पूर्ति भए भएनन् भन्ने कुराको लेखाजोखा गर्ने प्रक्रिया मूल्याङ्कन हो भने मूल्याङ्कन प्रक्रियालाई योजनाबद्ध तथा प्रभावकारी बनाउने महत्त्वपूर्ण साधनमध्ये विशिष्टीकरण तालिका पनि एक हो। शिक्षाको गुणस्तर र प्रभावकारिता अभिवृद्धि गर्न मूल्याङ्कन प्रणालीमा सुधार गर्न अत्यावश्यक हुन्छ। मूल्याङ्कन प्रणालीमा सुधार गर्न पाठ्यक्रमका सम्पूर्ण पक्ष समेटेर मूल्याङ्कनका साधन निर्माण गरी मूल्याङ्कन प्रक्रिया सञ्चालन गर्नु अपरिहार्य हुन्छ। हाम्रो वर्तमान शैक्षिक प्रक्रियामा मूल्याङ्कनको अभिन्न अङ्गका रूपमा परीक्षालाई लिइने गरिएको परीक्षाका प्रश्नपत्र निर्माण गर्दा वैज्ञानिक आधार तय गरी प्रश्नपत्र निर्माण गर्नु आवश्यक छ। पाठ्यक्रमका उद्देश्य प्राप्त हुने गरी पाठ्यक्रमका सबै विषयवस्तु समेटेर पाठ्यक्रमद्वारा निर्दिष्ट मूल्याङ्कन प्रक्रिया अपनाई मूल्याङ्कनका साधनका रूपमा परीक्षालाई प्रयोगमा ल्याउन विशिष्टीकरण तालिकाको महत्त्वपूर्ण भूमिका रहेको हुन्छ। परीक्षा सञ्चालन गर्नुअगाडि प्रश्नपत्रहरू बनाउन कुन एकाइ वा पाठबाट कुन प्रकारको प्रश्न सोध्ने, कुन उद्देश्यको मूल्याङ्कन गर्न कस्तो प्रश्नपत्र तयार गर्ने, प्रश्नको अङ्कभार कति दिने, कुन प्रश्नलाई कति समय निर्धारण गर्ने जस्ता कुराहरू विचार गरेर प्रश्नपत्र निर्माण गर्नु आवश्यक हुन्छ। हरेक शिक्षकले परीक्षा सञ्चालन गर्नुअगाडि यिनै कुराहरू समावेश गरी तयार पारिने तालिकालाई नै विशिष्टीकरण तालिका भनिन्छ। यसरी उक्त तालिकामा पाठ्यक्रमका उद्देश्य, विषयवस्तु, अङ्कभार, समय आदिलाई ख्याल गरी कुन एकाइबाट कस्ता र कतिओटा प्रश्नहरू सोध्ने, कुन प्रश्न कति अङ्कको राख्ने, कुन प्रश्नलाई कति समय दिने, प्रश्नमा ज्ञान, सिप र उच्च क्षमतालाई कुनकुन प्रश्नबाट मूल्याङ्कन गर्ने जस्ता कुराहरू समावेश गरिएको हुन्छ। विशिष्टीकरण तालिकाकै अङ्गका रूपमा नमुना प्रश्नपत्र निर्माणकर्ता र उत्तरपुस्तिका परीक्षकका लागि एकप्रकारको मार्गदर्शन वा निर्देशिका पनि हो। त्यस्तै शिक्षकले शिक्षण प्रक्रिया सञ्चालन गर्दा पनि कुन विषयवस्तु, कसरी, कुनै उद्देश्य प्राप्तिका लागि गर्ने भन्ने मार्गनिर्देश पनि यस तालिकाले गर्दछ।

विशिष्टीकरण तालिकाले शिक्षक तथा प्रश्नपत्र निर्माणकर्तालाई प्रश्नपत्र बनाउँदा विषयवस्तुगत वैधता निर्धारण गर्न निर्देशित गर्दछ। यसमा पाठ्यक्रमको उद्देश्यअनुसार परीक्षा र मूल्याङ्कन प्रतिबिम्बित भएको हुन्छ। परीक्षाको स्तरीकरण, एकरूपता र वैधताका लागि विशिष्टीकरण तालिकाले महत्त्वपूर्ण भूमिका खेलेको हुन्छ। यसमा सिकाइका सम्पूर्ण पक्ष समेटिएको हुनुपर्छ। पाठ्यक्रमका सम्पूर्ण क्षेत्रबाट प्रश्न निर्माण गर्न सकिने गरी ज्ञान, बोध र अन्य तहका प्रश्नहरू निर्माण गर्न, प्रश्न सङ्ख्या, समय र अङ्क निर्धारण गर्न तथा मूल्याङ्कन गर्ने प्रक्रियासमेतलाई निर्धारण गर्ने हुँदा शिक्षणसिकाइ प्रक्रियामा यसको अहम् भूमिका रहेको हुन्छ।

कुनै पनि विषयको पाठ्यक्रमअनुसार विशिष्टीकरण तालिका फरकफरक ढङ्गले निर्माण गर्न सकिन्छ। त्यस्तै विषयको प्रकृति र स्वरूपअनुसार पनि विशिष्टीकरण तालिका निर्माण हुन सक्दछ। सामान्यतया विशिष्टीकरण तालिका निर्माण गर्दा निम्नलिखित कुराहरूमा विचार गर्न आवश्यक हुन्छ :

- (क) पाठ्यक्रमका सक्षमता र सिकाइ उपलब्धि
- (ख) विषयवस्तुका क्षेत्र वा सिकाइका विधाहरू
- (ग) सिकाइका विभिन्न तहहरू सम्झाइ, बुझाइ, प्रयोग, विश्लेषण, मूल्याङ्कन, सिर्जना आदि पक्षहरू
- (घ) पाठ्यक्रमद्वारा निर्दिष्ट पाठ्यघण्टा र विषयवस्तुको व्यापकता
- (ङ) परीक्षामा सोधिने प्रश्नका प्रकार, प्रश्नका स्तर, प्रश्नका सङ्ख्या, अङ्कभार र समय
- (च) प्रश्न निर्माणका लागि स्पष्ट मार्गनिर्देशन
- (छ) विशिष्टीकरण तालिकाअनुसारको नमुना प्रश्नपत्र निर्माण

१.२ प्रश्नपत्र निर्माण गर्दा प्रयोग हुने मुख्य क्रियापदहरू

प्रश्नपत्र निर्माण गर्दा प्रश्नलाई मापनीय, वस्तुगत, विश्वसनीय र वैध बनाउन धेरै कुरामा ध्यान पुऱ्याउन आवश्यक हुन्छ। त्यस्तै ज्ञान, बोध र अन्य तहका प्रश्नहरू निर्माण गर्न निश्चित क्रियापदहरूको प्रयोग गर्नुपर्दछ। प्रश्नपत्र निर्माण गर्दा कुन तहको प्रश्नमा कस्ता क्रियापद प्रयोग गर्न उपयुक्त हुन्छ भन्ने सामान्य जानकारीका लागि यहाँ केही क्रियाहरू उदाहरणस्वरूप प्रस्तुत गरिएको छ :

- (क) **संज्ञान तहका क्रियापदहरू** : ज्ञान तहका प्रश्नमा विषयवस्तुको ज्ञानलाई जोड दिइने हुनाले त्यसअनुरूपका क्रियापदहरू राखी प्रश्न निर्माण गर्नुपर्दछ । जस्तै: परिभाषा दिनु, पहिचान गर्नु, सूची तयार गर्नु, नाम दिनु, रेखाङ्कन गर्नु, उल्लेख गर्नु, चिन्नु, एकाइ बताउनु, सूत्र लेख्नु आदि ।
- (ख) **बोध तहका क्रियापदहरू** : कुनै पनि विषय अध्ययन गरेर, सुनेर वा पढेर बुझ्ने क्षमता वा सिप नै बोध गर्ने क्षमता पनि यसमा पर्दछ । तसर्थ यस खालको प्रश्नमा छुट्याउनु, देखाउनु, छान्नु, सूचित गर्नु, रूपान्तर गर्नु, उदाहरण दिनु, व्याख्या गर्नु, तुलना गर्नु, अर्थार्थानु, निष्कर्ष दिनु, सारांश तयार गर्नु, वर्गीकरण गर्नु जस्ता क्रियापद प्रयोग गरी प्रश्न निर्माण गर्नुपर्दछ ।
- (ग) **प्रयोग तहका क्रियापदहरू** सिकेका ज्ञान, सिपलाई परिचित र नयाँ अवस्थामा प्रयोग गर्ने खालका सक्षमता मापन गर्ने कार्य यस तहमा गरिन्छ । यस तहमा सामान्य ज्ञान र बुझ्नेभन्दा उच्च दक्षता र क्षमताको परीक्षण गरिने हुनाले त्यस्तै खालका क्रियापदहरू प्रश्नपत्रमा प्रयोग गरिनुपर्दछ । जस्तै: परिवर्तन गर्नु, प्रदर्शन गर्नु, तयार गर्नु, सम्बन्ध देखाउनु, समाधान गर्नु, छनोट गर्नु, चित्र बनाउनु आदि ।
- (ग) **उच्च दक्षता तहका क्रियापदहरू** : उच्च दक्षताअन्तर्गत विश्लेषण, मूल्यांकन र सिर्जनासँग सम्बन्धित पक्षहरू पर्दछन् । यस तहका दक्षताको लागि तथ्य र आधारमा विश्लेषण र विभेद छुट्याउनु, संगठन गर्नु, सबलता तथा दुर्बलता अर्थात् गुण दोस छुट्याउनु, तर्क दिनु, विवेचना गर्नु, समीक्षा गर्नु, पुष्टि गर्नु, मूल्याङ्कन गर्नु, छलफल गर्नु, रचना गर्नु, समालोचना गर्नु, प्रमाणित गर्नु, सुझाव दिनु, सिफारिस गर्नु, योजना तथा ढाँचा तयार गर्नु, विचार प्रस्तुत गर्नु, सिर्जना गर्नु आदि क्रियापदहरू प्रयोग गर्न सकिन्छ ।

१.३ विशिष्टीकरण तालिकाको प्रयोग

वर्तमान मूल्याङ्कन प्रक्रियामा सुधार गरी पाठ्यक्रमको मूल्याङ्कन प्रक्रियाअनुरूप विशिष्टीकरण तालिका निर्माण गर्ने, विशिष्टीकरण तालिकाअनुसार नमुना प्रश्नपत्र बनाई परीक्षा सञ्चालन गर्ने र तदनुरूप शिक्षक तथा विद्यार्थीहरूमा यसको प्रयोग गर्ने बानी विकास गर्नु आवश्यक छ । पाठ्यक्रमले निर्धारण गरेका सक्षमता तथा सिकाइ उपलब्धि पूरा गर्नका लागि विशिष्टीकरण तालिकाको निर्माण गरी सम्पूर्ण पक्षलाई समेट्ने गरी प्रश्नपत्र तयार गरी सोअनुसार परीक्षा सञ्चालन एवम् परीक्षण र पृष्ठपोषण गर्न अत्यावश्यक भएकाले यसको महत्त्वपूर्ण भूमिका रहेको छ । मूलतः विशिष्टीकरण तालिकाको प्रयोग निम्नलिखित कार्यका लागि गर्न सकिन्छ :

(क) **शैक्षणिक योजना निर्माण गर्न** : हरेक प्रकारका शैक्षणिक योजना निर्माण गर्न विशिष्टीकरण तालिकाले सहयोग पुऱ्याउँछ । विद्यार्थीहरूका सिकाइउपलब्धि मापन गर्न आवश्यक मूल्याङ्कन सामग्री कस्तो खालको, कति भारको हुने र प्रश्न सङ्ख्या जस्ता कुराहरू अध्यापन योजनामा राख्न सहयोग पुग्ने हुँदा मूल्याङ्कनको अभिन्न अङ्गका रूपमा योजना निर्माणमा विशिष्टीकरण तालिकाको प्रयोग गर्नुपर्दछ ।

(ख) **उपयुक्त प्रश्नपत्रको निर्माण गर्न** : एक निश्चित समयावधिभित्र पाठ्यक्रम वा उद्देश्यअनुरूप विद्यार्थीहरूका सिकाइउपलब्धि मूल्याङ्कन गर्न सिकाइका तहअनुरूप प्रश्नहरूका निश्चित प्रकार र सङ्ख्या, अङ्कभार, समय आदि यसमा राखिने हुँदा प्रश्नपत्र निर्माण गर्न यसले मार्गदर्शन गर्छ । तसर्थ मूल्याङ्कनलाई प्रभावकारी रूपमा प्रयोग गर्न यसले सघाउँछ ।

(ग) **विद्यार्थीहरूको सिकाइमा अभिवृद्धि गर्न** : यस तालिकामा सिकाइका कुनकुन तहहरूलाई मापन गर्ने र हरेक तहका सिकाइलाई कति भार दिने भन्ने जस्ता कुराहरू राखिएको हुन्छ । तसर्थ शिक्षणसिकाइ क्रियाकलापमा यी कुराहरूलाई सामञ्जस्य कायम गराउन सकिनेमा विद्यार्थीको सिकाइमा अभिवृद्धि हुन जान्छ । यस तालिकामा ज्ञान, बोध, व्यावहारिक सिप तथा उच्च दक्षता मापन गर्ने गरी प्रश्नहरू तहअनुसार निर्माण गर्ने प्रक्रिया उल्लेख हुने हुनाले पनि यस तालिकाको प्रयोग सही रूपमा भएमा विद्यार्थीको सिकाइ अभिवृद्धिमा सहयोग पुग्न जान्छ ।

१.४ विद्यार्थी मूल्याङ्कन प्रक्रिया

विद्यालय तहमा विद्यार्थी उपलब्धि मूल्याङ्कनका लागि निर्माणात्मक मूल्याङ्कन प्रक्रिया अवलम्बन गरी सिकाइ सुधारका लागि निरन्तर पृष्ठपोषण प्रदान गरिनुका साथै निर्णयात्मक मूल्याङ्कन प्रक्रियालाई अवलम्बन गरी विद्यार्थीको सिकाइस्तर निर्धारण गर्नुपर्छ ।

(क) आन्तरिक मूल्याङ्कन

(अ) आन्तरिक मूल्याङ्कन निर्माणात्मक मूल्याङ्कनका रूपमा सम्पन्न गर्नुपर्ने छ । निर्माणात्मक मूल्याङ्कनको मुख्य उद्देश्य विद्यार्थीहरूको सिकाइ स्तरमा सुधार गर्नु हो । यसका लागि शिक्षकले विद्यार्थीको व्यक्तिगत सिकाइ उपलब्धिका आधारमा पटक पटक सिकाइ अवसर प्रदान गर्नुपर्ने छ । विद्यालय तहको निर्माणात्मक मूल्याङ्कनमा कक्षागत सिकाइ सहजीकरणको अभिन्न अङ्गका रूपमा गृहकार्य, कक्षाकार्य, प्रयोगात्मक तथा परियोजना कार्य, सामुदायिक कार्य, अतिरिक्त क्रियाकलाप, एकाइ परीक्षा, मासिक तथा

त्रैमासिक परीक्षा जस्ता मूल्याङ्कनका साधनहरूको प्रयोग गर्न सकिने छ । यस्तो मूल्याङ्कनमा विद्यार्थीको अभिलेख राखी सिकाइ अवस्था यकिन गरी सुधारात्मक तथा उपचारात्मक सिकाइबाट सुधार गर्ने पक्षमा जोड दिइने छ । विशेष सिकाइ आवश्यकता भएका विद्यार्थीका लागि विषय शिक्षकले नै उपयुक्त प्रक्रिया अपनाई मूल्याङ्कन गर्नुपर्ने छ ।

निर्माणात्मक मूल्याङ्कनको नतिजालाई अभिलेखीकरण गरी विषयगत पाठ्यक्रममा तोकिएअनुसार निश्चित भार आन्तरिक मूल्याङ्कनका रूपमा निर्णयात्मक मूल्याङ्कनमा समावेश गरिने छ ।

(आ) प्रत्येक अनिवार्य तथा ऐच्छिक विषयमा विद्यालयले प्रयोगात्मक/व्यावहारिक अभ्यास गराउनुपर्ने छ । यस्तो अभ्यासमा विषयको प्रकृतिअनुसार प्रयोगात्मक कार्य, परियोजना कार्य, सामुदायिक कार्य, प्रस्तुतीकरण, खोज, इन्टर्नेसिप, अतिरिक्त कार्यकलाप, खेलकुद, गायन आदि कार्य गराउन सकिने छ । तर सम्बन्धित विषयको पाठ्यक्रमले तोकेअनुसारको प्रयोगात्मक अभ्यास गराउनुपर्ने छ ।

(ख) **निर्णयात्मक मूल्याङ्कन** : माध्यमिक तह (कक्षा ११ र १२) मा निम्नानुसार निर्णयात्मक मूल्याङ्कन गर्नुपर्ने छ :

(अ) निर्माणात्मक मूल्याङ्कनबाट प्राप्त नतिजाका आधारमा आन्तरिक मूल्याङ्कनको र अन्तिम/बाह्य परीक्षाको नतिजाका आधारमा तोकिएको भार समावेश गरी विद्यार्थीको निर्णयात्मक मूल्याङ्कन गरिने छ ।

(आ) आन्तरिक मूल्याङ्कनका रूपमा निर्माणात्मक मूल्याङ्कनबाट प्राप्त विषयगत पाठ्यक्रममा तोकिएअनुसारको भारको मूल्याङ्कन निर्णयात्मक मूल्याङ्कनमा समावेश गरिने छ । आन्तरिक मूल्याङ्कनका तरिकामा विषयगत विविधता हुन सक्ने भए पनि निम्नलिखित पक्षको मूल्याङ्कन सबै विषयमा समावेश हुने छ :

● **कक्षा सहभागिताको मूल्याङ्कन** : विद्यार्थीको नियमितता (उपस्थिति) र कक्षा क्रियाकलापमा सहभागिताको अभिलेखका आधारमा गरिएको मूल्याङ्कन ।

● **त्रैमासिक परीक्षाहरूका अङ्कका आधारमा प्राप्त अङ्क** : पहिलो त्रैमासिक अवधिभरमा पठनपाठन भएका विषयवस्तुबाट पहिलो त्रैमासिक परीक्षा सञ्चालन गरिने छ भने पहिलो र दोस्रो त्रैमासिक अवधिभरमा पठनपाठन भएका विषयवस्तुबाट दोस्रो त्रैमासिक परीक्षा सञ्चालन गरिने छ ।

● **प्रयोगात्मक तथा परियोजना कार्यको मूल्याङ्कन**

● **विषयगत पाठ्यक्रममा तोकिएअनुसारका अन्य आधारहरू**

(इ) कक्षा ११ र १२ मा विषयगत पाठ्यक्रममा तोकिएअनुसारको भारको बाह्य परीक्षा हुने छ । बाह्य परीक्षा सैद्धान्तिक वा सैद्धान्तिक र प्रयोगात्मक दुवै हुन सक्ने छ । सैद्धान्तिक र प्रयोगात्मक दुवै मूल्याङ्कनको छुट्टाछुट्टै श्रेणीकरण गरिने छ ।

(ई) प्रयोगात्मक, सैद्धान्तिक तथा अन्य पक्षको मूल्याङ्कनको भार, विधि तथा साधन सम्बन्धित विषयको पाठ्यक्रममा उल्लेख भएअनुसार हुनुपर्ने छ । सैद्धान्तिक पक्षको मूल्याङ्कनका लागि विशिष्टीकरण तालिका निर्माण गरिने छ । सैद्धान्तिक मूल्याङ्कनका लागि ७५ प्रतिशत भार हुने विषयमा ३ घण्टा र ५० प्रतिशत भार हुने विषयमा २ घण्टा समय निर्धारण गरिने छ ।

(उ) परीक्षामा विशेष सिकाइ आवश्यकता भएका विद्यार्थीहरूलाई केही खास खास विषयहरूमा अरू साधारण विद्यार्थीहरूलाई दिइने प्रश्नभन्दा अलग प्रश्न बनाई मूल्याङ्कन गर्नुपर्ने छ । विशेष आवश्यकता भएका विद्यार्थीका लागि परीक्षाको समय थप गर्न सकिने छ । विद्यार्थी मूल्याङ्कन गर्दा शिक्षकले अपाङ्गता भएका र विशेष सिकाइ आवश्यकता भएका विद्यार्थीहरूका लागि उपयुक्त हुने मूल्याङ्कन प्रक्रिया अपनाउनुपर्ने छ ।

(ऊ) विद्यार्थीको स्तर निर्धारण (Grading) अक्षराङ्कन पद्धतिबाट हुने छ ।

२. भौतिक विज्ञान (Physics)

Test Specification Chart 2078

Grade : 12

Subject : Physics Theory (Phy. 102)

SN	Content Area	Working hour	Competency level																Unit wise Marks						
			Remembering				Understanding				Applying				Higher Ability										
			M CQ		SA Q		M CQ		SA Q		LA Q		M CQ		SA Q		LA Q								
			No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks							
1	Mechanics	22																	13						
2	Heat and Thermodynamics	12																	7						
3	Wave and Optics	26	2	2	2	10	5	5	1	5	1	8	3	1	2	10	1	8	1	1	3	15	1	8	15
4	Electricity and Magnetism	35																					21		
5	Modern Physics	33																					19		
Total Marks		128	12				18				21				24				75						

Item format plan						
S.N.	Type of item	Score per item	Total item	Total score	Time	
1	Multiple Choice Questions	1	11	11	25 minutes	
2	Short Question Answer	5	8	40	155 minutes	
3	Long Question Answer	8	3	24		
Grand Total			22	75	3 hours	

Remarks:

- Item format in composite should be met as per the specification grid.
- Designated weightage in the combined cell should be met, but ± 3 marks variation will be allowed within a unit/content area. But no unit can be nil.
- In the case of SAQ and LAQ, these should ensure that 1 mark will be assigned per element expected as correct response.
- The distribution of cognitive domain of questions should be nearly 15% knowledge/remembering, 25% understanding, 30% applying and 30% higher ability level, but ± 5 percent variation will be allowed in overall question set.
- SAQ and LAQ can be structured (have two or more sub-items). SAQ and LAQ can be distributed to two or more cognitive behaviors.
- In such case these will be added to their respective cognitive behavior. In sum the distribution of cognitive behavior should be approximately to the required distribution. In case of SAQ there will be 2 "OR" questions and in case of LAQ there will be 2 "OR" question.

Model Question
School Leaving Certificate Examination

2078

Grade: XII

Subject: Physics

Subject Code: 102

Full marks: 75 (11 marks Obj+ 64 marks Sub)

Time: 3 Hours

Group A: Multiple Choice Questions (11×1 = 11)

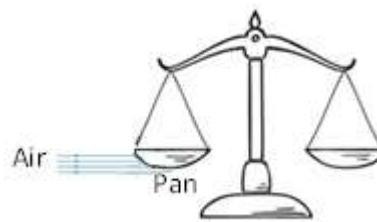
Time 25 Minutes

Tick the correct answer.

1. Which of the following is a correct formula for calculating radius of gyration of a rotating object?

- A) $k^2 = I/m$ B) $k = I/m$ C) $k = m/I$ D) $k = (I/m)^2$

2. A horizontal stream of air is blown under one of the pans balance as shown in the figure. What will be the effect on the pan?



of a beam
of this on the

- A) goes up. B) goes down C) remains unaffected D) rotates

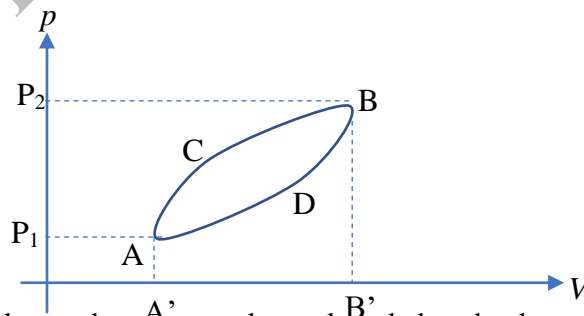
3. What will be the height of a capillary on the surface of the Moon if it is 'h' on Earth?

- A) h B) h/6 C) 6h D) zero

4. What is the coefficient of performance of an ideal refrigerator working between ice point and room temperature (27°C)?

- A) 0 B) 0.1 C) 1 D) 10

5. A thermodynamic system is taken from A to B via C and then returned to A via D as shown in the p-V diagram.



The area of which segment of the graph represents the total work done by the system?

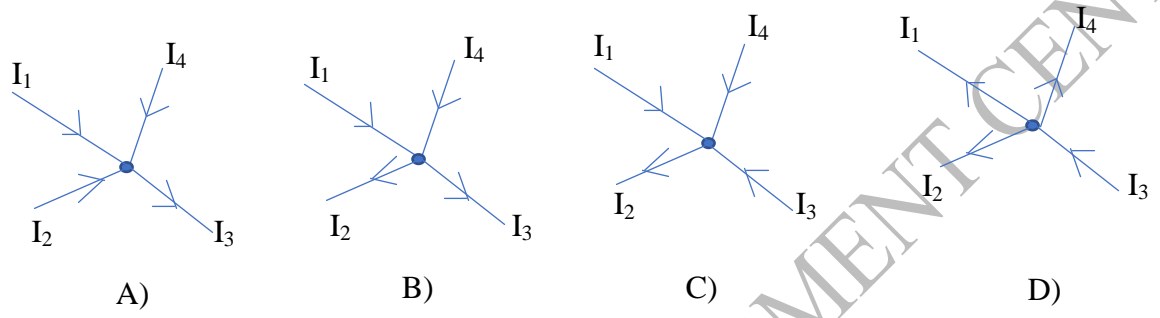
- A) P₁ACBP₂P₁ B) ACBB'A'A C) ACBDA D) ADBB'A'A

6. Which one of the following directly affects the quality of sound?

- A) shape of the source B) frequency C) intensity D) wave form

7. A diffraction pattern is obtained using a beam of red light. What will be the effect on the diffraction pattern if the red light is replaced with white light?
- A) All bright fringes become white.
 - B) All bright fringes, except the central one, become white.
 - C) All bright fringes become colourful.
 - D) All bright fringes, except the central one, become colourful.

8. In which one of the following diagrams the currents are related by the equation $I_1 - I_2 = I_3 - I_4$?



9. A coil having N turns and cross-section area A carries current I . Which physical quantity does the product NIA represent?
- A) magnetic flux of the coil
 - B) magnetic flux density of the coil
 - C) magnetic moment of the coil
 - D) magnetic susceptibility of the coil
10. What happens to the neutral temperature if the cold junction of a thermocouple is decreased?
- A) increases
 - B) decreases
 - C) remains the same
 - D) approaches inversion temperature
11. What is the point where the seismic waves start called?
- A) epicentre
 - B) hypocentre
 - C) metacentre
 - D) seismic centre

Model Question

School Leaving Certificate Examination

2078

Grade: XII

Subject: Physics

Subject Code: 102

Full marks: 75 (11 marks Obj+ 64 marks Sub)

Time: 3 Hours

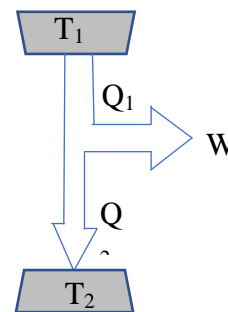
Attempt all the questions.

Group B: Short Answer Questions (8×5 = 40)

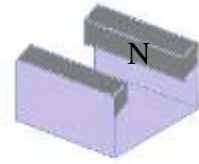
- (i) Define 'surface tension'. [1]
(ii) Establish a relation between surface tension and surface energy of a liquid. [2]
(iii) Two spherical rain drops of equal size are falling vertically through air with a certain terminal velocity. If these two drops were to coalesce to form a single drop and fall with a new terminal velocity, explain how the terminal velocity of the new drop compares to the original terminal velocity. [2]
- Angular speed of a rotating body is inversely proportional to its moment of inertia.
(i) Define 'moment of inertia'. [1]
(ii) Explain why angular velocity of the Earth increases when it comes closer to the Sun in its orbit. [2]
(iii) If the Earth were to shrink suddenly, what would happen to the length of the day? Give reason. [2]

OR

- (i) State Bernoulli principle. [1]
(ii) Derive Bernoulli's equation. [2]
(iii) You can squirt water from a garden hose a considerably greater distance by partially covering the opening with your thumb. Explain how this works. [2]
- (i) Define 'harmonics' in music. [1]
(ii) Calculate the frequency of a monotonous sound produced by a 30 cm long flute open at both ends and being played in the first harmonic. [Velocity of sound in air = 330 ms^{-1}] [2]
(iii) The flute mentioned in question (ii) was being played by a passenger on a stationary bus. The bus then moves uniformly. Explain what change in the pitch of the flute sound, if any, a person sitting on a bench at the bus park will feel when the bus starts moving. [2]
- (i) State the second law of thermodynamics. [1]
(ii) A refrigerator transfers heat from a cold body to hot body. Does this not violate the second law of thermodynamics? Give reason. [2]
(iii) In the given figure, a heat engine absorbs Q_1 amount of heat from a source at temperature T_1 and rejects Q_2 amount of heat to a sink at temperature T_2 doing some external work W .
(a) Obtain an expression for the efficiency of this heat engine. [1]
(b) Under what condition does the efficiency of such engine become zero percentage, if at all? [1]



5. A student wants to measure the magnetic flux density between the poles of two weak bar magnets mounted on a steel yoke as shown in the figure. The magnitude of the flux density is between 0.02T and 0.04T.



(i) Define Magnetic flux density. [1]

(ii) One way of measuring the magnetic flux density could be the use of a Hall probe.

Suggest one reason why Hall probe is not a suitable instrument to measure the magnetic flux density for the arrangement shown in the above figure. [1]

(iii) Another method of measuring the magnetic flux density for the arrangement shown in the above figure is to insert a current-carrying wire between the poles of the magnet. Explain how the magnetic flux density can be determined using this method. You are allowed to use any additional apparatus. [3]

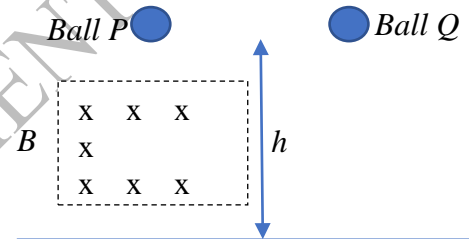
6. (a) Law of electromagnetic induction can be expressed mathematically as $\epsilon = -N \frac{d\phi}{dt}$.

(b) (i) State what the symbols ϵ and $\frac{d\phi}{dt}$ represent in the equation. [2]

(ii) Explain the significance of the negative sign. [1]

(iii) Two identical copper balls are dropped from the same height as shown in the figure. Ball P passes through a region of uniform horizontal magnetic field of flux density B .

Explain why ball P takes longer than ball Q to reach the ground. [2]



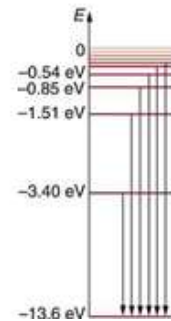
7. Ultraviolet radiation of frequency 1.5×10^{15} Hz is incident on the surface of an aluminium plate whose work function is 6.6×10^{-19} J.

(i) Show that the maximum speed of the electrons emitted from the surface of the aluminium is 8.6×10^5 ms⁻¹. [3]

(ii) State and explain what change, if any, occurs to the maximum speed of the emitted electrons when the intensity of the ultraviolet radiation is increased. [2]

8. (i) State Bohr's postulates of atomic model. [3]

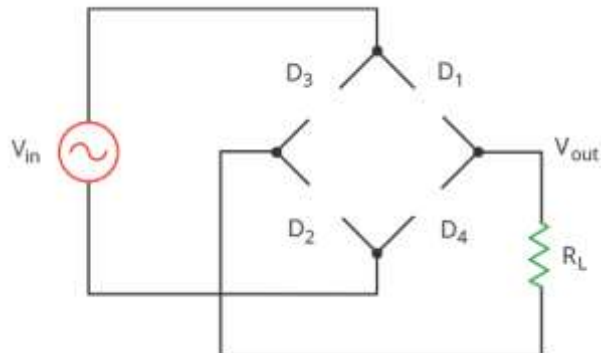
(ii) The figure shows Lyman series of energy transmission in hydrogen atom. Calculate the frequency of a photon emitted by an electron jumping from the second excited state to the ground level. [2]



OR

(i) Sketch the symbol of a p-n junction diode and indicate the polarity of its ends. [1]

(ii) Copy the outline of a diode bridge rectifier and complete it by adding diodes in the gaps. [2]



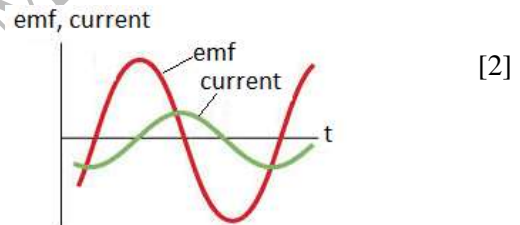
- (ii) Explain what will happen if one of the four diodes is damaged so that it stops conducting totally in any direction. Sketch a graph to show how the pd across the Load R_L would vary with time in this situation. [2]

Section C: Long Answer Questions. (3 × 8 = 24)

9. Earthquake sets rocks and buildings in motion. When a rock is subjected to compression, a restoring force develops inside it. This restoring force is given by an equation $F = -Ax$ where x is displacement and A is a constant.

- (i) Prove that this force will make the rock vibrate with simple harmonic motion. [2]
 (ii) Show that the speed of an object undergoing simple harmonic motion is given by the expression $v = \pm \omega \sqrt{(A^2 - x^2)}$ where the symbols carry standard meanings. [2]
 (iii) Calculate the maximum speed of a building shaken by S-waves of 21Hz and amplitude 0.05m. [2]
 (iv) Explain why tall buildings are more susceptible to damage by S-waves which generally have low frequency. [2]

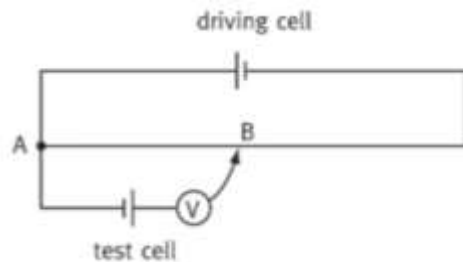
10. The figure below shows the variation of emf and current with time in a typical LRC circuit.



- (i) Explain whether the phase constant is positive or negative. [2]
 (ii) Sketch a phasor diagram for the given case. [2]
 (iii) Is the circuit more inductive or capacitive? Explain. [2]
 (iv) To increase the rate at which energy is transferred to the load, should the inductance be increased or decreased? Justify your answer. [2]

OR

A student sets up a circuit as shown in the figure given below to measure the emf of a test cell.



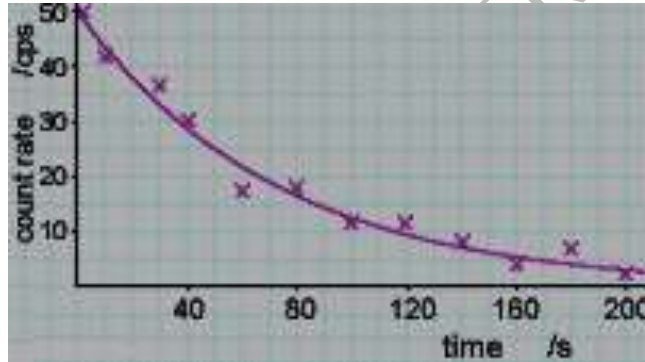
- (a) Explain why he is unable to find a balance point and state the change he must make in order to achieve the balance. [2]
 (b) State how he would recognize the balance point. [1]
 (c) He obtained the balance point for distance 37.5cm using standard cell of emf 1.50V. And for the test cell, the balance distance AB was 25.0 cm. Calculate the emf of the test cell. [2]
 (d) He could have used an ordinary voltmeter to measure the emf of the test cell directly. The student, however, argues that the above instrument is more precise than an ordinary voltmeter. Justify his logic. [2]
11. (a) Explain what is meant by quantization of charge. [2]
 (b) In a Millikan's oil drop experiment, an oil drop of weight $1.5 \times 10^{-14}N$ is held stationary between plates 10mm apart by applying a p.d. of 470V between the plates.

- (i) State the condition necessary for the drop to remain stationary. Also, sketch the forces acting on the oil drop. [2]
- (ii) Calculate the charge on the oil-drop. [2]
- (iii) Explain what would happen if the above oil drop is suddenly struck by a stray alpha particle. [2]

OR

(a) Derive an expression $N = N_0 e^{-\lambda t}$ for a radioactive process where the symbols carry their standard meanings. [3]

(b) A student measured the activity of a sample of radioactive rock. Her results are presented in the graph.



- (i) Explain why the data are scattered. [1]
- (ii) Determine the half-life of this sample. [2]
- (iii) How will the shape of this curve will change if she repeats the experiment with a sample with a larger decay constant. Give reason to your answer. [2]

Appendix

Text Matrix

Area	Load	MCQ	SA	LA
Mechanics	13	3	2	0
Heat and thermodynamics	7	2	1	0
Waves and optics	15	2	1	1
Electricity and magnetism	21	3	2	1
Modern physics	19	1	2	1

Section A	Question	K	U	A	HA
	1	1			
	2		1		
	3			1	
	4			1	
	5		1		
	6		1		
	7				1
	8			1	
	9		1		
	10		1		
	11	1			
	Total	2	5	3	1

	Question No	K	U	A	HA
Section B	1	1	2		2
	2	1		2	2
	2	1		2	2
	4	1	2	1	1
	5	1			4
	6	2	1		2
	7			3	2
	8	3		2	
		10	5	10	15
Section C	Question	K	U	A	H
	9			4	4
	10		4	2	2
	11		4	2	2
		0	8	8	8

Note: This is the test matrix prepared for this set only but for other sets of questions test matrix may be varied.

CURRICULUM DEVELOPMENT CENTRE

३. लेखाविधि (Accounting)

लेखाविधि [Acc.104]

पूर्णाङ्क: ७५

कक्षा: १२

समय: ३ घण्टा

विशिष्टिकरण तालिका

भाग १	सैद्धान्तिक तथा अभ्यास													कूल पाठ्यभार		
	विषय क्षेत्र	उपक्षेत्र	प्रश्न संख्या र संज्ञान					अंक विभाजन					उपक्षेत्रगत भार			
			अति प्रश्न (ज्ञान र बोध तह)	छोटो प्रश्न (बोध र प्रयोग तह)	छोटो प्रश्न (बोध र प्रयोग तह)	लामो प्रश्न (प्रयोग र उच्च दक्षता तह)	जम्मा	अति प्रश्न	छोटो प्रश्न	छोटो प्रश्न	लामो प्रश्न	जम्मा				
Th	Nr	Th	Nr	Th	Nr	Th	Nr	Th	Nr	Th	Nr					
१. कर्पोरेट लेखाविधि	१. कर्पोरेट अवधारणा												६	१९		
	२. सेयरको लेखाविधि	२						४	२		५+२+		१२		८	
	३. ऋणपत्रको लेखाविधि			२							३				५	
२. वित्तीय विवरणहरू	४. अन्तिम खाता परम्परागत											८	२४	५०		
	५. अन्तिम खाता आधुनिक	१	२		२		१	७	१	२	१०		२९		८	
	६. कार्य विवरण														१८	
	७. नगद प्रवाह विवरण						१					८				
३. लागत लेखाविधि	८. लागत लेखाविधि अवधारणा								२		५		४	४१		
	९. लागत अवधारणा तथा उपरिव्यय	२		१				९					२			
	१०. सामग्री तथा सामग्री नियन्त्रण लेखाविधि	१	१	१					१	१	२+३		१०			
	११. श्रम लेखाविधि			१					१				४			
	१२. लागत हिसाब मिलान विवरण	१									२+३		५			
	१३. लागत विवरण					१						८	१६			
४. लेखाविधीमा कम्प्युटर	१४. लेखाविधीमा कम्प्युटर प्रणाली	१		१				२	१		५		६	१०	१०	
जम्मा		८	३	८			३	२२	८	३	४०		२४	७५	१२०	१२०
भाग २	परियोजना कार्य												२५		४०	
जम्मा													१००		१६०	

Note:

Th=Theory;

Nr

=

Numerical

द्रष्टव्य :

१. अति छोटो प्रश्न १ अङ्कको हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन् ।
२. छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् साथै कुनै दुई प्रश्नमा विकल्प दिन सकिने छ ।
३. लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् साथै कुनै एक प्रश्नमा विकल्प दिन सकिने छ ।
४. ज्ञान तहमा पूर्णाङ्कका २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकता अनुसार प्रश्न रहने छन् ।
५. सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्च दक्षता अन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहने छन् ।

प्रश्नका प्रकार

प्रश्नका प्रकार	सोधिने सङ्ख्या	पूर्णाङ्क
अति सङ्क्षिप्त प्रश्न	११	११
छोटो उत्तर आउने प्रश्न	८	४०
लामो उत्तर आउने प्रश्न	३	२४
जम्मा	२२	७५

लेखाविधि (Accounting) [Acc.104]

कक्षा (Grade): XII
समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।
(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् (Attempt All Questions)

(11 × 1 = 11)

- सार्वजनिक कम्पनीका कुनै दुई विशेषता लेख्नुहोस् । (Write any two features of public company.)
- अधिकृत पूँजी भन्नाले के बुझ्नुहुन्छ ? (What do you mean by authorized capital?)
- वित्तीय विवरणको अर्थ लेख्नुहोस् । (Write the meaning of financial statement.)
- प्रक्रिया लागत विधि भनेको के हो ? (What is process costing?)
- उपरिव्यय बाँडफाँडको अर्थ लेख्नुहोस् । (Write the meaning of allocation of overhead.)
- भण्डारेका कुनै दुई कर्तव्य उल्लेख गर्नुहोस् । (List out any two duties of store-keeper.)
- समय ज्यालादर प्रणाली भनेको के हो ? (What is time rate wage system?)
- लेखाविधिमा कम्प्युटर प्रणालीको कुनै दुई सीमा उल्लेख गर्नुहोस् । (State any two limitations of computer system in accounting.)
- अग्रिम बीमा रु. २,००० खर्च भएको समायोजन प्रविष्टि तयार पार्नुहोस् । (Prepare adjustment entry of prepaid insurance expired Rs. 2,000.)
- तल दिइएका सूचनाका आधारमा अप्रत्यक्ष विधिबाट संचालन क्रियाकलापको नगद प्रवाह निकाल्नुहोस् । (From the following information calculate cash flow from operating activities under indirect method.)
खुद आमदानी (Net income): Rs. 40,000
चाँलु सम्पत्तिमा वृद्धि (Increase in current assets): Rs. 5,000
गैर सञ्चालन खर्च (Non-operating expenses) Rs. 10,000
- यदि वार्षिक परिमाण १,००,००० एकाइ र आदर्श आदेश परिमाण २०,००० एकाइ भए आदेश संख्या पत्ता लगाउनुहोस् । (If annual requirements is 1,00,000 units and economic order quantity 20,000 units then find out number of order.)

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(8 × 5 = 40)

12. कुनै एक कम्पनीले ५% प्रिमियममा रु. १०० दरका ६,००० कित्ता सेयर जारी गर्‍यो । भुक्तानी निम्नानुसार हुने छ (A company issued 6,000 shares of Rs 100 each at 5% premium. The money was payable as follows):

आवेदनमा (On application)Rs 30

बाँडफाँटमा (On allotment).....Rs 50

प्रथम तथा अन्तिम किस्तामा (On first and final call).....Rs.25

१०,००० कित्ता सेयरका लागी आवेदन प्राप्त भयो । सबै आवेदकलाई समानुपातिक दरमा सेयर बाँडफाँड गरियो । आवेदनमा बढी भुक्तानी प्राप्त रकम बाँडफाँटमा प्रयोग गरियो । सबै किस्ताको रकम माग गरियो र प्राप्त भयो । (Application were received for 10,000 shares. Share were allotted on pro rata basis. Excess application

money were utilized towards the money due on allotment. All calls were duly made and received)

तयार पार्नुहोस् (Required): जर्नल प्रविष्टि (Journal entry for) (1.5+2+1.5=5)

- क. सेयर आवेदन (Share application)
ख. सेयर बाँडफाँट (Share allotment)
ग. प्रथम र अन्तिम किस्ता (Share first and final call)

अथवा(or),

रु १०० प्रतिकिस्ता मूल्य भएको ५% छुटमा जारी गरेको सेयर मध्ये २५० किस्ताको सेयरधनीले अन्तिम किस्ता रकम रु. ३५ चुक्ता नगरेकोले निजको सेयर जफत गरियो। कम्पनीले उक्त जफत सेयर रु ११० पुरै भुक्तानी हुने गरी पुनः जारी गर्‍यो। (A shareholder holding 250 shares of Rs.100 each issued at 5 % discount fails to pay final call money Rs. 35. His shares were forfeited, the company reissued those forfeited shares @ Rs. 110 as fully paid.)

तयार पार्नुहोस् (Required): जर्नल प्रविष्टि (Journal entry for) (1.5+1.5+1+1=5)

- क. अन्तिम किस्ता (Final call)
ख. सेयर जफत (Share forfeiture)
ग. सेयर पुनः जारी (Share re-issue)
घ. हस्तान्तरण (Transfer)

13. A) अयान्स क.लि.ले आरब क.लि को निम्नानुसारको सम्पत्ति लियो (Ayaansh Co. ltd took over the following assets of Aarab Co. Ltd.):

- मेसिनरी (Machinery)..... Rs. 2,00,000
फर्निचर (Furniture)Rs. 50,000
मौज्दात (Stock)Rs. 1,00,000

कम्पनीले १०% छुटमा रु.१०० दरको ५,००० किस्ता सेयर जारी गरि खरिद बापतको रकम भुक्तानी गर्‍यो। (The company paid the purchase consideration by issuing 5,000 shares of Rs 100 each at 10% discount.)

तयार पार्नुहोस् (Required): सम्पत्ति खरिद र सेयर जारीको जर्नल प्रविष्टि (Journal entry for purchase of assets and issue of share) (1+1=2)

B) एउटा कम्पनीले १० वर्ष पछि १०% अतिरिक्त रकम सहित भुक्तानी गर्ने गरी रु.१००० दरका २०० किस्ता ८% ऋणपत्र अंकित मूल्यमा जारी गर्‍यो। (A co. ltd. issued 200,8% debentures of Rs 1,000 each at par and redeemable at 10% premium after 10 years.)

तयार पार्नुहोस् (Required): ऋणपत्र जारी र भुक्तानीका भौचरहरू (Journal entries for issue and redemption of debenture) (1+2=3)

14. एउटा कम्पनीको वित्तीय कारोबारको विवरण निम्नानुसार दिइएको छ (The following financial transactions of a company is provided):

विवरणहरू (Particulars)	रु.(Rs.)	विवरणहरू (Particulars)	रु.(Rs.)
बिक्री आय (Sales revenue)	5,00,000	विज्ञापन (Advertising)	15,000
सुरु मौज्दात (Opening stock)	40,000	भाडा प्राप्त (Rent received)	10,000
खरिद (Purchase)	3,00,000	कमिसन भुक्तानी (Commission paid)	4,000
बिमा (Insurance)	15,000	खरिद फिर्ता (Return outward)	12,000
तलब (Salary)	70,000	हुवानी (Carriage)	8,000
लगानी को ब्याज (Interest on investment)	1,00,000	बिक्री फिर्ता (Return inward)	3,000
ऋणको ब्याज (Interest on loan)	5,000		

थप जानकारी (Additional information):

- a) अन्तिम मौज्जात (Closing stock) Rs. 30,000
b) तिर्न बाँकी तलब (Salary outstanding) Rs. 5,000

तयार पार्नुहोस् (Required):

(2+ 3=5)

क व्यापार खाता (Trading account) ख.नाफा नोक्सान खाता (Profit & Loss account)

15. एउटा कम्पनीको असमायोजित सन्तुलन परीक्षण निम्नानुसार दिइएको छ । (An unadjusted trial balance of a company is given below.)

विवरणहरू (Particulars)	डेबिट रु. (Debit Rs.)	केडिट रु. (Credit Rs.)
सेयर पुँजी (Share Capital)		100,000
साहु (Creditors)		50,000
बैंडक ऋण (Bank loan)		40,000
विक्री (Sales)		250,000
मेसिनरी (Machinery)	145,000	
नगद मौज्जात(Cash balance)	60,000	
तलब (Salary)	35,000	
अग्रिम भाडा (Prepaid rent)	15,000	
छुट (Discount)		5,000
खरिद (Purchase)	1,90,000	
जम्मा (Total)	445,000	445,000

थप जानकारी (Additional information):

- a. अग्रिम भाडा रु. १२,००० खर्च लेखियो । (Prepaid rent of Rs. 3,000 was expired)
b. १०% का दरले मेसिनरीमा मूल्य ह्रास कट्टी गरियो । (Depreciate machinery by 10%)

तयार गर्नुहोस् (Required): कार्यविवरण (Work sheet) (5)

16. लागत लेखाको परिभाषा दिंदै यसका उद्देश्यहरू लेख्नुहोस् । (Mention the objectives of cost account with its definition.) (2+3)

17. A) केन्द्रीकृत र विकेन्द्रीकृत खरिदविचको भिन्नता देखाउनुहोस् । (Differentiate between centralized purchase and decentralized purchase.) (2)

- B) जेठ महिनाको भण्डारको कारोबार निम्नानुसार दिइएको छ (The following are the store transactions for the month of Jestha.)

Jestha 1: सुरु मौज्जात (Opening stock) 200 units @ Rs 3

Jestha 5: खरिद (Purchase) 400 units @ Rs 2.5

Jestha 10: खरिद (Purchase) 300 units @ Rs 2

जेठ महिनाको कुल विक्री (Total sales during the month of Jestha) 750 units

- पत्ता लगाउनुहोस् (Calculate):** आवधिक मौज्जात पद्धति अन्तर्गत FIFO विधिबाट अन्तिम मौज्जातको लागत र वस्तु विक्रीको लागत (Cost of ending inventory and cost of goods sold using FIFO method under periodic inventory system.) (3)

18. A) प्रति घण्टा प्रमाणिक उत्पादन ५ एकाइ हो । प्रति एकाई ज्यालादर रु. ३० र एक महिनाको कुल कार्य घण्टा १५० छ । (The standard output per hour is 5 units. The wage rate per unit is Rs.30 and total working hour in a month is 150 hours.)

पत्ता लगाउनुहोस् (Calculate): एकाइ ज्यालादर प्रणालीअनुसार एक महिनाको कूल ज्याला (Total wages for the month under piece rate system.) (2)

B) निम्नलिखित विवरण दिइएका छन् (The following information are provided)

- वित्तीय लेखाले खुद नाफा रु. ४५,००० देखायो । (Net profit shown by financial accounting Rs. 45,000)
- हासकट्टी रु. १०,००० ले लागत लेखामा बढी अभिलेख गरेको पाइयो । (Depreciation overcharged in cost accounting by Rs. 10,000)
- शुरु मौज्जात रु. ८,००० ले वित्तीय लेखामा कम मूल्यांकन देखियो । (Undervalued of opening stock in financial accounting Rs 8,000)
- वित्तीय लेखामा लगानीको ब्याज रु .११,००० क्रेडिट गरियो (Interest on investment credited in financial accounting Rs. 11,000)

तयार गर्नुहोस् (Prepare): लागत हिसाब मिलान विवरण (Cost reconciliation statement) (3)

19. कम्प्युटरकृत लेखा प्रणाली भनेको के हो ? कम्प्युटरकृत लेखा प्रणालीका तत्वहरूको व्याख्या गर्नुहोस् । (What is computerized accounting system? Explain the elements of computerized accounting system.) (2+3=5)

अथवा (or),

लेखा सफ्टवेरका विशेषता वर्णन गर्नुहोस् । (Describe the features of accounting software.) 5

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् । (Attempt All Questions.)

(3 × 8 = 24)

20. अपि लि.को ३१ असार २०७७ को सन्तुलन परीक्षण निम्नानुसार दिइएको छ । (A trial balance of Api Ltd. as on 31st Asar 2077 is given below):

विवरणहरू (Particulars)	डेबिट रु. (Debit Rs.)	विवरणहरू (Particulars)	क्रेडिट रु. (Credit Rs.)
सुरुको मौज्जात (Opening stock)	15,000	विक्री आमदानी (Sales revenue)	465,000
खरिद (Purchase)	285,000	सेयर पुँजी (Share capital)	150,000
लेखापरीक्षण शुल्क (Audit fee)	12,000	देय बिल (Accounts payable)	22,000
छपाइ तथा मसलन्द (Printing and stationery)	18,000	ऋण (Loan)	180,000
तलब खर्च (Salaries expenses)	60,000	ब्याज तथा लाभांश (Interest and dividend)	8,000
ख्याति (Good will)	10,000	सेवा आमदानी (Service Revenue)	35,000
प्रवर्धन खर्च (Promotion expenses)	9,000		
ब्याज खर्च (Interest expenses)	12,000		
मर्मत तथा सम्भार (Repair and maintenance)	8,000		
प्लान्ट तथा उपकरण (Plant and equipment)	200,000		
बैंक मौज्जात (Bank balance)	42,000		

प्राप्य विल (Accounts receivables)	65,000		
लगानी (Investment)	100,000		
भाडा खर्च (Rent expenses)	20,000		
अन्य विक्री खर्च (Other selling expenses)	4,000		
जम्मा (Total)	860,000	जम्मा (Total)	860,000

थप जानकारी (Additional information):

- अन्तिम मौज्दात (Closing stock).....Rs. 20,000
- प्लान्ट तथा उपकरणमा मूल्यह्रास कट्टी (Depreciate on plant and equipment).....10%
- २०% आयकर (Income tax @20%)
- भुक्तानी गर्न बाँकी भाडा (Rent outstanding)..... Rs. 1,000

तयार गर्नुहोस् (Required):

(5+3=8)

- NFRS अनुसार नाफा नोक्सान विवरण (Profit or loss statement based on NFRS)
- NFRS अनुसार वित्तीय अवस्था (Statement of Financial Position based on NFRS)

अथवा (or),

आर्या कम्पनीको सन्तुलन परीक्षण निम्नानुसार दिइएको छ (The trial Balance of Arya company ltd. is given below)

सन्तुलन परीक्षण(Trial balance)

३० चैत्र २०७६(as on 30th Chaitra, 2076)

विवरणहरू (Particulars)	डेबिट रु. (Debit Rs.)	विवरणहरू (Particulars)	क्रेडिट रु. (Credit Rs.)
सुरु मौज्दात (opening stock)	40,000	सेयर पुँजी (Share capital)	150,000
तलब (Salary)	32,000	बैंक ऋण (Bank loan)	50,000
खरिद (Purchase)	250,000	विविध साहु (Sundry Creditors)	40,000
विज्ञापन (Advertisement)	14,000	विक्रि (Sales)	390,000
बैंक मौज्दात (Bank balance)	35,000	खरिद फिर्ता (Purchase return)	5,000
विविध आसामी (Sundry debtors)	50,000	ब्याज प्राप्ति (Interest received)	14,000
लगानी (Investment)	50,000	कमिशन (Commission)	2,000
मेशिन (Machinery)	120,000		
ब्याज भुक्तानी (Interest paid)	5,000		
प्रशासनिक खर्च (Administrative expenses)	35,000		
अग्रिम बिमा (Prepaid insurance)	20,000		
जम्मा (Total)	651,000	जम्मा (Total)	651,000

थप जानकारी (Additional information)

- अन्तिम मौज्दात (Closing stock) Rs. 55,000
- मेशिनमा १०% ह्रासकट्टी (Depreciate machinery by 10%)

c. अग्रिम भुक्तानी विमा खर्च लेखियो (Prepaid insurance expired) Rs. 3,000

d. २५% आयकर (Income tax @25%)

तयार गर्नुहोस् (Required):

(4+4=8)

i. बहुचरणको आय विवरण (Multi step Income statement)

ii. वासलात (Balance sheet)

21. एउटा कम्पनीको दुई वर्षको वासलात तल दिइएको छ। (The balance sheet of a company for two years are given below.)

दायित्व (Liabilities)	2074. (Rs.)	2075 (Rs.)	Assets	2074 (Rs.)	2075 (Rs.)
शेयर पुँजी (Share capital)	250,000	300,000	मेशिनरी (Machinery)	180,000	300,000
ऋणपत्र (Debenture)	50,000	80,000	ख्याती (Goodwill)	40,000	20,000
साहू (Creditors)	30,000	65,000	आसामी(Debtors)	70,000	120,000
तिर्न बाँकी खर्च (Outstanding expenses)	10,000	5,000	मौज्दात (Stock)	30,000	50,000
अवितरित मुनाफा (Retained earnings)	40,000	60,000	नगद मौज्दात (Cash balance)	60,000	20,000
जम्मा (Total)	380,000	510,000	जम्मा (Total)	380,000	510,000

थप जानकारी (Additional information):

i) बिक्री (Sales) Rs.550,000

ii) बिक्रीको लागत (cost of goods sold) Rs. 350,000 .

iii) हासकट्टि रु.३०००० सहितको संचालन खर्च(Operating expenses including depreciation Rs 30,000)

Rs. 100,000

iv) ब्याज खर्च (Interest expenses) Rs 10,000

v) मेशिन बिक्री (Sale of machinery)Rs 40,000, मेशिन खरिद (Purchase of Machinery) Rs 185,000

vi) लाभांश भुक्तानी (Dividend paid) Rs 55,000

तयार गर्नुहोस् (Required):

(4+1+2+1=8)

प्रत्यक्ष विधिबाट नगद प्रवाह विवरण (Cash flow statement by using direct method.)

22. गत महिनाको अभिलेखबाट निम्न लागत विवरणहरु दिइएका छन् (The following cost information were extracted from last month records.)

प्रत्यक्ष सामग्री (Direct materials): Rs 250,000

प्रत्यक्ष ज्याला (Direct wage): Rs 150,000

कारखाना उपरिव्यय (Factory overhead): Rs 45,000

प्रशासनिक उपरिव्यय (Administrative overhead): Rs 44,500

उपरिव्यय निम्नअनुसार बाँडफाँट गरिन्छ: (Overheads are allocated as under):

कारखाना उपरिव्यय मूल लागतको आधारमा (Factory overhead on the basis of prime cost)

प्रशासनिक उपरिव्यय कारखाना लागतको आधारमा (Administrative overhead on the basis of factory cost)

बोलपत्र पेस गर्न निम्नअनुसारको लागत अनुमान गरियो (The following costs were estimated for submitting a tender):

सामग्री लागत (Material cost): Rs 100,000

श्रम लागत (Labour cost): Rs 60,000

कारखानाले बोलपत्र रकमको २०% मुनाफा चाहन्छ (The factory is expected to earn 20% profit on tender price.)

तयार गर्नुहोस् (Required): (3+5=8)

a) लागत विवरण (Cost Sheet)

b) बोलपत्र विवरण (Tender sheet)

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४. नेपालको न्याय र कानून प्रणाली (Nepalese Legal System) [Nls. 110]

Nepali Legal System, Grade 12, Test Specification Chart, 2078

Plan for Question and distribution of marks covered

Unit	Content Area	Teaching Hours	Knowledge			Comprehension			Application			Higher ability			Total Question covered			Total	Total Marks	
			VS	S	L	VS	S	L	VS	S	L	VS	S	L	VS	S	L			
1	Introduction to Legal System	14																		
2	Types of Major Legal System	20	2	1		1	1	1							3	2	1	6	21	
3	Introduction to Hindu Jurisprudence	12																		
4	Development of Nepali Legal System	22	2		1	1	1		1					3	2	1	6	21		
5	Introduction to Nepali Legal System	22																		
6	Influence of major legal systems in Nepali Legal System	10	2						1			1	1	2	2	1	5	20		
7	Legal Education in Nepal	8																		
8	Legal Profession in Nepal	12	2			1	1					1		3	2	-	5	13		
			120	8	1	-	3	3	1	-	2	-	-	2	1	11	8	3	22	75

Notes:

1. The alternative short and long questions will be asked from appropriate chapters taking in to account the nature, depth and coverage of the contents.

2. Very short question will be of one (1) mark and there will be eleven (11) questions from each of the chapters to the possible extent.
3. Short question will be of five (5) marks and there will be eight (8) questions from each of the chapters to the possible extent. All the questions shall be compulsory. However, two alternative questions will be added to any two questions among the total questions asked.
4. There will be three long questions carrying eight (8) marks. All the questions shall be compulsory. However, one alternative question will be added to any one of the three questions.
5. The weightage of the question shall not exceed twenty percent in knowledge level, no less than 20 percent in higher efficiency and in other level question may be asked as per necessity.

Types of Question

Types of Question	Numbers of Question	Total marks
Very short answer type	11	$11 \times 1 = 11$
Short answer type	8	$8 \times 5 = 40$
Long answer type	3	$3 \times 8 = 24$

Note: Numbering of the questions should be arranged from first very short questions (Q.N. 1 to 11), short answer questions (Q.N. 12 to 19) and long answer questions (Q.N. 20 to 22).

नेपालको न्याय र कानून प्रणाली (Nepalese Legal System)

नमुना प्रश्न पत्र २०७८ (Model Question 2078)

कक्षा (Grade): XII

समय(Time) : 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।
(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरूको उत्तर दिनुहोस् (Attempt All Questions.) (11 x 1 = 11)

1. कानुनी प्रणालीको कुनै दुईओटा महत्त्व उल्लेख गर्नुहोस् ।
Mention any two importance of Legal System.
2. धार्मिक कानुनी प्रणाली भनेको के हो ?
What is religious legal system?
3. कानून कानुनी प्रणाली र देवानी कानुनी प्रणालीका कुनै दुईओटा फरक लेख्नुहोस् ।
Write any two differences between common legal system and civil legal system.
4. हिन्दु कानूनको परिभाषा दिनुहोस् :
Define Hindu law.
5. राम शाहले प्रतिपादन गरेका कुनै दुईओटा नियमहरूको सूची बनाउनुहोस् ।
List out any two rules laid down by Ram Shah.
6. हिन्दु कानूनका कुनै दुई स्रोत उल्लेख गर्नुहोस् ।
Mention any two sources of Hindu Law.
7. नेपालका अदालतका तह के के हुन् ?
What is the hierarchy of courts in Nepal?
8. अर्ध न्यायिक निकाय भनेको के हो ?
What do you mean by Quasi-judicial body?
9. कानुनी शिक्षाका कुनै दुई क्षेत्र लेख्नुहोस् ।
Write any two scopes of legal education.
10. कानून व्यवसायीका कुनै दुई आचार संहिता लेख्नुहोस् ।
Write any two code of conduct of lawyers.
11. कानून व्यवसायीका प्रकार के के हुन् ?
What are the categories of lawyers?

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्नहरूको उत्तर दिनुहोस् । (Attempt All Questions) (8 x 5 = 40)

12. कानून प्रणालीका आवश्यक विशेषता के के हुन् ? प्रकाश पार्नुहोस् ।
What are the essential characteristics of legal system? Shed light on them.
13. कानून कानुनी प्रणालीको सङ्क्षिप्तमा चर्चा गर्नुहोस् ।
Briefly discuss the common legal system.
14. हिन्दु विधिशास्त्रका सिद्धान्त छोटकरीमा लेख्नुहोस् ।

Write the principles of Hindu Jurisprudence in brief.

अथवा(or)

लिच्छवि कालमा कस्ता न्यायिक सङ्घ संस्था अभ्यासमा थिए ? लेख्नुहोस् ।

What kind of judicial institutions were in practice during Lichhavi Period? Write it down.

15. मानौं, तपाईं मुलुकी ऐन, १९१० को मस्यौदा समितिको एक सदस्य हुनुहुन्थ्यो भने के कस्ता प्रावधान त्यहाँ उल्लेख गर्न सुभाव दिनुहुन्थ्यो ? लेख्नुहोस् ।

Suppose you were a member of drafting committee of Muluki Ain, 1910, what provisions would you recommend to mention there? Write them.

16. वैकल्पिक विवाद समाधानको महत्त्व उल्लेख गर्दै एक दैनिक पत्रिकको लागि समाचारको नमुना तयार पार्नुहोस् ।
Draft news for a newspaper mentioning the importance of Alternative Dispute Resolution.

17. यदि तपाईं न्यायिक समितिको सदस्य नियुक्त हुनुभयो भने तपाईंलाई के कस्ता मुद्दाको निर्णय गर्ने अधिकार प्राप्त गर्नुहुन्छ ?
What cases would you have right to decide if you are appointed as a member of judicial committee?

18. नेपालको कानुनी शिक्षा सम्बन्धमा सङ्क्षिप्तमा चर्चा गर्नुहोस् ।
Briefly introduce the legal education of Nepal.

19. वकिललाई किन सामाजिक इन्जिनियर भनिन्छ ?
Why lawyers are called social engineers?

अथवा(or)

नेपालमा कानुनी पेसाको ऐतिहासिक विकासबारे बयान गर्नुहोस् ।

Explain the historical development of legal profession in Nepal.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्नको उत्तर दिनुहोस् । (Attempt All Questions)

(3 X 8 = 24)

20. कानून प्रणालीका प्रकार के के छन् ? तिनीहरूको आधारभूत प्रवृत्तिबारे बयान गर्नुहोस् ।

What are the various types of Legal system? Elaborate their basic trends.

अथवा(or)

कानून प्रणालीको अर्थ र महत्त्वलाई व्याख्या गर्नुहोस् ।

Explain the meaning and importance of legal system.

21. नेपाली कानून प्रणाली विकासबारे विस्तारमा छलफल गर्नुहोस् ।

Discuss in detail about the development of Nepalese Legal System.

22. नेपाली कानून प्रणालीमा कम्न कानून प्रणालीको प्रभावलाई आलोचनात्मक विश्लेषण गर्नुहोस् ।

Critically analyze the influence of common legal system in Nepalese legal system.

5. Instructional Pedagogy and Evaluation

Test Specification Chart Class 12

S. N.	Unit/Area	CH	Marks	Remembering /Knowledge			Understanding			Applying			Higher ability			No. of questions			Marks			Total Marks	
				VS	S	L	VS	S	L	VS	S	L	VS	S	L	VS	S	L	VS	S	L		
1	Instructional objectives, pedagogy and evaluation	5	3	2	1	-	-	2	1	1	1	1	-	1	1	-	4	5	1	4	25	8	37
2	Instructional planning	10	7																				
3	Managing instruction	15	9																				
4	Instructional materials	14	9																				
5	Instructional methods	15	9																				
6	Conceptualizing evaluation	10	6	3	1	-	1	1	-	2	1	1	1	-	1	7	3	2	7	15	16	38	
7	Planning instructional evaluation	15	9																				
8	Administration, scoring and analyzing the test	15	9																				
9	Concept and preparation of non-testing devices	11	7																				
10	Continuous Assessment system	10	7																				
Total		120	75	5	2	-	1	3	1	3	2	1	2	1	1	11	8	3	11	40	24	75	

Question and Mark Distribution

SN	Types of questions	Number of questions	Marks per question	Full Marks	Time
1	Very Short Questions	11	1	11	180 minutes (3 hrs)
2	Short Questions	8	5	40	
3	Long Questions	3	8	24	
4	Total	22		75	

Remarks:

- Item format in composite should be met as per the specification grid.
- Weightage in the combined cell should be met, but ± 3 marks variation will be allowed within the combined cells. But cannot be nil.
- SQ and LQ may be structured (have two or more sub-items). SQ and LQ can be distributed to two or more cognitive behaviors. In such case these will be added to their respective cognitive behavior. In sum the distribution of cognitive behavior should be approximately to the required distribution.

- The distribution of questions based on cognitive domain will be nearby 20% knowledge/remembering, 30% understanding, 30% applying and 20 % higher ability level.
- In case of short question there will be 2 "OR" questions and in case of long question there will be 1 "OR" question.

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कक्षा १२

शैक्षणिक पद्धति र मूल्याङ्कन (Instructional Pedagogy and Evaluation)

सबै प्रश्नहरू अनिवार्य छन् । (Attempt all questions.)

समय ३ घण्टा (Time: 3 hours)

समूह क : अति छोटो उत्तरात्मक प्रश्न

११ × १ = ११

Group A: Very short answer type questions

१. पेडागोजी शब्दको अर्थ लेख्नुहोस् ।

Write the meaning of the term 'pedagogy'.

२. कुनै एउटा शीर्षकमा एउटा विशिष्ट उद्देश्य लेख्नुहोस् ।

Write one specific objective of any one topic.

३. विद्यार्थीलाई कक्षामा प्रश्न सोध्ने उपयुक्त दुई तरिका लेख्नुहोस् ।

Write appropriate two techniques of questioning students in classroom.

४. दृष्टिविहीन विद्यार्थीको लागि उपयुक्त एउटा शैक्षिक सामग्री र अनुपयुक्त एउटा शैक्षिक सामग्रीको नाम लेख्नुहोस् ।

Write one example of an instructional material which is appropriate and one example which is not appropriate for students with sight disabilities.

५. शिक्षण विधि र शिक्षण तरिकाबिच एक भिन्नता लेख्नुहोस् ।

Differentiate between teaching method and teaching technique in one point.

६. विद्यार्थीको व्यवहारमा आएको परिवर्तनलाई मात्रात्मक रूपमा अङ्क दिने र तिनको व्यवहारको प्रगतिको लेखाजोखा गर्ने कार्यलाई के भनिन्छ ?

What is said to the act of assigning numbers to the change that has come in the behavior of student and to the act of appraising the progress of the performance of student?

७. उत्तरपुस्तिका परीक्षणमा एउटा परीक्षक र अर्को परीक्षकले दिने अङ्कमा घटीबढी हुन सक्ने र अङ्क हेरफेर नहुने किसिमका प्रश्नलाई के भनिन्छ ?

What is said to the type of questions where there is variation in assigning marks to the answer sheet from one examiner to another and where there is no variation at all in this process of assigning marks?

८. कक्षा ६ को परीक्षाका लागि आन्तरिक मूल्याङ्कन गर्दा देखिने कुनै दुईओटा सबल पक्ष लेख्नुहोस् ।

Write any two strong points of conducting internal assessment in the examination process of Grade VI.

९. प्रश्नको कठिनाई स्तर कति हुनु उपयुक्त हुन्छ र किन ?

How much difficulty level of a question item is appropriate and why?

१०. विषयगत प्रश्नको अङ्कन प्रक्रियामा सुधार गर्ने दुईवटा तरिकाहरू उल्लेख गर्नुहोस् ।

State two measures for improving scoring procedures of subjective test items.

११. एकीकृत पाठ्यक्रमअनुसार हाल नेपालमा कुन मूल्याङ्कनमा जोड दिइएको छ ?

Which assessment system is emphasized in Nepal according to the integrated curriculum?

समूह ख : छोटो उत्तरात्मक प्रश्न

८ × ५ = ४०

Group B: Short answer type questions

१२. शिक्षणको अर्थ स्पष्ट गर्दै शिक्षण र सिकाइबिचको सम्बन्ध देखाउनुहोस् ।

Illustrate the relationship between teaching and learning with clarifying the meaning of teaching.

१३. कक्षा तीनको कुनै विषयको एउटा पाठ छान्नुहोस् । उक्त पाठको उद्देश्य र पाठको कक्षा सुरु गर्ने तरिका उल्लेख गर्नुहोस् ।

Select a topic/lesson from any subject of Grade III. Write specific objectives of the lesson and the way you introduce the lesson.

अथवा OR

प्रारम्भिक कक्षाहरूमा कक्षा शिक्षण व्यवस्था किन उपयुक्त हुन्छ ? स्पष्ट गर्नुहोस् ।

Why is grade teaching appropriate for students studying in elementary grades? Clarify.

१४. विद्यालय वरिपरि पाइने शिक्षण सिकाइका लागि उपयुक्त हुने दुईओटा सामग्रीहरूको नाम लेख्नुहोस् र तिनको कक्षामा प्रयोग गर्ने तरिका वर्णन गर्नुहोस् ।

List out two local materials available at school surroundings appropriate for teaching learning and describe the ways of using these materials in the classroom

१५. मूल्याङ्कन भनेको के हो? विद्यार्थीको सर्वाङ्गीण विकासको उद्देश्यको सन्दर्भमा शैक्षिक प्रगतिको अवस्था कसरी मूल्याङ्कन गर्नुपर्दछ ? वर्णन गर्नुहोस् ।

What is evaluation? How should evaluation be done for educational progress of students in the context of their all-round development? Describe.

अथवा OR

विद्यार्थीको सिकाइको सारभूत पक्षको मूल्याङ्कन गर्नका लागि मूल्याङ्कनका कस्ता विधि उपयुक्त मानिन्छन् ? छोटकरीमा तर्कसहित प्रस्ट पार्नुहोस् ।

What type of evaluation devices are appropriate for evaluating the essence of learning of students? Clarify with logics.

१६. लेटर ग्रेडिङ निर्देशिका, २०७८ अनुसार विद्यार्थीको उपलब्धि मूल्याङ्कन गर्ने तरिका लेख्नुहोस् ।

Write the ways of assessing the students' achievement based on the letter grading directive 2078.

१७. एक जना विद्यार्थीको अनुशासनसम्बन्धी व्यवहार मूल्याङ्कन गर्नका लागि क्रम मापक (रेटिङ स्केल) को प्रयोग कसरी गर्नुहुन्छ ? उदाहरणसहित लेख्नुहोस् ।

How do you use a rating scale for assessing disciplinary behavior of a student? Write with example.

१८. सिकाइका लागि परीक्षा भन्ने अवधारणा राम्रो देखिन्छ । यस किसिमको अवधारणालाई वास्तविकतामा रूपान्तरण गर्न के के गर्न सकिन्छ ? सुझाव दिनुहोस् ।

The concept of examination for learning sounds good. How can this concept be transformed in reality? Give suggestions.

१९. नेपालमा कार्यान्वयन गरिएको निरन्तर मूल्याङ्कन पद्धतिका कमजोरीका कारण औँल्याउनुहोस् । यस पद्धतिमा सुधारका उपाय केके हुन सक्छन् ? उल्लेख गर्नुहोस् ।

Identify causes of not effective implementation of continuous assessment system (CAS) and suggest ways of improvement in this system.

समूह ग : लामो उत्तरात्मक प्रश्न

३ × ८ = २४

Group 'C' Long answer type questions

२०. पाठ योजना बनाउँदा ध्यान दिनुपर्ने कुरामध्ये कक्षामा गरिने शिक्षणका तीनओटा चरण के के हुन् ? तिनको प्रयोग गर्ने तरिकाको उदाहरणसहित व्याख्या गर्नुहोस् ।

What are the three phases of teaching in classroom that are to be considered in preparing lesson plans? Explain ways of action in classroom in those phases with examples.

२१. सहयोगात्मक सिकाइका रणनीतिहरू वा तौरती रका के के हुन सक्छन् ? तिनको कक्षामा प्रयोग गर्ने तरिका उदाहरणसहित व्याख्या गर्नुहोस् ।

What are the cooperative learning strategies? Explain ways of action for those strategies in teaching with examples.

२२. विशिष्टकरण तालिकाको एउटा उदाहरण दिएर नमुना तयार गर्नुहोस् र यसका प्रत्येक आयामहरूको महत्त्व स्पष्ट गर्नुहोस् ।

Prepare an example of specification chart and explain the importance of its each dimension.

अथवा OR

बहुवैकल्पिक प्रकारको तीनओटा प्रश्न (ज्ञान, बोध र प्रयोगको एक एकओटा) तयार गर्नुहोस् । ती प्रश्नका कमजोर पक्षको समीक्षा गर्नुहोस् र यस्ता प्रश्नमा सुधार गर्ने उपाय वर्णन गर्नुहोस् ।

Prepare three multiple choice type items. Review the weaknesses of these multiple type items and describe the ways of improvement in these type of items

६. मनोविज्ञान (Psychology) [Psy.120]

Test Specification Chart
Class 12

Subject: Psychology

S. N.	Unit/Area	WH	Marks	Remember/ Knowledge			Understand/ Comprehension			Apply/ Application			Higher ability			No. of questions			Marks			Total
				VS	S	L	VS	S	L	VS	S	L	VS	S	L	VS	S	L	VS	S	L	
1	Humanistic psychology	8	5	1	1	-	1	-	1	-	1	-	-	1	-	2	2	1	2	10	8	20
2	Mental health	12	8																			
3	Status of mental health in Nepal	12	7																			
4	Psychological issues	18	11	2	1	-	2	1	-	1	1	-	1	-	1	6	3	1	6	15	8	29
5	Psychological counseling	14	9																			
6	Verbal and non-verbal communication	14	9																			
7	Psychosocial care and support	18	11	2	-	-	1	1	-	-	1	1	-	1	-	3	3	1	3	15	8	26
8	Psychological first aid (PFA)	12	7																			
9	Intervention pyramid for MHPSS in emergency	12	8																			
	Total	120	75	5	2	-	4	2	1	1	3	1	1	2	1	11	8	3	11	40	24	75

Question and Mark Distribution

SN	Types of questions	Number of questions	Marks per question	Full Marks	Time in minutes
1	Very Short Questions	11	1	11	26
2	Short Questions	8	5	40	96
3	Long Questions	3	8	24	58
4	Total	22		75	180 minutes (3 hrs)

Remarks:

- Item format in composite should be met as per the specification grid.
- Weightage in the combined cell should be met, but ± 3 marks variation will be allowed within the combined cells. But cannot be nil.
- In case of 5 or 8 marks items, these should ensure that 1 mark will be assigned per element expected as correct response. However, cognitive behaviour intended might not be single behaviour within the item. But in total cognitive distribution should met. ± 3 marks variation will be allowed within the cognitive levels.
- SQ and LQ may be structured (have two or more sub-items). SQ and LQ can be distributed to two or more cognitive behaviours. In such case these will be added to their respective cognitive behaviour. In sum the distribution of cognitive behaviour should be approximately to the required distribution.
- The distribution of questions based on cognitive domain will be nearby 20% knowledge/remembering, 30% understanding, 25% applying and 25% higher ability level.
- In case of short question there will be 2 "OR" questions and in case of long question there will be 1 "OR" question.

मनोविज्ञान (Psychology) [Psy.120]

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।
(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् (Attempt All Questions) (11 x 1 = 11.)

1. मानसिक स्वास्थ्यलाई परिभाषित गर्नुहोस् । (Define Mental Health.)
2. मानवतावादी मनोविज्ञानका कुनै दुई सबल पक्ष लेख्नुहोस् । (Write any two strengths of humanistic psychology?)
3. मानिसहरूले मनोसामाजिक समस्या कसरी व्यक्त गर्छन् ? (How do people express psychosocial problems?)
4. मनोसामाजिक समस्याका कुनै दुई कारण पहिचान गर्नुहोस् । (Identify any two causes of psychosocial problems.)
5. SOLER को पूरा रूप के हो ? (What is the full form of SOLER?)
6. आत्म प्रकटीकरणलाई परिभाषित गर्नुहोस् । (Define self-disclosure.)
7. मनोसामाजिक परामर्श मनोचिकित्सा भन्दा कसरी फरक छ ? (How does psychosocial counselling differs from psychotherapy?)
8. परम्परागत उपचार पद्धतिले कसरी मानसिक स्वास्थ्य प्रवर्द्धनमा मद्दत गर्छ ? (How can traditional healing practices help in promotion of mental health?)
9. मनोसामाजिक हेरचाहलाई परिभाषित गर्नुहोस् । (Define psychosocial care.)
10. मनोसामाजिक हेरचाहको कुनै एक महत्व लेख्नुहोस् । (Write one importance of psychosocial care and support?)
11. मनोसामाजिक परामर्शमा कुनै हानी नगर्ने सिद्धान्त किन महत्वपूर्ण छ ? (Why the principle of do no harm is important in psychosocial counselling.)

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् । (Attempt All Questions.) (8 x 5 = 40)

12. नेपालमा मानसिक स्वास्थ्य सेवाको इतिहास उल्लेख गर्नुहोस् । (Mention the history of mental health services in Nepal.)

13. नेपालमा मनोसामाजिक सल्लाहकारमा रोजेरियन दृष्टिकोण किन लोकप्रिय छ ? स्पष्ट पार्नुहोस् । (Why Rogerian approach is popular among Nepalese psychosocial counsellors? Clarify.)
14. मनोसामाजिक समस्याका सामान्य विशेषता वर्णन गर्नुहोस् ।(Describe the common characteristics of psychosocial problems.)
15. नेपालको सन्दर्भमा मनोसामाजिक परामर्शको क्षेत्र पहिचान गर्नुहोस् ।(Identify the scope of psychosocial counselling in the Nepalese context.)
16. तनावलाई कसरी व्यवस्थापन गर्न सकिन्छ ? व्याख्या गर्नुहोस् ।(How stress can be managed? Explain.)
17. आपत्कालीन अवस्थाका बहुस्तरीय सहयोगका मुख्य तत्त्व वर्णन गर्नुहोस् ।(Describe the key components of multi-layered supports in an emergency.)

अथवा(Or),

- घटना वा मामला व्यवस्थापन विधिको वर्णन गर्नुहोस् ।(Describe the process of case management.)
18. PFA कार्य सिद्धान्त आपतकालीन अवस्थामा कसरी प्रयोग गर्न सकिन्छ ? व्याख्या गर्नुहोस् ।(How can the action principles of PFA be used in emergency setting? Explain.)
 19. आपतकालीन अवस्थाको MHPSS को हस्तक्षेप पिरामिड प्रस्तुत गर्नुहोस् । (Illustrate the Intervention pyramid for MHPSS in an emergency.)

अथवा(Or),

मानसिक स्वास्थ्य हेरचाहका लागि IASC पिरामिड प्रस्तुत गर्नुहोस् । (Illustrate the IASC pyramid for mental health care.)

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.) (3 X 8 = 24)

20. मनोसामाजिक समस्याको मनोसामाजिक कल्याणसँगको भिन्नता देखाउनुहोस् । (Differentiate psychosocial wellbeing from the psychosocial problem.)
21. "सञ्चार कौशलता मनोसामाजिक परामर्श पेसाको मेरुदण्ड हो ।" उपयुक्त उदाहरणसहित प्रमाणित गर्नुहोस् ।
("Communication skill is the backbone of the psychosocial counselling profession."
Justify with appropriate example.)
22. मनोसामाजिक हेरचाह र सहयोगको सिद्धान्त महामारीको अवस्थामा कसरी प्रयोग गरिन्छ ? (How the principle of psychosocial care and support is used in a pandemic situation.)

अथवा(Or),

मनोवैज्ञानिक प्राथमिक उपचार (PFA) लाई आपत्कालीन अवस्थामा कसरी प्रयोग गर्न सकिन्छ ?(How psychological first aid (PFA) can be used in an emergency?)

७. इतिहास (History) [His.122]

विशिष्टीकरण तालिका

कक्षा: १२

कार्यघण्टा : १२० (सैद्धान्तिक ७५%)

विषय: ऐच्छिक इतिहास

प्रश्न योजना तथा अङ्कभार वितरण

एकाइ	विषयवस्तुको क्षेत्र/एकाइ	पाठ्यभार	प्रश्न योजना तथा अङ्कभार वितरण															
			ज्ञान			बोध			प्रयोग			उच्चदक्षता			जम्मा प्रश्न सङ्ख्या			जम्मा अङ्क
			अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	
१	विश्वका मुख्य सभ्यताको परिचय	२५	१			१			१					१	२	१	१	१५
२	विश्वको धर्मको सङ्क्षिप्त इतिहास र तिनको उपदेश	२०	१	१		१			१					२	२			१२
३	नयाँ विश्व व्यवस्था	२५	१					१					१		१	१	१	१४
४	विश्वयुद्ध	१५	१			१	१						१		२	२		१२
५	अन्तर्राष्ट्रिय सङ्गठन	१०	१						१					१	१			६
६	अन्तर्राष्ट्रिय गठबन्धन	१०	१				१							१	१			६
७	क्षेत्रीय गठबन्धन	१५	१			१								२		१		१०
	जम्मा	१२०	७	१	१	४	२	१		३			२	१	११	८	३	७५

द्रष्टव्य :

१. अति छोटो प्रश्न १ अङ्कको हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन् ।
२. छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् साथै कुनै दुई प्रश्नमा विकल्प दिन सकिने छ ।

३. लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् साथै कुनै एक प्रश्नमा विकल्प दिन सकिने छ ।

४. ज्ञान तहमा पूर्णाङ्कका २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकताअनुसार प्रश्न रहने छन् ।

५. सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्च दक्षता अन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहने छन् ।

● प्रश्नका प्रकार

प्रश्नका प्रकार	सोधिने सङ्ख्या	पूर्णाङ्क
अति सङ्क्षिप्त प्रश्न	११	११
छोटो उत्तर आउने प्रश्न	८	४०
लामो उत्तर आउने प्रश्न	३	२४
जम्मा	२२	७५

इतिहास (History [His.122])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ। किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ। (The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

१. ग्रीक सभ्यताको सुरुवात कुन सहरबाट भएको थियो ?
Where did Greek civilization begin?
२. प्राचीन रोमको सभ्यताले वर्तमान विश्वलाई के योगदान दिएको छ ?
What contribution did Roman civilization render to the present world?
३. इस्लाम धर्मका कुनै दुई आधार स्तम्भ लेख्नुहोस्।
Write down any two pillars of Islam religion?
४. कन्फ्युसियस धर्मको मुख्य सार के हो ? एक वाक्यमा लेख्नुहोस्।
What is the main essence of confusius religion? Write in a sentence.
५. भारतको स्वतन्त्र सङ्ग्राम कहिले भएको थियो ?
When was the Indian war of Independence held?
६. प्रथम विश्वयुद्धको तत्कालीन कारण के थियो ?
What was the immediate cause of First World War?
७. प्रथम विश्वयुद्ध र द्वितीय विश्वयुद्धबिचका कुनै दुई फरक लेख्नुहोस्।
Mention any two differences between First World War and Second World War.
८. राष्ट्र सङ्घको स्थापना कहिले भएको थियो ? पूरा मिति लेख्नुहोस्।
When was League of Nation established? Write its full date.
९. नेटो (NATO) सैन्य शक्ति नेतृत्वकर्ता देश कुन हो ?
Which country is the leader of NATO?
१०. सार्क (SAARC) भित्र कतिओटा देश आवद्ध छन् ?
How many countries are the members of SAARC?
११. अरब लिग भनेको के हो ?
What is meant by Arab league?

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस्। (Attempt All Questions.)

(8 x 5 = 40)

१२. चिनियाँ सभ्यताका कुन कुन राम्रा पक्ष हाम्रो जीवनमा प्रयोग गर्न सकिन्छ ? उल्लेख गर्नुहोस्।
What positive aspects of Chinese civilization we can use in our life?
Mention it.
१३. बौद्ध धर्मका मुख्य उपदेश लेख्नुहोस्।
Write-down the major preaching of Buddha religion.
१४. हिन्दु धर्मका उपदेश ग्रहण गरी अवलम्बन गर्दा व्यक्तित्व निर्माणमा कस्ता प्रभाव पर्न सक्छन्?

What impacts can be seen in personality building along with the implementation of teaching of Hindu religion?

१५. फ्रान्सको राज्यक्रान्तिका कारण के के हुन् ? समीक्षा गर्नुहोस् ।

What are the causes of the French Revolution? Review it.

१६. दोस्रो विश्वयुद्धमा नेपालको भूमिका के थियो ? छोटकरीमा लेख्नुहोस् ।

What was the role of Nepal during the Second World War? Write in brief.

अथवा(or),

रुसकोक्रान्तिको महत्त्व बताउनुहोस् ।

Discuss the significance of the Russian revolution.

१७. "राष्ट्रसंघको असफलता नै दोस्रो विश्व युद्धको प्रमुख कारण थियो ।" यस तथ्यलाई उदाहरण सहित प्रमाणित गर्नुहोस् ।

"Failure of League of Nation was the chief reason of second world war" . Prove it with examples.

१८. संयुक्त राष्ट्र सङ्घका उद्देश्य केका लागि निर्माण गरिएका थिए ? छोटकरीमा लेख्नुहोस् ।

For what purpose were the objectives of the UNO adapted? Write in brief.

अथवा(or),

नेटोका मुख्य क्रियाकलाप के के छन् ? लेख्नुहोस् ।

What are the major activities of NATO? Write down.

१९. नेटो र वार्सामा के के फरक छन् ? बुदाँगत रूपमा लेख्नुहोस् ।

What are the differences between NATO and WARSAW? Write in points.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(3 X 8 = 24)

२०. मेसोपोटामिया र रोमन सभ्यताको समीक्षात्मक टिप्पणी प्रस्तुत गर्नुहोस् ।

Present a review note of Mesopotamia and Roman civilizations.

२१. पुनर्जागरण भनेको के हो ? पुनर्जागरणका विशेषताको चर्चा गर्नुहोस् ।

What is Renaissance? Highlight the feature of the Renaissance.

२२. सार्क (SAARC) स्थापनाको पृष्ठभूमि उल्लेख गर्दै यसका उद्देश्य र अङ्गको सूची बनाउनुहोस् ।

Mention the background of the establishment of SAARC and also make a list of its objectives and organs.

अथवा(or),

औद्योगिक क्रान्ति भनेको के हो ? यो बेलायतबाट नै किन सुरु भयो ? कारण व्याख्या गर्नुहोस् ।

What is industrial revolution? Why was it started from England? Explain the reasons. (3+2+3)

8. Biology (202)

Specification grid 2078

Grade: 12

Subject: Biology Theory (Bio. 202)

SN	Content Area	Working hour	Competency level																		Unit wise Marks	Group wise score				
			Remembering				Understanding				Applying				Higher Ability											
			MCQ		SAQ		MCQ		SAQ		LAQ		MCQ		SAQ		LAQ									
			No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks								
1	Plant Anatomy	8																						5	37	
2	Plant Physiology	20																						11		
3	Embryology	8																						5		
4	Genetics	21																						12		
5	Biotechnology	7																						4	38	
6	Applied Biology	16	4	4	2	8	3	3	2	8	1	8	2	2	3	12	1	8	2	2	1	4	2	16		9
7	Animal tissue	8																						5		
8	Developmental Biology	6																						4		
9	Human biology	28																						16		
10	Human Population and Health Disorders	6																						4		
Total Marks			12				19				22				22				75	75						

Item format plan					
S.N.	Type of item	Score per item	Total item	Total score	Time
1	Multiple Choice Questions	1	11	11	25 minutes
2	Short Question Answer	4	8	32	155 minutes
3	Long Question Answer	8	4	32	
Grand Total			23	75	3 hours

Remarks:

- Item format in composite should be met as per the specification grid.
- Designated weightage in the combined cell should be met, but ± 3 marks variation will be allowed within a unit/content area. But no unit can be nil.
- In the case of SAQ and LAQ, these should ensure that 1 mark will be assigned per element expected as correct response.
- The distribution of cognitive domain of questions should be nearly 15% knowledge/remembering, 25% understanding, 30% applying and 30% higher ability level, but ± 5 percent variation will be allowed in overall question set.
- SAQ and LAQ can be structured (have two or more sub-items). SAQ and LAQ can be distributed to two or more cognitive behaviors.
- In such case these will be added to their respective cognitive behavior. In sum the distribution of cognitive behavior should be approximately to the required distribution.
- Each group will consist of 4 SAQs questions with one "OR" question and 2 LAQs with one "OR" question. Botany portion will consist of 5 MCAQs and zoology portion consists of 6 MCAQs.

CURRICULUM DEVELOPMENT CENTRE

Model Question – 2078

Grade: XII

Subject: Biology

F.M.: 75

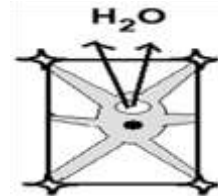
Attempt all questions.

Part: I [Botany]

Group: A

Circle the correct answer from the given alternatives. (5 × 1 = 5)

- There are many types of chromosomal disorders in organisms, among them euploidy is very common in the population. Which one of the following conditions is true for euploidy?
 - Addition or deletion of one or more chromosome in diploid chromosome
 - Addition of one or more chromosome in diploid chromosome
 - Deletion of one or more chromosome in diploid chromosome
 - Addition or deletion of one set or more than one set of chromosomes in diploid chromosome
- The formation of two male gametes is a peculiar feature in angiosperm. If the first male gamete is fused to oosphere, in which part does the second male gamete fuse?
 - Synergids
 - Egg cell
 - Polar nuclei
 - Antipodal cell
- The given vascular bundle is highly specialised by centripetal protoxylem. What is it called?
 - Exarch
 - Endarch
 - Mesarch
 - Centrach
- Which of the following plants is used as bio fertilizer?
 - Volvox*
 - Funaria*
 - Azolla*
 - Rhizopus*
- When a plant cell is placed in hypertonic solution, it gets plasmolysed as shown in the diagram. Which of the following occupies the space between the cell wall and the shrunken protoplast in such plasmolysed cell?
 - Water
 - Hypertonic solution
 - Isotonic solution
 - Hypotonic solution

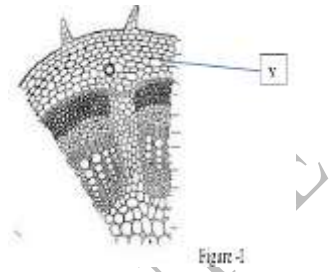


Group –B Botany

Give short answers to the following questions.

[4 × 4 = 16]

1. The anatomical structure of vascular plant is given. Study the given diagram and answer the following questions. (1+3=4)
 - (a) Write the main characteristics of the given layer Y.
 - (b) Draw the given diagram and label the tissues which is responsible for secondary growth. Elaborate the activities of this tissue up to the formation of cambial ring.
2. Write the salient features of a monocot embryo in reference to its development pattern with diagrams. (3+1=4)
3. "Micropropagation is an analytical and conventional bulk breeding technique for rapid cloning of desirable stock". Justify the statement by describing it briefly with the various stages of micropropagation technique in plants. (4)
4. What is genetic material? Describe the structure and functions of RNA. (1+2+1=4)



OR

What are plant growth hormones? Write the physiological functions of auxin. Mention its shortcoming of hyper use in crops.

Group –C Botany

Give long answers to the following questions.

[2 × 8 = 16]

5. One of the Mendelian inheritances states that 'The alleles of different traits can be segregated during gametogenesis and passed independently'. State and explain the essential pattern of inheritance verifying the statement with examples showing cross up to second filial generation with chart and ratio. (1+ 3+2+2= 8)

OR

In *Drosophila*, an eye colour is X-linked. Explain. If white eye female *Drosophila* is crossed to red eye male *Drosophila*, what result do you expect? Analyse briefly with the help of crosses.

6. How are the Glycolysis and Krebs (TCA) cycle linked? Draw a detailed flow chart of the Krebs cycle? 4+ 4= 8

Part: II (Zoology)
Group –A

Circle the correct answer from the given alternatives. (6 ×1 = 6)

1. The parasympathetic nervous system releases a hormone acetylcholine. Which one of the following is activated by this hormone?
 - a. Regulate the involuntary response
 - b. Decrease the rate of heart beat
 - c. Increase blood pressure
 - d. Increase myocardial contractility
2. After the release of mature ovum from the ovary, the Graffian follicle changes into corpus luteum which is the source of female sex hormones. In the woman, what would be the condition of corpus luteum in absence of pregnancy?
 - a. Secretes FSH and LH continuously
 - b. Secretes oxytocin and relaxin
 - c. Automatically degenerates after sometime
 - d. Remains intact and active
3. Which of the following statement is more appropriate for early an amniocentesis test?
 - a. It takes place between 15th and 20th weeks of pregnancy
 - b. It may cause fetal injury and lethality
 - c. It helps to detect fetal complications
 - d. It may cause infertility
4. What are the main processes involved in gastrulation of a frog?
 - a. Epiboly, involution, cleavage
 - b. Epiboly, invagination, Involution
 - c. Involution, epiboly, invagination
 - d. Involution, invagination, cleavage
5. Blood cells are formed in the bone marrow. What is the process of formation of blood called?
 - a. Haemopoiesis
 - b. Haemolysis
 - c. Lymphopoiesis
 - d. Erythroblastosis
6. A person suddenly falls down and becomes unconscious. A doctor checked and said that it is due to inadequate blood supply to the brain. What would be the type of disorder?
 - a. Asthma
 - b. Syncope
 - c. Heart attack
 - d. Oedema

Group –B

Zoology

Give short answers to the following questions.

4× 4 =16

1. Compare and contrast areolar tissue and adipose tissue. 2+2=4
2. Describe the process of fertilization of an egg with reference a frog. 4

OR

Describe the various steps applied in poultry farming. 4

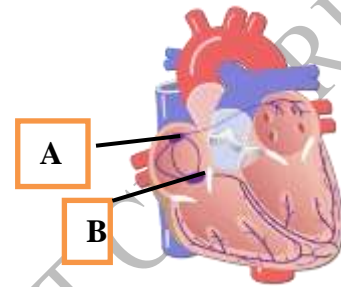
3. Study the given diagram and answer the following questions.

1+3=4

(a) Label A and B.

(b) Write any three differences between A and B.

4. Overpopulation is a major issue in the development of the nation. Highlight the socio-economic problems caused by overpopulation and mention how to solve such problems. 2+2=4



Group –C

Give long answers to the following questions.

[2 × 8=16]

5. Mention the causative agent, mode of transmission, symptoms and control measures of tuberculosis in the community. (1+2+3+ 2 =8)
6. Draw a labelled diagram of the alimentary canal of a human being. Explain the mechanism of the digestion of foods that a person under takes. What would happen in digestion when the pancreas is removed? (3+4+1)

OR

Draw a labelled drawing of respiratory system of a human being. Why and how oxygen and carbon dioxide are exchanged rapidly in the lungs? What would happen if a person moves to high altitude? Write your views on how to solve it. (2 +4+ 1+1 =8)

"Best of luck"

९. शिक्षा र विकास (Edd.204)

विशिष्टीकरण तालिका

सैद्धान्तिक मूल्याङ्कन

कक्षा १२

विषय : शिक्षा र विकास

प्रश्न योजना तथा अङ्कभार वितरण																			
एकाइ	क्षेत्र/एकाइ	कार्य घण्टा	अङ्क भार	ज्ञान			बोध			प्रयोग			उच्च दक्षता			जम्मा प्रश्नभार			जम्मा अंकभार
				धेरै छोटो	छोटो	लामो	धेरै छोटो	छोटो	लामो	धेरै छोटो	छोटो	लामो	धेरै छोटो	छोटो	लामो	धेरै छोटो	छोटो	लामो	
१	शिक्षा र विकासका आयामहरु	14	9	1	-	-	2	-	1	-	1	-	-	1	-	3	2	1	21
२	शिक्षा र दिगो विकास	10	6																
३	समुदायको परिचालन र सहभागिता	10	6																
४	नागरिक शिक्षा र सचेतना	14	9	1	1	-	1	1	-	-	-	1	-	1	-	2	3	1	25
५	शिक्षामा विविधता	12	8																
६	शान्ति शिक्षा र विकास	12	8																
७	विकासका लागि स्रोत परिचालन	12	7	3	1	-	2	1	-	1	1	-	-	-	1	6	3	1	29
८	शिक्षा र विकासका लागि योजना	16	10																
९	नेपालमा शिक्षा विकास : ऐतिहासिक स्वरूप तथा वर्तमान अवस्था	20	12																
जम्मा		120	75	5	2	-	5	2	1	1	2	1	-	2	1	11	8	3	75

प्रश्न सङ्ख्या, अङ्कभार र समय तालिका

क्र.स.	प्रश्नको प्रकार	प्रश्न सङ्ख्या	प्रति प्रश्न अङ्कभार	जम्मा अङ्कभार	समय
१	धेरै छोटो प्रश्न	११	१	११	१८० मिनेट (३ घण्टा)
२	छोटो प्रश्न	८	५	४०	
३	लामो प्रश्न	३	८	२४	
जम्मा		२२		७५	

द्रष्टव्य :

- सामान्यतया ज्ञान तहका प्रश्न २० प्रतिशत, बोध तहका प्रश्न ३० प्रतिशत, प्रयोग तहका प्रश्न २५ प्रतिशत र उच्च दक्षताका प्रश्न २५ प्रतिशत हुने छन् ।
- एकाइभित्रको समूहको जम्मा अङ्कमा फरक नपर्ने गरी समूहभित्रका एकाइमा फरक गरी प्रश्न निर्माण गर्न सकिने छ तर प्रत्येक एकाइबाट प्रश्न सोधिने गरी विषयवस्तुको वैधता कायम गर्नुपर्नेछ ।
- छोटो प्रश्न र लामो प्रश्नमा एक भन्दा बढी उप प्रश्नहरू पनि सोध्न सकिने छ ।
- उच्च दक्षताअन्तर्गत विश्लेषण, मूल्यांकन र सिर्जना रहने गरी प्रश्न निर्माण गर्नुपर्ने छ ।
- छोटो प्रश्नहरू मध्ये कुनै दुईओटा अथवा प्रश्न र लामो प्रश्नमा एउटा अथवा प्रश्न सोधिने छ ।

CURRICULUM DEVELOPMENT CENTRE

शिक्षा र विकास (Edd.204)

कक्षा १२

समूह (क) Group 'A'

तलका प्रश्नहरूको अति छोटो उत्तर दिनुहोस् ।

११ × १ = ११

Write very short answers of the following questions.

१. मानव विकास र शिक्षाविचको अन्तर्सम्बन्धलाई कुनै दुई बुँदामा लेख्नुहोस् ।

Write the relationship between human development and education in any two points.

२. दिगो विकासको लक्ष्यअन्तर्गत शिक्षासम्बन्धी लक्ष्य लेख्नुहोस् ।

Mention the sustainable development goal related to education.

३. समुदायको विकासको लागि समुदाय परिचालन गर्नुपर्ने कुनै दुई कारण उल्लेख गर्नुहोस् ।

Mentions any two causes of community mobilization for community development.

४. शान्ति शिक्षा भनेको के हो ?

What is peace education?

५. शान्ति र विकासको अन्तरसम्बन्धलाई दुई बुँदामा लेख्नुहोस् ।

Write the relationship between peace and development in any two points.

६. शैक्षिक योजनाको महत्त्वलाई दुई बुँदामा प्रस्तुत गर्नुहोस् ।

Present the importance of educational planning in any two points.

७. जनशक्ति योजना भनेको के हो ?

What is manpower planning?

८. शिक्षामा लगानी गर्नुको कुनै दुईओटा कारण लेख्नुहोस् ।

Write any two causes for investing in education.

९. राणाकालमा शिक्षामा भएका कुनै दुई मुख्य उपलब्धि लेख्नुहोस् ।

Write any two educational achievements in Rana Period.

१०. एक्काइसौँ शताब्दीमा गुणस्तरी शिक्षालाई परिभाषित गर्नुहोस् ।

Create your own definition of quality education in 21st Century.

११. विद्यालय शिक्षामा निजी लगानीको कुनै दुईओटा फाइदा लेख्नुहोस् ।

Write any two advantages of private investment in school education.

समूह (ख) Group (B)

तलका प्रश्नको छोटो उत्तर दिनुहोस् ।

८ × ५ = ४०

Write short answers to the following questions.

१२. दिगो विकासका लागि स्थानीयस्तरबाट शिक्षाले कस्तो भूमिका निर्वाह गर्नुपर्ला ?

What should be done the role of education from local level for sustainable development?

अथवा

दिगो विकासका लक्ष्य हासिल गर्न शिक्षाको भूमिका पहिचान गर्नुहोस् ।

Identify the role of education for achieving the sustainable development goals.

१३. शिक्षाको विकासमा समुदायको संलग्नताको अभिवृद्धि गर्ने व्यावहारिक उपाय प्रस्तुत गर्नुहोस् ।

Present the behavioural ways of promoting the community involvement in education development.

१४. नागरिक शिक्षाको महत्त्वलाई पाँच बुँदामा वर्णन गर्नुहोस् ।

Describe civic education in five points.

१५. शिक्षामा समता र समानताबिचको भिन्नतालाई उपयुक्त उदाहरणसहित प्रस्तुत गर्नुहोस् ।

Present the difference between equity and equality in education with suitable examples.

१६. तपाईंको स्थानीय समुदायमा देखिने कुनै दुई द्वन्द्वको पहिचान गर्नुहोस् । ती द्वन्द्व समाधानको लागि अपनाउन सकिने व्यावहारिक उपाय सुझाउनुहोस् ।

Identify any two conflicts occurred in your local community. Suggest behavioural ways to resolve those conflicts.

१७. स्थानीय स्रोतको अधिकतम परिचालनमा सामुदायिक सङ्घसंस्थाको भूमिका पहिचान गर्नुहोस् ।

Identify the role of community organizations for maximum mobilizing of the local resources.

१८. शिक्षण सिकाइमा पाठ्यक्रमलाई कसरी प्रयोग गर्न सकिन्छ ? कुनै पाँच तरिका प्रस्तुत गर्नुहोस् ।

How do use curriculum in teaching learning? Present any five ways.

अथवा

मूल्याङ्कनलाई विद्यार्थीको सिकाइमा कसरी प्रयोग गर्न सकिन्छ ? कुनै पाँच तरिका प्रस्तुत गर्नुहोस् ।

How do use assessment in students' learning? Present any five ways.

१९. शिक्षकको पेसागत क्षमता विकास गर्ने कुनै दुई तरिकालाई छोटकरीमा वर्णन गर्नुहोस् ।

Describe any two ways of teachers' professional development.

समूह (ग)
Group (C)

तलका प्रश्नको लामो उत्तर दिनुहोस् ।

३ × ८ = २४

Write long answers of the following questions.

२०. विकासका आर्थिक, सामाजिक तथा मानव विकासका आयाम र शिक्षाबिचको अन्तरसम्बन्ध व्याख्या गर्नुहोस् ।

Explain the interrelationship between education and economic, social and human dimensions of development.

२१. सार्वजनिक सरोकारका विषयमा जनचेतना प्रवर्धन गर्ने कुनै चारओटा व्यावहारिक तरिका पहिचान गरी छोटकरीमा व्याख्या गर्नुहोस् ।

Identify and explain any four behavioural ways to promote public awareness in public concerns.

अथवा

विद्यालय शिक्षामा विविधता व्यवस्थापन गर्ने कुनै चारओटा व्यावहारिक तरिका पहिचान गरी छोटकरीमा व्याख्या गर्नुहोस् ।

Identify and explain any four behavioural ways to manage diversity in school education.

२२. विद्यालय सुधार योजना निर्माण गर्नुको औचित्यलाई चार बुँदामा प्रस्तुत गर्नुहोस् । विद्यालय सुधार योजनालाई प्रभावकारी रूपमा कार्यान्वयन गर्ने कुनै तीनओटा उपाय पहिचान गरी छोटकरीमा व्याख्या गर्नुहोस् ।

Present the rationale of making school improvement plan in any four points. Explain any three ways to implement the school improvement plan effectively.

विशिष्टीकरण तालिका

विषय : भूगोल (Geo.206)

सैद्धान्तिक मूल्याङ्कन

कक्षा १२

एकाइ	क्षेत्र/एकाइ	पाठ्य घण्टा	ज्ञान			बोध			प्रयोग			उच्चदक्षता			जम्मा प्रश्न संख्या			जम्मा अंक
			अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	
१	भूगोलको परिचय	५	१			१									२			२
२	भौतिक भूगोल	६०	१	१		१	२			१			१	१	२	५	१	३५
३	मानव भूगोल	२५	२			१		१	१				१		४	१	१	१७
४	नेपालको भूगोल	३०	१	१		१					१	१	१		३	२	१	२१
५	प्रयोगात्मक भूगोल	४०																
	जम्मा	१४०	५	२		४	२	१	१	१	१	१	३	१	११	८	३	७५

द्रष्टव्य :

- अति छोटो प्रश्न १ अङ्कका हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन् ।
- छोटो प्रश्न ५ अङ्कका हुने छन्, सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् र कुनै दुई प्रश्नमा विकल्प प्रश्न रहने छन् ।
- लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् र कुनै एउटा प्रश्नमा विकल्प प्रश्न रहने छ ।
- ज्ञान तहमा पूर्णाङ्कको २० प्रतिशतमा नबढ्ने गरी, उच्चदक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकताअनुसार प्रश्न रहने छन् ।
- सबै तहमा विषयको प्रकृति र आवश्यकताअनुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्चदक्षताअन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मकतहका प्रश्न रहने छन् ।
- एकाइ ५ प्रयोगात्मक भूगोलमा ४० पाठ्यघण्टाको प्रयोगात्मक कार्य गरी मूल्यांकन गरिने हुनाले सैद्धान्तिक खण्डमा प्रश्न राखिएको छैन ।

भूगोल (Geography [Geo.206])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ । (The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

१. नेपालको कुनै एक भौगोलिक प्रदेशका उपविभाजन लेख्नुहोस् ।

Write the sub-divisions of any one geographical region of Nepal.

२. नेपालको भूगोलसँग सम्बन्धित कुनै दुईओटा विषय लेख्नुहोस् ।

Mention any two integrated subjects in geography of Nepal.

३. मुखद्वीपको परिभाषा एक वाक्यमा दिनहोस् ।

Define delta in a sentence.

४. ऊष्ण हावापानीको प्रदेशमा पाइने कुनै दुई वनस्पतिको नाम लेख्नुहोस् ।

Write the names of any two-vegetation found in tropical climate region.

५. मानव भूगोल भनेको के हो ? एक वाक्यमा लेख्नुहोस् ।

What is human geography? Write in a sentence.

६. जनसङ्ख्या वृद्धिले ल्याउने कुनै एक समस्या लेख्नुहोस् ।

Write any one problem caused by the population growth.

७. उच्च जन्मदरको कुनै एक कारण लेखी त्यसलाई कम गर्ने कुनै एक उपाय लेख्नुहोस् ।

Identify any one causes of high fertility rate and also suggest a measure to minimize it.

८. तपाईं बसोबास गर्नु भएको क्षेत्रमा बसाईसराइले पारेको कुनै एक प्रभाव लेख्नुहोस् ।

Write any one effects brought by migration in your area.

९. नेपालमा वनविनाशको कुनै एक कारण लेख्नुहोस् ।

Write any one cause of deforestation in Nepal.

१०. नेपालको हावापानीमा प्रभाव पार्ने कुनै दुईओटा तत्त्व लेख्नुहोस् ।

Mention any two factors that affect Nepal's climate.

११. नेपालमा पर्यटकलाई आकर्षण गर्ने कुनै एक नारा लेख्नुहोस् ।

Prepare a slogan to attract tourist in Nepal.

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(8 x 5 = 40)

१२. पर्वत निर्माण प्रक्रियाको बारेमा छोटकरीमा लेख्नुहोस् ।

Explain the mountain formation process in short.

अथवा(Or)

हिमनदीले बनाएका संरचनाको बारेमा छोटकरीमा लेख्नुहोस् ।

Write briefly about the structures built by glacier.

१३. नदीका काम छोटकरीमा लेख्नुहोस् ।

Write the functions of river in short.

१४. जलवायु परिवर्तन भनेको के हो ? छोटकरीमा लेख्नुहोस् ।

What is climate change? Write in brief.

१५. तपाईंको क्षेत्रमा पाइने प्राकृतिक वनस्पति संरक्षण गर्ने उपाय बताउनुहोस् ।

Suggest the measures to protect the natural vegetation of your area.

१६. तपाईंको क्षेत्रमा पाइने जैविक विविधता संरक्षण गर्ने योजना बनाउनुहोस् ।

Present a plan for the protection of Bio-diversity in your area.

१७. तपाईंको क्षेत्रमा वातावरण तथा मानवविचको अन्तरसम्बन्धलाई छोटकरीमा वर्णन गर्नुहोस् ।

Write a short description about the interrelationship between human and environment in your area.

१८. नेपालमा सौर्य ऊर्जाको उपयोगबारे छोटकरीमा लेख्नुहोस् ।

Describe the trend of utilization of solar resource in Nepal.

अथवा(Or)

नेपालमा पर्यटन उद्योगको महत्त्व छोटकरीमा लेख्नुहोस् ।

Write the importance of tourism industry of Nepal in short.

१९. अव्यवस्थित सहरीकरणले धेरै समस्या निम्त्याउँछ । यो समस्यालाई समाधान गर्ने कुनै पाँचओटा

उपाय बताउनुहोस् ।

Unplanned urbanization causes many problems. Suggest any five measures to overcome the problem.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(3 X 8 = 24)

२०. भूक्षयका कारण विश्लेषण गरी माटो संरक्षणका उपाय बताउनुहोस् ।

Analyze the causes of soil degradation and also suggest the measures for the conservation of soil.

अथवा (Or)

तपाईं बसोवास गरेको क्षेत्रको हावापानी र वनस्पतिबिचको अन्तरसम्बन्धको चर्चा गर्नुहोस् ।

Describe the interrelationship between the climate and vegetation of your area.

२१. निर्माणमा आधारित उद्योगको अवस्थितीकरणमा असर गर्ने तत्त्व व्याख्या गर्नुहोस् र हावापानीको असर पनि लेख्नुहोस् ।

Explain the factors that affect the existence of construction based industries and also describe the effects of climate.

२२. नक्साको सहायताले नेपालको नगदेवालीको वितरणलाई प्रकाश पार्नुहोस् ।

Shed light the distribution of cash crops of Nepal through map.

CURRICULUM DEVELOPMENT CENTRE

11. Legal Drafting ([Led. 210])

Test Specification Chart																			
Legal Drafting(Plan for Question and distribution of marks covered																			
Unit	Content Area	Teaching Hours	Knowledge		Comprehension			Application		Higher Ability		Total Question covered			Total Question	Total Marks			
			VS	S	L	VS	S	L	VS	S	L	VS	S	L					
1	Introduction to Legal Drafting	8	1	1										1	1	-	2	6	
2	Drafting of Court Documents	25	1		1	1								1	2	1	1	4	15
3	Drafting of Private Transaction Documents	15	1		1														
4	Drafting of Commercial Transaction Documents	15	1		1				1	1				4	1	1	6	17	
5	Drafting of Documents in General Use	10	1																
6	Drafting of other documents	7	1						1			1		2	2	-	4	12	

	80	6	1	-	3	1	-	2	1	-	1	1	9	5	2	16	50
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Notes:

1. The alternative short and long questions will be asked from appropriate chapters taking in to account the nature, depth and coverage of the contents.
2. Very short question will be of one (1) mark and there will be nine (9) questions from each of the chapters to the possible extent.
3. Short question will be of five (5) marks and there will be five (5) questions from each of the chapters to the possible extent. All the questions shall be compulsory. However, two alternative questions will be added to any two questions among the total questions asked.
4. There will be two (2) long questions carrying eight (8) marks. All the questions shall be compulsory. However, one alternative question will be added to any one of the two questions.
5. The weightage of the question shall not exceed twenty percent in knowledge level, no less than 20 percent in higher efficiency and in other level question may be asked as per necessity.

Types of Question

Types of Question	Numbers of Question	Total marks
Very short answer type	9	9x1=9
Short answer type	5	5x5=25
Long answer type	2	2x8=16

Note: Numbering of the questions should be arranged from first very short questions (Q.N. 1 to 9), short answer questions (Q.N. 10 to 14) and long answer questions (Q.N. 15 and 16).

कानुनी मस्यौदा (Legal Drafting [Led. 210])

कक्षा (Grade): XII

समय(Time) : 2 Hrs.

पूर्णाङ्क (Full Marks): 50

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ । (The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नको उत्तर दिनुहोस् (Attempt All Questions.) (9 x 1 = 9)

1. लिखत भनेको के हो?
What is deed (likhat)?
2. फिरादपत्र भनेको के हो ?
What is meant by registration of complaints?
3. थुनुवा पुर्जा किन जारी गरिन्छ ?
Why arrest warrant (thunuwa purji) is issued?
4. व्यक्तिगत कारोबारमा प्रयोग हुने कुनै दुई लिखतको नाम लेख्नुहोस् ।
Name any two private transaction documents.
5. व्यक्तिगत कारोबारको लिखतमा खुलाउनु पर्ने आवश्यक तत्व के के हुन् ?
What are the elements that need to be disclosed in private transaction documents?
6. बैनापट्टा लिखतको अर्थ लेख्नुहोस् ।
Write the meaning of advance payment deed.
7. करारनामाको लिखत किन आवश्यक पर्दछ ?
Why deed of contract is necessary?
8. सिफारिस पत्र भनेको के हो ?
What is recommendation letter?
9. पेशी स्थगित र हाजिर हुने निवेदनबिचको फरक देखाउनुहोस् ।
Show the difference between peshi sthagitko nibedan and hajir huneko nibedan.

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्नको उत्तर दिनुहोस् । (Attempt All Questions) (5 x 5 = 25)

10. कानुनी मस्यौदा भनेको के हो ? कानुनी मस्यौदाको आवश्यकताबारे विश्लेषण गर्नुहोस् ।
What is deed? Explain the need of legal draft. २+३
 11. अधिकृत बारेसनामा भनेको के हो ? कस्तो अवस्थामा अधिकृत बारेसनामा दिइन्छ ? वर्णन गर्नुहोस् ।
What is meant by power of attorney? In which condition power of attorney is issued? Explain. २+३
 12. दृष्टि बन्धकी लिखत भनेको के हो ? दृष्टि बन्धकी लिखतको नमुना तयार गर्नुहोस् ।
What is Dristibandhaki likhat ? Draft a sample of Dristibandhaki likhat. २+३
- अथवा(Or)
- भोग बन्धकी लिखत भनेको के हो ? भोग बन्धकी लिखतको नमुना तयार गर्नुहोस् ।
What is bhogbandhaki likhat ? Draft a sample of bhogbandhaki likhat. २+३
 13. नागरिकताको सिफारिस लिनका लागि आवश्यक कागजात के के हुन् ? यसको कार्यविधिको बारेमा उल्लेख गर्नुहोस् । २+३
What are documents required to get recommendation of citizenship? State its procedures.

14. समाह्वान तथा इतलायनामा भनेको के हो ? समाह्वान र इतलायनामा बिचको भिन्नता देखाउनुहोस् । ३+२
What are summons and italayanama? Show the difference between summons and italayanama.
अथवा(Or)
फिरादपत्र भनेको के हो ? फिरादपत्र लेख्दा ध्यान दिनुपर्ने कुरा के के हुन् ? २+३
What is deed of complaints? What are the things to be considered while drafting deed of complaints?

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्नहरूको उत्तर दिनुहोस् । (Attempt All Questions) (2 X 8 = 16)

15. पुनरावेदन पत्रको बारेमा उल्लेख गर्नुहोस् । भ्रगडिया भिकाउने आदेशका लागि आवश्यक पर्ने आधारको विश्लेषण गर्नुहोस् । ३+५
State the letter of re-appeal. Evaluate the grounds necessary for the issuance of Jhagaddiya jhikauneko aadesh.
अथवा (or)
खानेपानी र विद्युत् जडान गर्नका लागि सिफारिस पत्र लिन आवश्यक कागजात र प्रक्रियाको बारेमा चर्चा गर्नुहोस् ।
What are the necessary documents and procedures required to get letter of recommendation to connect water and electricity? Discuss.
16. बैनापट्टा लिखतको किन आवश्यक पछ ? बैनापट्टा लिखतको नमुना तयार गर्नुहोस् । ३+५
Why advance payment deed (Bainapatta) is needed? Draft a sample of advance payment deed (Bainapatta).

विशिष्टीकरण तालिका

विषय: समाजशास्त्र (कक्षा- १२)

सैद्धान्तिक मूल्याङ्कन:

एकाई	पाठ्यवस्तु		ज्ञान			बोध			प्रयोग			उच्चदक्षता			जम्माप्रश्न			जम्माअंक भार
			लामो	छोटो	अति छोटो	लामो	छोटो	अति छोटो	लामो	छोटो	अति छोटो	लामो	छोटो	अति छोटो	लामो	छोटो	अति छोटो	
१	सामाजिक असमानता र सिमान्तीकरणका आयामहरू	१५			१	१									१		१	९
२	सामाजिक परिवर्तन र पेसा	१३		१				१			१			१		१	३	८
३	सामाजिक विविधता तथा एकता	२०					१				१			१	१			१३
४	सामाजिक संस्था	१५					१					१				२		१०
५	नेपालमा बसाइँसराइ र सहरीकरण	१७	१		१			१							१		२	१०
६	विकासको समाजशास्त्र	१५			१			१				१	१			१	३	८
७	मुलुकी ऐन संहिता	१०			१				१	१						१	२	७
८	सामाजिक अनुसन्धान विधि: सामाजिक सर्वेक्षण र स्थलगत अध्ययनका विधि	१५					१			१						२		१०
	जम्मा	१२०	१	१	४	१	३	३		२	२	१	२	२	३	८	११	७५

द्रष्टव्य : अति छोटो प्रश्न १ अङ्कको हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन् । . छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् साथै कुनै दुई प्रश्नमा विकल्प दिन सकिने छ । लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् साथै कुनै एक प्रश्नमा विकल्प दिन सकिने छ । ज्ञान तहमा पूर्णाङ्कका २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकता अनुसार प्रश्न रहने छन् । सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्च दक्षता अन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहने छन् ।

समाजशास्त्र (Sociology [Soc.212])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ। किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ। (The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

१. असमानताको एक वाक्यमा परिभाषा दिनुहोस्।

Define inequality in a sentence.

२. सामाजिक परिवर्तन भनेको के हो ?

What is meant by social change?

३. पेसा परिवर्तनले व्यक्तिको जीवनमा पार्न सक्ने कुनै दुई प्रभाव प्रस्तुत गर्नुहोस्।

Present any two impacts that could be caused in an individual with the change of profession.

४. विप्रेषण नेपालको अर्थतन्त्रको भरपर्दो साधन हुन सक्दैन। किन ?

Remittance can't be a reliable means of Nepalese economy. Why?

५. बसाइँसराइको कुनै दुई कारण लेख्नुहोस्।

State any two causes of migration.

६. सहरीकरण भनेको के हो ?

What is meant by Urbanization?

७. विकासको समाजशास्त्रीय अवधारणा लेख्नुहोस्।

Write the sociological concept of development.

८. सङ्घीयता भनेको के हो ?

What do you mean by Federalism?

९. नेपालको प्रादेशिक विकास किन चुनौतीपूर्ण देखिन्छ ? दुई प्रमाण दिनुहोस्।

Why is provincial development challenging in Nepal? Give two proofs.

१०. मुलुकी (संहिता) ऐन, २०७४ कहिले देखि कार्यान्वयन भएको हो ? पूरा मिति लेख्नुहोस्।

When was civil (codified) code, 2074 implemented? Write full date.

११. समाजमा भइरहेको सामाजिक भेदभाव रोक्न तपाईंले के कार्य गर्नुभएको छ ?

What works have you done to prevent social inequality existing in society?

समूह 'ख'

Group B

छोटो उत्तरात्मक प्रश्नहरू (Short answer questions)

(8×5=40)

सबै प्रश्नको उत्तर दिनुहोस् (Attempt all questions)

१२. नेपालमा पेसा र जीविकोपार्जनबिचको सम्बन्ध प्रस्तुत गर्नुहोस्।

Present the relation between profession and livelihood in Nepal.

१३. 'सामाजिक विविधता नेपाली समाजको पहिचान हो।' कसरी ? उदाहरणसहित बयान गर्नुहोस्।

'Social diversity is the identity of Nepalese society.' Explain with examples.

अथवा (or),

सीमान्तीकरणबाट समाजमा सिर्जना हुने समस्या समाधानका लागि योजना बनाउनुहोस्।

Make a plan to solve the problems borne by marginalization.

१४. नेपाली परिवार प्रथामा आएको परिवर्तन के के छन् ? बुँदागत रूपमा उल्लेख गर्नुहोस्।

What are the changes seen in the Nepalese family custom? Mention in points.

१५. नेपालमा सामाजिक संस्थाले गरेका कार्य विवादित भई सार्वजनिक टीका टिप्पणी हुने गरेको पाइन्छ । यस सन्दर्भमा आफ्ना धारणा लेख्नुहोस् ।

The works carried out by social institutions in Nepal are commented on and publicly criticized. Write your opinions in this regard.

१६. नेपालमा स्थानीय विकासका आयामहरु उल्लेख गर्दै दुई साथीबिचको संवाद तयार पार्नुहोस् ।

Prepare a dialogue between two friends mentioning the dimensions of local development in Nepal.

१७. मुलुकी ऐनको सम्पत्ति र अंशवण्डा महल तपाईंको जीवनमा कसरी प्रयोग योग्य भएको छ ? लेख्नुहोस् ।

In what ways are the section of property and its division mentioned in civil code applicable for your life? Write down.

१८. सामाजिक अनुसन्धानमा स्थलगत अध्ययनको महत्त्व लेख्नुहोस् ।

Write down the importance of field study in social research.

१९. तपाईंले कुनै एक अनुसन्धान गरेको हुनुपर्छ, उक्त अनुसन्धानको प्रतिवेदनको परिचय र उद्देश्य खण्ड लेख्नुहोस् ।

You might have made a research, now write the introduction and objectives part of report of the research.

अथवा (or),

नेपालमा बसाइँसराइ प्रवृत्तिको विश्लेषण गर्नुहोस् ।

Analyze the trend of migration in Nepal.

समूह ग

लामो उत्तरात्मक प्रश्नहरु (Short answer questions)

३×८ = २४

सबै प्रश्नको उत्तर दिनुहोस् (Attempt all questions)

२०. नेपाली समाजमा असमानताका आयामको विस्तृतमा चर्चा गर्नुहोस् ।

Discuss in detail the dimensions of inequality in Nepalese society.

अथवा (or),

विवाहको परिभाषा दिई यसका कार्यको चर्चा गर्नुहोस् ।

Define marriage and discuss its functions.

२१. आरक्षणको संवैधानिक प्रावधानले सीमान्तकृत जातजाति र समुदायलाई विकासका मुलधारमा ल्याएको दृष्टान्त प्रस्तुत गर्दै एक लेख तयार पार्नुहोस् ।

Prepare an article presenting the instances of mainstreaming the marginalized castes and community in development via reservations of the constitutional provisions.

२२. नेपालमा सहरीकरणलाई व्यवस्थित गर्न के कस्ता रणनीति तयार पार्नुपर्छ ? व्याख्या गर्नुहोस् ।

What type of strategies should be prepared for the management of urbanization in Nepal? Explain them.

प्रश्न योजना तथा अङ्कभार वितरण																		
एकाइ	क्षेत्र/एकाइ	पाठ्य भार	ज्ञान			बोध			प्रयोग			उच्च दक्षता			जम्मा अङ्कभार			जम्मा
			अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	
१	व्यवस्थापनको प्रकृति	१०	१	१			१								१	१०		११
२	शास्त्रीय व्यवस्थापनका अवधारणा	८																
३	योजना तथा निर्णय प्रक्रिया	१२	१			१	१		१	१	१				३	१०	८	२१
४	सङ्गठन कार्यहरु	२०																
५	नेतृत्व	८	१	१		१			१				१	१	३	१०	८	२१
६	नियन्त्रण	६																
७	अन्य व्यवस्थापकीय कार्यहरु	२०																
८	समकालीन व्यवस्थापकीय विषयहरु	१६	२			१	१								३	५		८
९	व्यावसायिक पत्र लेखन	१२	१							१				१	१	५	८	१४
१०	व्यावसायिक योजना	८																
	जम्मा	१२०	६	२		३	३		२	२	१		१	२	११	४०	२४	७५

द्रष्टव्य : १. अति छोटो प्रश्न १ अङ्कको हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन्। छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् साथै कुनै दुई प्रश्नमा विकल्प दिन सकिने छ। लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् साथै कुनै एक प्रश्नमा विकल्प दिन सकिने छ। ज्ञान तहमा पूर्णाङ्कका २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकताअनुसार प्रश्न रहने छन्। सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन्। सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन। उच्च दक्षताअन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहने छन्।

व्यावसायिक अध्ययन (Business Studies [Bus.216])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ। किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ।

(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

१. व्यवस्थापनलाई परिभाषित गर्नुहोस्।

Define management?

२. योजनाका कुनै दुई सीमा उल्लेख गर्नुहोस्।

State any two pitfalls of planning.

३. निर्णय कार्य भन्नाले के बुझ्नुहुन्छ?

What do you mean by decision making?

४. कार्यात्मक सङ्गठन संरचनाको ढाँचा तयार पार्नुहोस्।

Draw a functional organization structure.

५. सञ्चारका प्रकार लेख्नुहोस्।

Write the types of communication.

६. सुपेरिवेक्षण भनेको के हो?

What is supervision?

७. कर्मचारीका लागि उत्प्रेरणा किन महत्त्वपूर्ण हुन्छ?

Why motivation is important for employee?

८. पारिवारिक व्यवसाय व्यवस्थापनका कुनै दुई विशेषता उल्लेख गर्नुहोस्।

State any two feature of family business management.

९. आपूर्ति शृङ्खला व्यवस्थापन भनेको के हो?

What is supply chain management?

१०. प्रतिभा व्यवस्थापन सङ्गठनका लागि किन महत्त्वपूर्ण हुन्छ?

Why talent management is important for an organization?

११. व्यावसायिक पत्रका गुण सूचीबद्ध गर्नुहोस्।

List out the qualities of business letter.

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस्। (Attempt All Questions.)

(8 x 5 = 40)

१२. व्यवस्थापनलाई एक कलाका रूपमा व्याख्या गर्नुहोस्।

"Management is an art". Explain.

१३. फायोलको प्रशासनिक व्यवस्थापनको सिद्धान्त संक्षेपमा व्याख्या गर्नुहोस्।

Briefly discuss the Fayol's administrative management theory.

१४. एउटा व्यावसायिक सङ्गठनमा व्यवस्थापकले कसरी निर्णय लिन्छन्?

How managers make decision in a business organization?

अथवा(or)

व्यावसायिक सङ्गठनमा योजनाको औचित्य सङ्क्षेपमा व्याख्या गर्नुहोस् ।

Briefly describe the rationale of planning in a business organization.

१५. सङ्गठन कार्यका सिद्धान्त व्याख्या गर्नुहोस् ।

Explain principles of organizing.

१६. नेताको रूपमा व्यवस्थापकको भूमिका विश्लेषण गर्नुहोस् ।

Analyze the role of manager as a leader.

१७. प्रभावकारी नियन्त्रणका आवश्यक तत्त्व वर्णन गर्नुहोस् ।

Describe essentials of an effective control.

अथवा(or)

प्रभावकारी संचारका मनोवैज्ञानिक र भाषागत अवरोध स्पष्ट पार्नुहोस् ।

Elucidate psychological and semantic barriers of effective communication.

१८. गुणस्तर व्यवस्थापन भनेको के हो ? यसका तत्त्व चर्चा गर्नुहोस् ।

2+3

What is quality management? Discuss its components.

१९. बजार सहायक पदका लागि एउटा आवदेन पत्र तयार गर्नुहोस् ।

Draft an application letter for the post of marketing assistant.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(3 X 8 = 24)

२०. उच्च व्यवस्थापकहरू अख्तियार प्रत्यायोजन गर्न किन अनिच्छुक हुन्छन् ? अख्तियार प्रत्यायोजन र विकेन्द्रीकरण कुनै तीन भिन्नता उल्लेख गर्नुहोस् ।

5+3

Why top managers are unwilling to delegate authority? State any three differences between delegation and decentralization of authority.

२१. मास्लोको उत्प्रेरण सिद्धान्तको आलोचनात्मक व्याख्या गर्नुहोस् ।

Critically examine the Maslow's theory of motivation.

२२. प्रमुख तत्त्व समावेश गर्दै एउटा व्यावसायिक योजना तयार पार्नुहोस् ।

Formulate a business plan including its major elements.

अथवा(or)

द्वन्द्व व्यवस्थापन भनेको के हो । तपाईंको विचारमा कुनै सङ्गठनमा द्वन्द्व सृजना हुनका कारण के हुन सक्छन्?

What is conflict management? What do you think, what could be the cause of conflict in an organization?

3+5

14. Chemistry

Test Specification Chart 2078

Grade: 12

Subject: Chemistry Theory (Che. 302)

SN	Content Area	Working hour	Competency level																		Unit wise Marks						
			Remembering			Understanding						Applying						Higher Ability									
			M	C	Q	S	A	Q	M	C	Q	S	A	Q	L	A	Q	M	C	Q		S	A	Q	L	A	Q
			No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks		No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks
1	Physical chemistry	40																								22	
2	Inorganic chemistry	20																								12	
3	Organic chemistry	55	2	2	2	10	5	5	1	5	1	8	3	3	2	10	1	8	1	1	3	15	1	8	33		
4	Applied chemistry	13																								8	
Total		128	12						18						21						24						75

Item format plan					
S.N.	Type of item	Score per item	Total item	Total score	Time
1	Multiple Choice Questions	1	11	11	25 minutes
2	Short Question Answer	5	8	40	155 minutes
3	Long Question Answer	8	3	24	
Grand Total			22	75	3 hours

Remarks:

- Item format in composite should be met as per the specification grid.
- Designated weightage in the combined cell should be met, but ± 3 marks variation will be allowed within a unit/content area. But no unit can be nil.
- In the case of SAQ and LAQ, these should ensure that 1 mark will be assigned per element expected as correct response.
- The distribution of cognitive domain of questions should be nearly 15% knowledge/remembering, 25% understanding, 30% applying and 30% higher ability level, but ± 5 percent variation will be allowed in overall question set.
- SAQ and LAQ can be structured (have two or more sub-items). SAQ and LAQ can be distributed to two or more cognitive behaviors.
- In such case these will be added to their respective cognitive behavior. In sum the distribution of cognitive behavior should be approximately to the required distribution. In case of SAQ there will be 2 "OR" questions and in case of LAQ there will be 2 "OR" question.

Model Question
School Leaving Certificate Examination

2078

Grade: XII

Subject: Chemistry

Subject Code: 302

Full marks: 75 (11 marks Obj+ 64 marks Sub)

Time: 3 Hours

Group A: Multiple Choice Questions (11×1 = 11)

Time 25 Minutes

Tick the correct answer.

1. What is the equivalent weight of H_3PO_3 in the reaction; $2\text{NaOH} + \text{H}_3\text{PO}_3 \rightarrow \text{Na}_2\text{HPO}_3 + 2\text{H}_2\text{O}$
A) 2M B) M/1 C) M/2 D) M/3
2. The solubility product of chalk is 9.3×10^{-8} . What is its solubility in gram per liter?
A) 3.04×10^{-1} B) 3.04×10^{-2} C) 3.04×10^{-3} D) 3.04×10^{-4}
3. What is the concentration of N_2O_5 in the following first order reaction in which the rate is 2.4×10^{-5} mol/L and rate constant is $3.0 \times 10^{-5}\text{S}^{-1}$?
 $2\text{N}_2\text{O}_5 \longrightarrow 4\text{NO}_2 + \text{O}_2$
A) 0.04 B) 0.8 C) 1.2 D) 1.4
4. What happens when the lead storage battery is discharged?
A) SO_2 is evolved B) PbSO_4 is consumed
C) Lead is formed D) H_2SO_4 is consumed
5. What is the general electronic configuration of transition metal?
A) $(n-1)s^2p^6d^{1-10}ns^{0-2}$ B) $(n-1)s^2p^6ns^2np^1$ C) $(n-1)s^2p^6d^5ns^1$ D) $(n-1)s^2p^6ns^1$
6. Which of the following ore is concentrated by froth-flotation process?
A) Hematite B) Siderite C) Galena D) Malachite
7. Which of the following products is obtained when nitrobenzene is electrolytically reduced?
A) p-aminophenol B) azobenzene C) azoxybenzene D) hydrazobenzene
8. Which of the following compounds is pi-bonded organo-metallic compound which has ethene as one of its component and is the first synthesized organometallic compound?
A) Zeise's salt B) Ferrocene C) Dibenzene chromium D) Tetraethyl tin

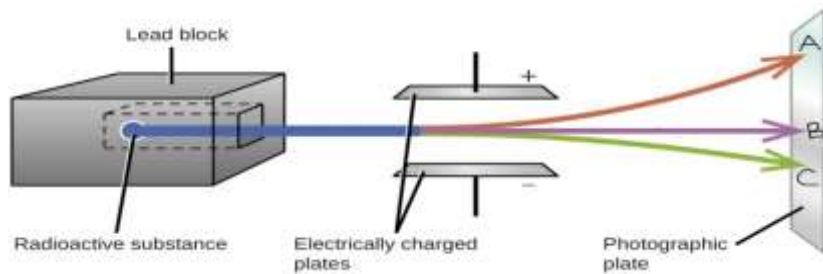
9. What effect does calcium sulphate have on cement?

- A) Retards setting action B) Acts as flux C) Imparts color D) Reduces strength

10. Removal of which of the following leads to higher fiber-fiber bonding strength in paper? .

- A) Softwood B) Hardwood C) Lignin D) Pulp

11. In the figure given below which one is correct?



- A) Alpha rays deviate towards A, beta rays deviate towards C and gamma rays direct towards B.
- B) Alpha rays direct towards B, beta rays deviate towards C and gamma rays towards A.
- C) Alpha rays deviate towards C, beta rays direct towards B and gamma rays towards A.
- D) Alpha rays deviate towards C, beta rays deviate towards A and gamma rays direct towards B.

Model Question
School Leaving Certificate Examination

2078

Grade: XII

Subject: Chemistry

Subject Code: 302

Full marks: 75 (11 marks Obj + 64 marks Sub)

Time: 3 Hours

Attempt all the questions.

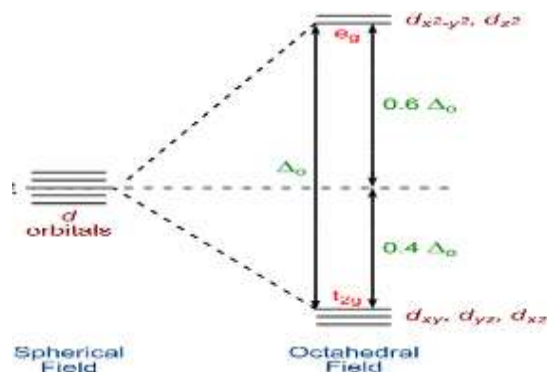
Group B: Short Answer Questions (8×5 = 40)

1. Standard solution of Na_2CO_3 is used to determine the strength of H_2SO_4 during Titration.
- A) How is the completion of the reaction in this titration detected? Is the solution prepared from Na_2CO_3 primary standard? Why? [1+1]
- B) 2.16 g of pure Na_2CO_3 is added to 400 ml deci-normal solution of H_2SO_4 . How many grams of H_2SO_4 is further required to neutralize the resultant solution completely? [3]
- OR
- A) Derive the relation $k = \log \frac{2.303}{t} \log \frac{a}{a-x}$. Show that for the first order reaction the time required for half the change (half life period) is independent of the initial concentration. (2+1)
- B) A first order reaction is 50% completed in 1.26×10^{145} . How much time would it take for 90% completion? (2)
2. Study the following data for the thermodynamic process $\text{H}_2\text{O} (\text{l}) \longrightarrow \text{H}_2\text{O} (\text{s})$ at different temperatures and at 1 atmospheric pressure.

Condition	Temperature	Entropy change in J/Kmol^{-1}	
		Entropy of system	Entropy of surrounding
1	-1°C	-25.68	+25.72
2	0°C	-26.55	+26.88
3	$+1^\circ\text{C}$	-27.62	+27.42

- a. Calculate the total entropy of the universe at given condition 3. (1)
- b. Can we predict the spontaneity of the given reaction at 0°C ? (1)
- c. Calculate the equilibrium constant for the fusion of ice at 1°C . What is the effect of temperature for the entropy change of reaction? (2+1)

3. The figure shows the octahedral distortion of d-block orbital in the presence of ligand.



- Why does octahedral distortion occur in the presence of ligand? Explain on the basis of CFT. (2)
 - On the basis of the given distortion, how can you explain $[\text{Cu}(\text{H}_2\text{O})_6]^{++}$ is blue colored complex. (1)
 - Out of Fe^{++} and Fe^{+++} which one is more stable? Explain on the basis of distortion seen in the above figure. (1)
 - Why do such elements which give such splitting show good catalytic properties? (1)
4. X is an ore of a metal M. X on calcination gives black precipitate (W) of metal oxide which belongs to group II of basic radical in qualitative analysis. X on roasting gives the metal (M) and a gas as major byproduct. The gas when passed through an acidified $\text{K}_2\text{Cr}_2\text{O}_7$ solution turns green.
- Identify the metal X. (1)
 - Write the reaction involved during calcination of X. (1)
 - Write the action of the gas on acidified $\text{K}_2\text{Cr}_2\text{O}_7$. (1)
 - Convert metal X into its vitriol. (2)
5. The given table shows the compounds and their molecular formula. How can you convert P to Q, where Q is a compound in which two methyl groups are substituted at adjacent carbons? How is P obtained from T, where T is secondary alcohol? Write the reactions involved in the conversion of P into R and S? [5x1=5]

Compounds	Molecular formula
P	$\text{C}_3\text{H}_7\text{Br}$
Q	C_6H_{14}
R	CH_2O
S	$\text{C}_2\text{H}_4\text{O}$
T	$\text{C}_3\text{H}_8\text{O}$

OR

An aromatic compound [A] in which one chlorine atom is substituted at benzene ring. When the compound [A] is heated with 2, 2, 2-trichloro ethanal in presence of conc. H_2SO_4 gives an insecticide [B]. The compound [A] when treated with an acid chloride containing two carbon atoms in the presence of anhydrous AlCl_3 gives [C].

- a. Identify B and C. (1 +1)
 b. Reaction of aq. NaOH on the compound [A] is more difficult than with chloroethane, justify with a suitable explanation. (2)
 c. How would you obtain compound A from benzene diazonium chloride? (1)
6. A list of compounds are given as follows:
 p-hydroxyazobenzene, $C_6H_5N_2Cl$, $C_6H_5NH_2$, $C_6H_5NO_2$, C_6H_6
- From the above list of compounds, prepare a sequence of reaction chain with suitable conditions and reactions. (1+1+1+1+1)
7. Write down the isomeric alcohols of C_3H_8O and their IUPAC name. How would you apply Victor Meyer's test to distinguish these isomers? (2+3)
8. A) Define condensation polymerization. Write the molecular structures of monomers of Bakelite. (1+2)
 B) Differentiate between OPC and PPC cement. (2)

Group C: Long Answer Questions (3 × 8 = 24)

9. (A) What amount of $Zn(OH)_2$ will be precipitated out at $25^{\circ}C$ if 100 ml of 0.22g NaOH is added to 1 liter of a saturated solution of $Zn(OH)_2$? Precipitate is obtained in this reaction, why? [Solubility product of $Zn(OH)_2$ at $25^{\circ}C$ is 1.8×10^{-14} .] (4+1)
 (B) Potassium hydroxide having pH 8 is diluted 1000 times. Calculate the pH of the diluted base. (3)
- OR
- (A) Calculate heat of formation of ethyl alcohol from the given data. (4)

Heat of combustion of ethyl alcohol	-330 kcal
Heat of formation of Carbondioxide	-94 kcal
Heat of formation of water	-68.5 kcal

- (B) The standard electrode potential for the following electrode reaction at standard state is given.
- $Cu(s) \longrightarrow Cu^{++}(aq) + 2e^{-} \dots \dots \dots E^{\circ} Cu^{++}/Cu = +0.34V$
 $Ag^{+}(aq) + e^{-} \longrightarrow Ag(s) \dots \dots \dots E^{\circ} Ag^{+}/Ag = +0.80V$
- a. Write the cell notation indicating anode and cathode. (1)
 b. With 1M solution of ion at $25^{\circ}C$ and 1atm. pressure, what will be the cell potential? (1)
 c. Calculate the free energy change in the reaction. (1)
 d. Can we store $AgNO_3$ solution in a copper vessel? (1)
10. (A) A primary alcohol with molecular wt. 46 is boiled with sodium hydroxide and iodine. When the same alcohol is heated with ethanoic acid in presence of conc. H_2SO_4 , one of the derivatives of carboxylic acid is obtained. Write the reactions involved in both conditions. What would be the product obtained when the same alcohol is heated with conc. H_2SO_4 ? How would you distinguish the above alcohol from methanol? [1+1+1+1+1=5]
 (B) An aromatic compound known as oil of mirabane is prepared from benzene.

- a. What product would you obtain when the compound is electrolyzed in acidic medium?
(1)
- b. Give the complete reaction for the conversion of the compound into yellow dye. (2)

11.

(A) An organic compound is used in the given figure to preserve museum specimens and also to prepare urinary antiseptics.

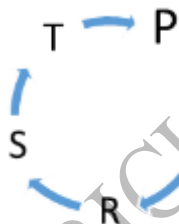


- a. Write the reaction when the compound is heated with concentrated sodium hydroxide. (1)
- b. Draw the structure of urinary antiseptic (1)
- c. Write the chemical reaction that would occur when the given preservative is treated with phenol in acidic medium. (2)
- d. How would you obtain the preservative from methanol? (1)

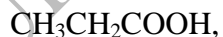
(B) A carbonyl compound with molecular formula C_3H_6O (it does not give silver mirror test) has treated with a compound Y which gives Z. Z on hydrolysis in acidic medium gives 2-hydroxy-2-methyl propanoic acid. Identify the carbonyl compound, Y and Z with proper reactions. [1+1+1]

OR

(A) Starting from compound P, how do the reactions proceed ahead to obtain T which gives benzene where R is aniline? Complete the reaction sequence with suitable conditions. [5x1=5]



(B) Arrange the given compounds according to their ascending order of acidic strength and justify your order.



[1+1+1]

The End

Appendix
Test Matrix

SN	Chapter	Area/TH	Weightage (TH)	MCQ	SAQ	LAQ
1	Volumetric analysis	Physical Chemistry 40 (22 Marks)	8	1	1	
2	Ionic equilibrium		10	1		1
3	Chemical kinetics		7	1	1	
4	Thermodynamics		8		1	(3)
5	Electrochemistry		7	1		(5)
6	Transition metal	Inorganic 20 (12 Marks)	5	1	1	
7	Heavy metal		15	1	1	
8	Haloalkanes	Organic Chemistry 55 (33 Marks)	8		1	
9	Haloarenes		3		1	
10	Alcohols		7			(5)
11	Phenols		4		1	
12	Ethers		2			
13	Aldehydes and ketones		10			1
14	Carboxylic acids		9			1
15	Nitro compounds		3	1		
16	Amino compounds		7		1	(3)
17	Organometallic compounds		2	1		
18	Chemistry in service to mankind	Applied Chemistry 13 (8 Marks)	4		(3)	
19	Cement		4	1	(2)	
20	Paper and pulp		3	1		
21	Nuclear chemistry		2	1		
	Total	128 (75 Marks)	128	11	40	24

Note: This is the test matrix prepared for this set only but for other sets of questions test matrix may be varied.

१५ अर्थशास्त्र विशिष्टीकरण तालिका (३०४)

सैद्धान्तिक तथा अभ्यास

विषय क्षेत्र	उपक्षेत्र	कार्य घण्टा	ज्ञान			बोध			प्रयोग			उच्च दक्षता			जम्मा प्रश्न			जम्मा सख्या	जम्मा भार	
			अ. छोटो	छोटो	लामो	अ.छोटो	छोटो	लामो	अ.छोटो	छोटो	लामो	अ.छोटो	छोटो	लामो	अ.छोटो	छोटो	लामो			
१. अर्थशास्त्रको आधारभूत अवधारण र साधनको वितरण	१. अर्थशास्त्रको आधारभूत अवधारण र साधनको वितरण	८	१				१								१	१		२	६	
२. सुक्ष्म अर्थशास्त्र	१. बजार तथा आम्दानी रेखाहरु																			
	२. लागत रेखाहरु																			
	३. मूल्य तथा उत्पादन निर्धारणको सिद्धान्त																			
	४. उत्पादनका साधनको मूल्य निर्धारण	३८					१		१	१	१		१		१	३	१	५	२४	
३. समष्टि अर्थशास्त्र	१. बैङ्किङ प्रणाली र मौद्रिक नीति																			
	२. सरकारी वित्त																			
	३. अन्तराष्ट्रिय व्यापार	२५	१	१		१				१					२		१		४	१५
४. विकास अर्थशास्त्र	१. गरीबि, असमानता, बेरोजगारी र मानव संसाधन	८	१										१		१	१			२	६
५. नेपालको अर्थव्यवस्था	१. नेपालको वैदेशिक व्यापार र वैदेशिक रोजगार																			
	२. नेपालमा विकास योजना																			
	३. दिगो विकासका लक्ष्यहरु र नेपाल	२८	१			१			१	१			१		३	१	१	५	१६	
६. परिमाणात्मक पद्धति	१. आधारभूत तथ्याङ्कशास्त्र	१३	१					१				१	१		३	१		४	८	
		१२०	५	१		२	२		३	२	२	१	३	१	११	८	३	२२	७५	

द्रष्टव्य :

१. अति छोटो प्रश्न १ अङ्कको हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन् ।
२. छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् साथै कुनै दुई प्रश्नमा विकल्प दिन सकिने छ ।
३. लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् साथै कुनै एक प्रश्नमा विकल्प दिन सकिने छ ।
४. ज्ञान तहमा पूर्णाङ्कका २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकताअनुसार प्रश्न रहने छन् ।
५. सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्च दक्षताअन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहने छन् ।

अर्थशास्त्र (Economics [Eco.304])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।
(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

1. मिश्रित अर्थव्यवस्थाका कुनै दुईओटा विशेषता लेख्नुहोस् ।
(Write any two features of mixed economy.)
2. यदि कुनै एउटा फर्मको कुल आय रु. ४००० र कुल लागत रु. ३३०० भए कुल नाफा पत्ता लगाउनुहोस् ।
(If total revenue of a firm is Rs. 4000 and total cost is Rs. 3300 then find the total profit.)
3. सरकारी आय भनेको के हो?
(What is government revenue?)
4. व्यापार सन्तुलन र भुक्तान सन्तुलनको कुनै दुईओटा भिन्नता लेख्नुहोस् ।
(Write any two differences between balance of trade and balance of payments.)
5. मानव विकास सूचकाङ्कका कुनै दुईओटा आधारभूत अवयव लेख्नुहोस् ।
(Write any two basic components of Human Development Index.)
6. विश्व व्यापार सङ्गठन भनेको के हो ?
(What is World Trade Organization?)
7. नेपालको अर्थतन्त्रमा विप्रेषणका कुनै दुई उत्पादनशील उपयोग लेख्नुहोस् ।
(Write any two productive uses of remittance in Nepalese economy.)
८. दिगो विकासका १७ ओटा लक्ष्यमध्ये नेपालका लागि प्रत्यक्ष रूपमा सान्दर्भिक नरहेको लक्ष्य कुन हो ?
(Which one of the 17 goals of sustainable development is not directly relevant to Nepal?)
9. तथ्याङ्कशास्त्रको परिभाषा दिनुहोस् ।
(Define statistics.)
- ज्ञान प्राथमिक तथ्याङ्कलाई किन बढी विश्वासिलो मानिन्छ ?
१. धन उच्चवचन मवतव ष्क अयलकषमभचभम नयचभ चभष्विदभिरु०
11. दिइएको तथ्याङ्कको मध्यक १६ भए 'X' को मान पत्ता लगाउनुहोस् ।
(Find the value of 'X' if the mean of given data is 16.)
आय रु. (Income in Rs.): 10, 12, X, 18, 26

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(8 x 5 = 40)

12. श्रम विभाजन भनेको के हो ? यसका फाइदाको व्याख्या गर्नुहोस् । 1+4
(What is division of labour? Explain its advantages.)
अथवा (Or),
समाजवादी अर्थतन्त्र भनेको के हो ? यसका विशेषता व्याख्या गर्नुहोस् । 1+4
(What is socialist economy? Explain its features.)
13. ब्याजको शास्त्रीय सिद्धान्त व्याख्या गर्नुहोस् ।
(Explain the Classical Theory of Interest.)
14. दिइएको तालिकाको आधारमा तलका प्रश्नको उत्तर दिनुहोस् । 3+2
(Answer the following questions based on the given table.)

विक्री गरिएको वस्तुको एकाइ (Units of good sold)	मूल्य रु. (Price in Rs.)	कुल आय (Total revenue)	सीमान्त आय (Marginal revenue)	औसत आय (Average revenue)
1	10			
2	8			
3	6			
4	4			

- i. दिइएको तालिका पूरा गर्नुहोस् । (Complete the given table.)
ii. पूरा गरिएको तालिकाबाट औसत र सीमान्त आय रेखा रचना गर्नुहोस् ।
(Draw average and marginal revenue curves from the completed table.)
15. औसत र सीमान्त लागतविचको सम्बन्ध रेखाचित्रको आधारमा विश्लेषण गर्नुहोस् ।।
(Analyze the relationship between average cost and marginal cost based on a diagram.)
16. केन्द्रीय बैङ्कका कुनै पाँचओटा कार्य वर्णन गर्नुहोस् ।
(Describe any five functions of Central Bank)
17. नेपालमा बढ्दो बेरोजगारीका कारण लेखाजोखा गर्नुहोस् ।
(Evaluate the causes of increasing unemployment in Nepal.)
18. नेपालमा योजना निर्माण प्रक्रियालाई प्रभावकारी बनाउन कुन कुन उपाय अपनाउन सकिन्छ ? आफ्नो राय व्यक्त गर्नुहोस् ।
What measures do you suggest to make plan formulation effective in Nepal? Give your opinion.
19. दिइएको तथ्यांकबाट स्तरीय विचलन पत्ता लगाई नतिजाको व्याख्या गर्नुहोस् । 4+1
(Find the standard deviation from the given data and interpret the result.)

ज्याला रु.(Wages Rs.)	श्रमिकको सङ्ख्या (No. of Labor)
15	4
22	5
26	3
32	6
35	2

अथवा (Or)

- दिइएको तथ्यांकबाट पाश्चेको मूल्य सूचकाङ्क पत्ता लगाउनुहोस् र नतिजाको व्याख्या गर्नुहोस् । 4+1
(Find Paasche's Price Index Number from the given data and interpret the result)

वस्तुका प्रकार (Types of Goods)	वि.स. (B.S.) 2070		वि.स. (B.S.) 2077	
	प्रतिएकाइ मूल्य रु. मा (Per unit price in Rs.)	वस्तुको परिमाण कि.ग्रा (Quantity of goods in Kg.)	प्रतिएकाइ मूल्य रु. मा (Per unit price in Rs.)	वस्तुको परिमाण कि.ग्रा (Quantity of goods in Kg.)
A	8	12	15	15
B	9	22	12	19
C	12	11	18	19
D	5	20	10	25

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(3 X 8 = 24)

20. पूर्ण प्रतिस्पर्धा बजारमा सीमान्त आय सीमान्त लागत विधिद्वारा अल्पकालमा फर्मको सन्तुलित मूल्य र उत्पादन कसरी निर्धारण हुन्छ ? व्याख्या गर्नुहोस् ।

(How equilibrium price and output are determined in the short-run by a firm using MR-MC approach under perfect competition? Explain.)

21. नेपालको अर्थतन्त्रका लागि सरकारी ऋण किन महत्त्वपूर्ण छ ? कारण दिनुहोस् ।

(Why government borrowing is important for Nepal's economy? Give reasons.)

22. नेपालको व्यापार घाटा कम गर्न तपाईंले के के सुझाव दिनुहुन्छ ? व्याख्या गर्नुहोस् ।

(What measures do you suggest to reduce trade deficits of Nepal? Explain.)

अथवा (Or),

“विकासोन्मुख देशका लागि वैदेशिक रोजगार सधैं फाइदाजनक हुदैन ।” पुष्टि गर्नुहोस् ।

(“Foreign employment is not always beneficial for the developing country.” Justify.)

16. Marketing [Mar.308]

Specification Grid

Subject: Marketing [Mar.308]

Grade: XII

S. No Units	Content/Domain Area	Knowledge			Comprehensive			Application			Higher Ability			Total Questions			Marks	Weight age
		Very short	Short	Long	Very short	Short	Long	Very short	Short	Long	Very short	Short	Long	Very short	Short	Long		
1	An Overview of Marketing	1												1	-	-	1	2
2	Product	1			1	1	1	1	1					3	2	1	21	20
3	Pricing																	12
4	Distribution	1	1			1		1	1				1	2	3	1	25	22
5	Promotion																	20
6	Emerging issues in modern marketing	2			1	1						1	1	3	2	1	21	20
7	Business ethic and social responsibility																	12
8	Developing Salesmanship Skill	1	1		1									2	1	-	7	12
Total		6	2		3	3	1	2	2			1	2	6	5	2	100	120

Notes:

1. The alternative short and long questions will be asked from appropriate chapters taking in to account the nature, depth and coverage of the contents.
2. Very short question will be of one (1) mark and there will be eleven (11) questions from each of the chapters to the possible extent.
3. Short question will be of five (5) marks and there will be eight (8) questions from each of the chapters to the possible extent. All the questions shall be compulsory. However, two alternative questions will be added to any two questions among the total questions asked.
4. There will be three long questions carrying eight (8) marks. All the questions shall be compulsory. However, one alternative question will be added to any one of the three questions.

5. The weightage of the question shall not exceed twenty percent in knowledge level, no less than 20 percent in higher efficiency and in other level question may be asked as per necessity.

Types of Question

Types of Question	Numbers of Question	Total marks
Very short answer type	11	11x1=11
Short answer type	8	8x5=40
Long answer type	3	3x8=24

Note: Numbering of the questions should be arranged from first very short questions (Q.N. 1 to 11), short answer questions (Q.N. 12 to 19) and long answer questions (Q.N. 20 to 22).

बजारशास्त्र (Marketing [Mar.308])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।
(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

1. बजारशास्त्रको अर्थ लेख्नुहोस् ।
Write the meaning of marketing.
2. उपभोक्ता वस्तुका प्रकार उल्लेख गर्नुहोस् ।
Point out the types of consumer goods.
3. व्यक्तिगत ब्रान्डका कुनै दुई उदाहरण दिनुहोस् ।
Give any two examples of individual brand.
4. मूल्य निर्धारणको अर्थ लेख्नुहोस् ।
Write the meaning of pricing.
5. व्यापार छुट भन्नाले के बुझ्नुहुन्छ ? उल्लेख गर्नुहोस् ।
What do you know about trade discount? State.
6. बिक्री प्रवर्द्धनका लागि अपनाइने कुनै दुई प्रचलित विधिको उदाहरण दिनुहोस् ।
Give any two examples of method of sales promotion.
7. औद्योगिक बजारशास्त्र भनेको के हो ?
What is industrial marketing?
8. इन्टरनेट आधुनिक र लोकप्रिय बजारीकरणको विधि हो । किन ?
Internet is modern and famous method of marketing. Why?
9. बजारशास्त्र नैतिकताका बारेमा के बुझ्नुहुन्छ ? लेख्नुहोस् ।
What do you know about the marketing ethics? Write.
10. बजारशास्त्र सङ्गठनद्वारा अपनाइएका कुनै दुई सामाजिक उत्तरदायित्व उल्लेख गर्नुहोस् ।
State any two social responsibilities adopted by marketing organization.
11. विक्रय सीप एउटा पेसा हो । कसरी ?
Salesmanship is a profession. How?

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् । (Attempt All Questions.)

(8 x 5 = 40)

12. मूल्य निर्धारणलाई प्रभाव पार्ने तत्त्वको उदाहरण सहित व्याख्या गर्नुहोस् ।
Describe factors affecting price determination with example.
13. खुद्रा बिक्री भनेको के हो? यसका विशेषता वर्णन गर्नुहोस् ।
What is retailing? Explain its features.
14. उपभोक्ता वस्तुको विभिन्न माध्यम ढाँचा उदाहरणसहित वर्णन गर्नुहोस् ।
Discuss the various channel structure of consumer product with examples.

अथवा(or),

बजारशास्त्र नैतिकता भनेको के हो ? राज्यप्रतिको सामाजिक उत्तरदायित्वको बयान गर्नुहोस् ।

What is marketing ethics? Explain the social responsibility of marketing towards nation.

15. विभागीय भण्डार भन्नाले के बुझिन्छ ? विशाल बजारसँग यसको भिन्नता देखाउनुहोस् ।

What do you mean by department store? Differentiate it from super market.

16. विज्ञापनको अर्थ र महत्वबारे वर्णन गर्नुहोस् ।

Describe meaning and importance of advertising.

17. नेपालमा सञ्जाल बजारशास्त्रको वर्तमान अवस्था कस्तो छ ? विवेचना गर्नुहोस् ।

What is the present status of network marketing in Nepal? Evaluate.

अथवा(or),

उपभोक्ता प्रति बजारशास्त्रको महत्वबारे व्याख्या गर्नुहोस् ।

Explain the importance of marketing towards customers.

18. विक्रयकला विकास प्रकृयाहरु उल्लेख गर्नुहोस् ।

State the development process of salesmanship.

19. सफल विक्रेतामा हुनुपर्ने आवश्यक गुण बयान गर्नुहोस् ।

Explain the essential qualities of successful salesperson.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(3 X 8 = 24)

20. नामकरण नगर्नुका कारणको व्याख्या गर्नुहोस् । ब्रान्डनाम र ट्रेडमार्कको भिन्नता छुट्याउनुहोस् ।

Describe reasons for not branding. Differentiate brand name and trademark.

अथवा(or),

बजारशास्त्र समिश्रणको अवधारणा र तत्वको व्याख्या गर्नुहोस् ।

Explain the concept and components of marketing mix.

21. प्रवर्द्धन भनेको के हो? आधुनिक व्यवसायमा विज्ञापनलाई प्रवर्द्धनको उपयोगी तत्वमा रूपमा लिइन्छ । यस भनाईलाई पुष्टि गर्नुहोस् ।

What is promotion? Advertisement is one of the most useful component of sales promotion in modern business. Prove this statement.

22. कृषि बजारशास्त्र भनेको के हो ? नेपालको सन्दर्भमा कृषि बजारशास्त्रका सम्भावनाका बारेमा विश्लेषण गर्नुहोस् ।

What is agricultural marketing? Analyze the prospects of the agricultural marketing in the context of Nepal.

17. Civil and criminal law and Justice, [Ccl.320])

Grade: 12

Test Specification Chart																			
Plan for Question and distribution of marks covered																			
Unit	Content Area	Teaching Hours	Knowledge			Comprehension			Application			Higher ability			Total Question covered			Total Question	Total Marks
			VS	S	L	VS	S	L	VS	S	L	VS	S	L	VS	S	L		
1	Introduction to Civil Law and Criminal Law	6																	
2	Introduction to Property Law	12	1							1	1	1			2	1	1	4	15
3	Introduction to law of Marriage and Divorce	12																	
4	Law Concerning Adoption	12				1	1		1	1					2	2		4	12
5	Law of Contract	12																	
6	Introduction to criminal Law	10				1		1				1	1		2	1	1	4	15
7	Punishment System	10																	
8	Development of criminal Justice in Nepal	9		1		1			1	1					2	2		4	12
9	Some Major Crimes	25	1				1							1	1	1	1	3	14
10	Major Principles of Criminal Law	6								1									
11	Victim Justice	6	1			1									2	1		3	7
		120	3	1	-	4	2	1	2	3	1	2	2	1	11	8	3	22	75

Notes:

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Types of Question

Types of Question	Numbers of Question	Total marks
Very short answer type	11	11x1=11
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Long answer type	3	3x8=24

Note: Numbering of the questions should be arranged from first very short questions (Q.N. 1 to 11), short answer questions (Q.N. 12 to 19) and long answer questions (Q.N. 20 to 22).

देवानी र फौजदारी कानून र न्याय (Civil and Criminal law and Justice [Ccl.320])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ । (The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

1. देवानी कानून भनेको के हो ?
What is Civil Law?
2. दानवकस सम्बन्धी कानून किन आवश्यक छ ?
Why law of Donation is necessary?
3. धर्मपुत्रीको दुई कर्तव्य उल्लेख गर्नुहोस्
State any two duties of adopted daughter.
4. विधवाको अप्तालीसम्बन्धी अधिकारलाई कसरी व्याख्या गर्नुहुन्छ ? एक वाक्यमा लेख्नुहोस् ।
How do you define the Inheritance rights of widow? Write in a sentence.
5. अपराधका चारओटा चरण लेख्नुहास्
Write four stages of Crime.
6. मानवन्यायशास्त्र के हो ?
What is Manavnayasastra?
7. कस्तो अवस्थामा शारीरिक सजाय दिइन्छ ?
In which condition corporal punishment is given?
8. सम्पत्ति विरुद्धको अपराध भनेको के हो ?
What is offense against property?
9. यौनजन्य अपराध के हो ?
What is sexual offence?
10. किन कानूनको अज्ञानता क्षम्य हुँदैन?
Why Ignorance of Law is no excuse?
11. Define Crime Victim
अपराधपीडितको परिचय दिनुहुनस् ।

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(8 x 5 = 40)

12. मुलुकी देवाही संहिता, २०७४ मा देवानी कानून र न्यायसम्बन्धी भएका मुख्य मुख्य सिद्धान्त के के हुन् ?

What are the major principles of civil law and justice under the Muluki Civil Code, 2074?

अथवा(Or),

श्रीमतीको अंशवण्डासम्बन्धी अधिकार के हो ? व्याख्या गर्नुहोस् ।

What are the partition rights of wife? Explain

13. सम्पत्तिको हस्तान्तरणसम्बन्धी व्यवस्थालाई मौजुदा कानुनले कसरी सम्बोधन गरेको छ ? लेख्नुहोस् ।

How does the prevailing law address the provisions relating to Property transactions? Write.

14. नेपालमा महिलाले सम्बन्ध विच्छेद गर्न पाउने कानुनी कार्यविधि कस्ता छन् । वर्णन गर्नुहोस् ।

What are the legal procedures to get divorce by a women in Nepal? Describe

15. दोषी मनोभावनाविना गरिएको कार्य अपराध हुँदैन । यस भनाइलाई व्याख्या गर्नुहोस् ।

"Actus non facit reum nisi mens sit rea" Illustrate

अथवा (Or),

दोहोरो खतराको सिद्धान्तलाई व्याख्या गर्नुहोस् ।

Describe the principle of Double Jeopardy.

16. फौजदारी न्याय प्रणालीमा आरोप देखि दोषी प्रमाणित गर्ने अवस्था सम्मका अनुसन्धानका चरण के के हुन् ? व्याख्या गर्नुहोस् ।

What are the process of investigation from blame to conviction in Criminal Justice System? Explain.

17. मुलुकी ऐन, २०२० लाई खारेज गरी मुलुकी फौजदारी संहिता, २०७४ जारी हुनाका कारण के के हुन् ? लेख्नुहोस् ।

What are the causes to enact the National Penal Code, 2074 by replacing Muluki Ain, 2020? Write.

18. कस्ता प्रकारका गैरकानुनी क्रियाकलापले सरकारी दस्तावेजहरूको किर्ते गरेको ठहरिन्छ? उल्लेख गर्नुहोस् ।

What types of illegal activities declared as the offence of abuse or forgery of government documents? Illustrate

19. नेपालको वर्तमान संविधानले अपराध पीडकको हकलाई मौलिक हकको रूपमा व्यवस्था गरेको छ । यस व्यवस्थालाई कसरी व्याख्या गर्नुहुन्छ?

Rights of Crime victim is declared as a fundamental rights under the existing Constitution of Nepal. How do you explain this provision?

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(3 X 8 = 24)

20. विवाहको सदर, शून्य र वर्जनिय हुने कानुनी आधार के के हुन सक्छन् ? मुलुकी देवानी संहिता, २०७४ को आधारमा विश्लेषण गर्नुहोस् ।

What are the basis of Valid, Void and Voidable Marriage? Analyze under the provisions of National Civil Code, 2074

21. करार र करार कानुनको बारेमा व्याख्या गर्नुहोस् । साथै करारको सदर, शून्य र वर्जनियविचको फरक छुट्याउनुहोस् ।

Explain about contract and contract law. Also differentiate between valid, void and voidable contracts.

अथवा (Or),

अपराधका तत्त्वलाई कसरी वर्गीकरण गर्नुहुन्छ ? उपयुक्त उदाहरण सहित छोटकरीमा व्याख्या गर्नुहोस् ।

How do you categorize the elements of Crime? Briefly explain with appropriate examples

22. आधुनिक अपराध भनेको के हो ? वैज्ञानिक विकास र प्रविधिको कारण बढ्दै गएको आधुनिक अपराधलाई रोकथाम गर्ने उपाय के के हुन सक्छन् । व्याख्या गर्नुहोस् ।

What is modern crime? What are the measures to prevent modern crime that are increasing due to the scientific development and technology? Explain.

CURRICULUM DEVELOPMENT CENTRE

१८. संस्कृति (Culture [Cul.324])

विशिष्टीकरण तालिका

सैद्धान्तिक मूल्याङ्कन

विषय : संस्कृति

कक्षा : १२

प्रश्न योजना तथा अङ्कभार वितरण

एकाइ	क्षेत्र/एकाइ	पाठ्यभार	ज्ञान			बोध			प्रयोग			उच्च दक्षता			जम्मा अङ्कभार			जम्मा अङ्क
			अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	लामो
१	पुरातत्वको परिचय	१०	१	-	-	-	१	-	-	-	-	-	-	-	१	१	-	६
२	प्राग् इतिहास	१४	१	-	१	-	-	-	-	-	-	-	-	-	१	-	१	९
३	अभिलेख अध्ययन	१०	-	-	-	-	१	-	१	-	-	-	-	-	१	१	-	६
४	मुद्राशास्त्र	१०	-	-	-	-	-	-	१	-	-	-	१	-	१	१	-	६
५	नेपाली परम्परागत मूर्तिकला	१४	१	-	-	-	-	१	-	-	-	-	-	-	१	-	१	९
६.	नेपाली परम्परागत वास्तुकला	२०	१	-	-	१	-	-	-	१	-	-	-	१	२	१	१	१५
७.	विश्व सम्पदा सूचीमा सूचीकृत नेपालका धार्मिक-सांस्कृतिक सम्पदा	१६	-	१	-	१	-	-	-	१	-	-	-	-	१	२	-	११
८.	सङ्ग्रहालयको चिनारी	१३	१	-	-	-	१	-	-	-	-	-	-	-	१	१	-	६
९.	सांस्कृतिक पर्यटनको चिनारी	१३	१	-	-	१	-	-	-	१	-	-	-	-	२	१	-	७
	जम्मा	१२०	६	१	१	३	३	१	२	३			१	१	११	८	३	७५

दृष्टव्य :

१. अति छोटो प्रश्न १ अङ्कको हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन् ।

२. छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् साथै कुनै दुई प्रश्नमा विकल्प दिन सकिने छ ।
३. लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् साथै कुनै एक प्रश्नमा विकल्प दिन सकिने छ ।
४. ज्ञान तहमा पूर्णाङ्कका २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकताअनुसार प्रश्न रहने छन् ।
५. सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्च दक्षताअन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहने छन् ।

प्रश्नका प्रकारहरू

प्रश्नका प्रकारहरू	सोधिने सङ्ख्या	पूर्णाङ्क
अति सङ्क्षिप्त प्रश्न	११	११
छोटो उत्तर आउने प्रश्न	८	४०
लामो उत्तर आउने प्रश्न	३	२४
जम्मा	२२	७५

संस्कृति (Culture [Cul.324])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।
(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions) (11 x 1 = 11)

१. पुरातत्त्वलाई परिभाषित गर्नुहोस् ।

Define 'Archaeology'.

२. प्राग इतिहासको अर्थ के हो ?

What is the meaning of Pre -history?

३. आफ्नो टोल छिमेकमा रहेका पुरातात्विक अभिलेखलाई तपाईं कसरी संरक्षण गर्नुहुन्छ ? एक वाक्यमा लेख्नुहोस् ।

How do you preserve the archaeological inscription found in your tole and neighbour? Write in a sentence.

४. इतिहास र संस्कृतिको अध्ययनका लागि मुद्राको प्रयोग कसरी उपयोगी हुन्छ ?

How is the use of coin useful to study the history and culture?

५. लिच्छविकालीन कलाका दुईओटा विशेषता लेख्नुहोस् ।

Write any two characteristics of art of Lichchhivi period.

६. चित्रकला भनेको के हो ?

What is meant by Painting?

७. शिखर शैलीको वास्तुकला भन्नाले के बुझिन्छ ?

What is meant by Shikhara style architecture?

८. विश्व सम्पदा क्षेत्र भनेको के हो ?

What do you mean by 'world heritage site'?

९. सङ्ग्रहालको अर्थ लेख्नुहोस् ।

Give the meaning of Museum.

१०. पर्यटनका प्रकार उल्लेख गर्नुहोस् ।

Mention the types of Tourism.

११. सांस्कृतिक पर्यटन भन्नाले के बुझ्नुहुन्छ ?

What do you mean by cultural tourism?

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions) (8 x 5 = 40)

१२. लुम्बिनी क्षेत्रमा पाइएका पुरातात्विक वस्तुहरूको सङ्क्षिप्तमा वर्णन गर्नुहोस् ।

Describe in short the archaeological remains found in Lumbini site.

१३. ब्राह्मी लिपिले नेपाली कला, संस्कृति र इतिहासलाई कसरी प्रतिबिम्बित गरेको छ ? उदाहरणसहित प्रस्तुत गर्नुहोस् ।

How has the Brahmi Script reflected Nepalese art, culture and history? Present it with examples.

अथवा (Or),

होमोसेपियन्स मानवको जीवन शैलीबारे चर्चा गर्नुहोस् ।

Explain the Homo sapiens human life style.

१४. मल्लकालीन मुद्राका विशेषता उल्लेख गर्दै एक दैनिक पत्रिकाका लागि समाचारको नमुना तयार पार्नुहोस् ।
Prepare a model of news for a daily newspaper mentioning the characteristics of Malla Period Coins.

१५. नयाँ घर बनाउन परिवारमा छलफल चलिरहेको सन्दर्भमा घर निर्माणको परम्परागत नेपाली शैली अपनाउन तपाईं किन सिफारिस गर्नुहुन्छ ? लेख्नुहोस् ।
Why do you recommend to adopt traditional Nepalese style of house building in the midst of discussion in your family regarding new house construction? Write.

१६. अमूर्त सम्पदा सम्बन्धी युनेस्को महासन्धि, २००३ का मुख्य प्रावधान उल्लेख गर्नुहोस् ।
Mention the major provisions of UNESCO Protocol related to Abstract Heritage sites, 2003.

१७. तपाईं देशको पर्यटन मन्त्री हुनुभयो भने यहाँका सांस्कृतिक सम्पदाका क्षेत्र संरक्षण र संवर्द्धन गर्न कस्तो योजना बनाउनुहुन्छ ? योजना प्रस्तुत गर्नुहोस् ।
What plan would you make to protect and promote Nepalese cultural heritage sites if you were appointed minister for tourism in nation? Present the plan.

१८. नेपालको सङ्ग्रहालय क्षेत्रका समस्या र समाधानका उपाय उल्लेख गर्नुहोस् ।
Mention the problems and remedial measures of the museum in Nepal.

१९. पर्यटनले तपाईंको समाजमा पारेको सकारात्मक प्रभावको सूची तयार पार्नुहोस् ।
List out the positive impacts caused by tourism in your society.

अथवा (Or),

धातुकला र काष्ठकलाबिचका पाँचओटा फरक लेख्नुहोस् ।

Differentiate between metal and wooden craft in five points.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions) (3 X 8 = 24)

२०. नव पाषाण कालको परिचय दिई यसका मुख्य विशेषता वर्णन गर्नुहोस् ।
Introduce the Neolithic period and explain the chief features of it.

अथवा (Or),

नेपालमा पर्यटन विकासको इतिहास सम्बन्धमा चर्चा गर्नुहोस् ।

Shed light on the history of the tourism development of Nepal.

२१. नेपाली चित्रकलाको उत्पत्ति र विकास सम्बन्धमा समीक्षात्मक टिप्पणी प्रस्तुत गर्नुहोस् ।
Present a review note on Origin and Development of Nepalese Paintings.

२२. विहार वास्तुकलाको प्रवर्द्धन गर्न नेपाल सरकार र समुदाय स्वयम्ले के के भूमिका निर्वाह गर्नुपर्ला? प्रत्येकको सूची बनाउनुहोस् ।

What role should be played by Nepal government and community itself to promote Vihara architecture? Make a list of each.

19. English (Eng. 334)

English (Optional)
Grade XII (Eng. 334)

Contents	Types, numbers and description of questions		
	MCQs	Short answer questions	Long answer questions
Introduction to Language and Linguistics	3	2	-
		Definition, explanation, classification and comparison.	
Prose	3	3	1
		Summary, narration, comparison, justification of the title or meaning, evaluation, compare and contrast, explanation with reference to the context, character sketch, appreciation of the fictional elements, analyzing the text from a critical perspective and discussing particular social/ cultural/political issues with reference to <i>(Note: Questions should be asked from both fiction and non-fiction texts.)</i>	Justification, critical appreciation, plot, character sketch, comparison and contrast, appreciation of the fictional elements and discussing particular social/ cultural/political issues with reference to a text.
Poetry	2	1	1
		Question on explaining with reference to context Summarizing, giving the central idea/ theme, critical appreciation, comparison, justification, appreciating poetic elements, analyzing a text from a critical perspective and discussing particular social/ cultural/political issues with reference to a text	Justification, critical appreciation, and discussing particular social/ cultural/political issues with reference to a text.
Drama	2	-	1
		-	Character sketch, Analyzing, comparing and contrasting, reasoning, writing critical appreciation, appreciation the dramatic elements, analyzing a text from a critical perspective and discussing particular social/cultural/political issues with reference to a text.
Introduction to critical perspectives	1	2	-
		Defining the given concept or term, describing, comparing and writing short note.	
Total number of questions	11	8	3
Marks	11x1=11	8x5=40	3x8=24

English (Optional)
(Eng. 334)
Model Question for Final Examination

Grade XII

F.M.: 75

Time: 3 hours

Group A

Choose and copy the best answer.

(11x1=11)

1. What is a dead language?
 - i. A language no longer used in everyday life.
 - ii. A language that no one speaks anymore.
 - iii. A language that is learnt solely for ceremonial purposes.
 - iv. A language that has been lost to history.
2. The Indo European family includes languages.
 - i. English, German, Swedish
 - ii. Latin, French and Modern languages
 - iii. Hindi, Urdu, Sanskrit
 - iv. Welsh, Irish, Latin
3. Mother tongue influence can be effectively minimized in the classroom by
 - i. using the mother tongue less often
 - ii. giving examples from the mother tongue
 - iii. giving a lot of exposure in the target language
 - iv. giving inputs from the target language in a simple, graded manner
4. How did Sherlock Holmes solve the case in the story 'The Three Students'?
 - i. It was a lucky guess.
 - ii. He saw the culprit copying the test.
 - iii. He knew the culprit was tall and an athlete.
 - iv. He did not solve the case at all.
5. Why does the mother disagree with Aloo in the story 'Leaving'?
 - i. She does not like him.
 - ii. She hates America.
 - iii. She is afraid he will not return home.
 - iv. She is stubborn.
6. In the final sentence of 'Once More to the Lake', the narrator feels
 - i. like dancing.
 - ii. the chill of death.
 - iii. a storm approaching
 - iv. the clean hair of the waitress.
7. The Fool calls King Lear a for doing what?
 - i. Searching for the fool
 - ii. giving away his lands.
 - iii. Hitting Oswald.
 - iv. Leaving his palace.
8. During Spring, the narrator describes himself as
 - i. magical
 - ii. mischievous
 - iii. obstinate
 - iv. a man with rough fingers

9. What does Larry say he would do to Jeo if they were in the same room in the drama 'All My Sons'?

- i. Forgive him
- ii. Hug him
- iii. Kill him
- iv. Punch him

10. What sarcastic expression does Sue use to refer to the Kellers in the drama 'All My Sons'?

- i. The holy family.
- ii. The United Nations.
- iii. The band of thieves.
- iv. The three little pigs.

11. Who are the subaltern?

- i. Any person with hegemonic power.
- ii. Any person from elite class.
- iii. People relegated to inferior rank or status.
- iv. Historians.

Group B

Write short answers to these questions.

(8x5=40)

- 12. Are British English and American English two different languages? How are they different? Explain with examples.
- 13. Compare between different types of translation.
- 14. What does the story say about ecology and human life? (*Devil Deer*)
- 15. What contrast does White make between the sea and a lake, and why does he make this contrast at the very beginning of the essay? (*Once More to the Lake*)
- 16. What arguments does the writers make in favour of lean production? Give their examples too. (*How Lean Production Can Change the World*)
- 17. Why, what could she have done being what she is?
Was there another Troy for her to burn?
Explain these lines form the poem 'No Second Troy' with reference to context.
- 18. How is gender perspective different from class perspective in the study of literature? Explain.
- 19. Write a short note on any one of:
 - a. The character perspective
 - b. Cultural perspective

Group C

Write long answers to these questions.

(3x8=24)

- 20. What details of Paul's appearance and behavior, as his teachers see him, indicate that he is abnormal? Justify with examples. (*Paul's Case*)
- 21. How did Milton use the development of ongoing events to present problems with a mystical resolution in Sonnet 8? Explain.
- 22. How does Miller present Joe Keller as both a tragic hero and a villain in *All My Sons*?

The End!

20. Mathematics (Mat. 402)

Test Specification Chart, 2078

Grade: 12

Subject: Mathematics (Mat. 402)

SN	Content Area	Working hour	Competency level																		Areawise Marks	Number of Questions				
			Knowledge				Understanding						Application						Higher Ability							
			MCQ		SAQ		MCQ		SAQ		LAQ		MCQ		SAQ		LAQ		MCQ				SAQ		LAQ	
No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks			
1	Algebra	31																							20	MCQ: 2 SAQ: 2 LAQ: 1
2	Trigonometry	8																							5	
3	Analytic Geometry	13																							8	MCQ: 4 SAQ: 1 LAQ: 1
4	Vector	7																							4	
5	Statistics and Probability	9																							6	MCQ: 1 SAQ: 1
6	Calculus	31	2	2	2	10	5	5	1	5	1	8	2	2	4	20	1	8	2	2	1	5	1	8	20	MCQ: 2 SAQ: 2 LAQ: 1
7	Computational methods	10																							6	MCQ: 1 SAQ: 1
8	Mechanics or Mathematics for Economics and Finance	11																							6	MCQ: 1 SAQ: 1
Total Marks		120	12				18						30						15						75	MCQ: 11 SAQ: 8 LAQ: 3

Question format plan								
S.N.	Types of Questions	Marks per question	Number of questions				Total number of questions	Total Marks
			Knowledge	Understanding	Application	Higher Ability		
1.	Multiple Choice Question	1	2	5	2	2	11	11
2.	Short Answer Question	5	2	1	4	1	8	40
3.	Long Answer Question	8	0	1	1	1	3	24
Grand Total			4	7	7	4	22	75

Note:

- *Appropriate extra time will be provided for the handicapped students and the alternative questions to the figure based questions should be prepared for blind students.*
- *Questions should be prepared by giving the context and one question may have more than one sub-questions.*
- *Application and higher ability questions can be made by relating the other content areas.*
- *Questions should be made by addressing all the sub-areas of content.*
- *At least one multiple choice question should be asked from each area (Trigonometry, Analytic geometry and Vector).*

Secondary Education Examination

Model question – 2078

Grade: 12

Subject: Mathematics (Mat. 402)

Full marks: 75

Time: 3 hrs.

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all the questions.

Group 'A' [1 × 11 = 11]

Rewrite the correct option in your answer sheet.

- If ω is a complex cube root of unity, then the value of $(1 + \omega - \omega^2)(1 - \omega + \omega^2)$ is
(a) ω (b) ω^2 (c) $1 + \omega$ (d) 4
- An equation $(m + 2)x^2 - 2(m + 4)x + (m + 7) = 0$ have equal roots. The value of m is
(a) 2 (b) -2 (c) 7 (d) -4
- Solution of $\sin\left(2\sin^{-1}\frac{4}{5}\right)$ is
(a) $\frac{4}{5}$ (b) $\frac{24}{25}$ (c) $\frac{25}{24}$ (d) 1
- If $\cos mx = \cos nx$, then the value of x is
(a) $2n\pi$ (b) $2n\pi \pm \frac{\pi}{3}$
(c) $(4k - 1)\frac{\pi}{2(m \pm n)}$, $k = 0, \pm 1, \pm 2, \dots$ (d) $\frac{2k\pi}{m \pm n}$, $k = 0, \pm 1, \pm 2, \dots$
- The area of a parallelogram whose diagonals are the vectors $\vec{i} - 2\vec{k}$ and $4\vec{i} + 3\vec{j} + \vec{k}$ is
(a) $5\sqrt{14}$ sq. units (b) $\frac{3}{2}$ sq. units (c) $\frac{3}{2}\sqrt{14}$ sq. units (d) $\sqrt{14}$ sq. units
- The equation of a hyperbola in standard position satisfying transverse and conjugate axes are respectively 4 and 5 is
(a) $\frac{x^2}{4} - \frac{4y^2}{25} = 1$ (b) $4x^2 - 7y^2 = 36$ (c) $4x^2 + 7y^2 = 36$ (d) $\frac{x^2}{4} - \frac{y^2}{5} = 1$
- Four unbiased coins are tossed successively. The mean and variance of the distribution differed by
(a) 1 (b) 2 (c) 3 (d) 4
- The points on the curve $x^2 + y^2 - 2x - 3 = 0$ where the tangents are parallel to the X-axis are
(a) (1, 2), (1, -2) (b) (1, 2), (1, 2) (c) (-1, 2), (1, -2) (d) (1, 2), (1, 3)

9. The order and degree of the differential equation $\left(\frac{dy}{dx}\right)^3 + 2y\left(\frac{d^2y}{dx^2}\right) = 0$ is
 (a) 2, 1 (b) 1, 2 (c) 1, 3 (d) 3, 1
10. When Gauss forward elimination method is used for solving the equations
 $3x + 4y = 18$ (i)
 $3y - x = 7$ (ii)
 we apply the operation
 (a) $\text{eq}^n(\text{i}) + 4 \text{eq}^n(\text{ii})$ (b) $\text{eq}^n(\text{i}) + 3 \text{eq}^n(\text{ii})$
 (c) $\text{eq}^n(\text{i}) + \text{eq}^n(\text{ii})$ (d) $\text{eq}^n(\text{ii}) + 3 \text{eq}^n(\text{i})$
11. If the resultant of two like parallel forces acting at a distance of 3 m is 80 N at a distance of 75 cm from one of the forces, then the force is
 (a) 20 N (b) 9.8 N (c) 60 N (d) 40 N

OR

- If profit function $(\pi) = Q^2 - 10Q + 9$, then the breakeven coin is
 (a) 9 or 10 (b) 1 or 10 (c) 1 or 9 (d) 4 or 5

Group 'B' [5 × 8 = 40]

12. (a) If the numerical coefficients in the second, third and fourth terms of the expansion of $(x + a)^n$ are 30, 375 and 2500 respectively, find the value of n . Let a, b, c and x be elements of a group G .
 [3]
 (b) Solve for x : $x^2 = a^2$ and $x^5 = e$. [2]
13. (a) If $z = \cos\theta + i \sin\theta$, find the value of $z^n + \frac{1}{z^n}$ by using De Moivre's Theorem. [2]
 (b) Solve the system of equations by the row-equivalent method: $x + y + z = 6$, $x - y + z = 2$ and $x + y - z = 0$. [3]
14. (a) If $\tan^{-1}x + \tan^{-1}y + \tan^{-1}z = \pi$, then show that: $x + y + z = xyz$ [3]
 (b) Find the eccentricity and the foci of the ellipse $\frac{x^2}{9} + \frac{y^2}{16} = 1$. [2]
15. From the following data
- | | | | | | | |
|------------------|----|----|----|----|----|----|
| Age in years (X) | 5 | 15 | 30 | 45 | 50 | 60 |
| Weight in kg (Y) | 10 | 35 | 50 | 65 | 55 | 45 |
- compute the
 (a) correlation coefficient by Karl Pearson's method. [2]
 (b) line of regression for estimating X on Y and estimate the most probable age of the weight 37 kg.
 [3]

16. Evaluate:

(a) $\int \frac{dx}{3-2x-x^2}$ [2]

(b) $\int \frac{x^2}{(x^2+9)(x^2+4)} dx$ [3]

17. Solve $\frac{dy}{dx} + \frac{\cos x \sin y}{\cos y} = 0$. An equation reacting to the stability of an aeroplane is $\frac{dv}{dt} = g \cos \alpha - kv$, where v is the velocity and g, α, k are constants. Find an expression for velocity, if $v = 0$, when $t = 0$. [5]

18. Maximize $P = 25x + 45y$ subject to $x + 3y \leq 21, 2x + 3y \leq 24, x, y \geq 0$ by using simplex method. [5]

19. (a) Two unlike parallel forces, the greater of which is 75N, have a resultant 25N. Find the ratio of the distances of the resultant from the component forces. [2]

(b) A projectile thrown from a point in a horizontal plane comes back to the plane in 4 sec. at a distance of 60 m in front of the point of projection. Find the velocity of projection. ($g = 10 \text{ m/s}^2$). [3]

OR

State the Hawkins-Simon conditions for the viability of the system. The demand and supply curves for an item are given by $P_d = 20 - 3Q - Q^2$ and $P_s = Q - 1$ respectively. Find the difference between consumer and producer surplus at the equilibrium price. [1 + 4]

Group 'C' [8 × 3 = 24]

20. (a) In how many ways can the letters of the word "CALCULUS" be arranged so that the two L's do not come together? [3]

(b) Sum to n terms of the series $1^2 + 3^2 + 5^2 + \dots$ [3]

(c) The sum of the roots of a quadratic equation is 4 and the sum of their squares is 14. Find the equation. [2]

21. (a) Find the angle between the lines whose direction cosines are given by $l + m + n = 0$ and $2lm + 2ln - mn = 0$. [5]

(b) Prove by the vector method: $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$. [3]

22. (a) Find the derivative of $\ln \sin x$ by using first principle. [4]

(b) State the mean value theorem. Use it to verify for the function $f(x) = \sqrt{x^2 - 4}$ in $[2, 4]$. [1 + 3]

21. Applied Mathematics (Ama. 404)

Test Specification Chart, 2078

Grade: 12

Subject: Applied Mathematics (Ama. 404)

SN	Content Area	Working hour	Competency level																		Areawise Marks	Number of Questions				
			Knowledge				Understanding						Application						Higher Ability							
			MCQ		SAQ		MCQ		SAQ		LAQ		MCQ		SAQ		LAQ		MCQ				SAQ		LAQ	
			No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks			No. of Questions	Marks	No. of Questions	Marks
1	Data Handling	23																						14	MCQ: 1 SAQ: 1 LAQ: 1	
2	Measurement	23																						14	MCQ: 1 SAQ: 1 LAQ: 1	
3	Consumer Mathematics	30	2	2	2	10	5	5	1	5	1	8	2	2	4	20	1	8	2	2	1	5	1	8	19	MCQ: 1 SAQ: 2 LAQ: 1
4	Selecting the best value/alternative	11																						7	MCQ: 2 SAQ: 1	
5	Selection and Arrangements	11																						7	MCQ: 2 SAQ: 1	
6	Probability and prediction	11																						7	MCQ: 2 SAQ: 1	
7	Linear modeling	11																						7	MCQ: 2 SAQ: 1	
Total Marks		120	12				18						30						15						75	MCQ: 11 SAQ: 8 LAQ: 3

Question format plan								
S.N.	Types of Questions	Marks per question	Number of questions				Total number of questions	Total Marks
			Knowledge	Understanding	Application	Higher Ability		
1.	Multiple Choice Question	1	2	5	2	2	11	11
2.	Short Answer Question	5	2	1	4	1	8	40
3.	Long Answer Question	8	0	1	1	1	3	24
Grand Total			4	7	7	4	22	75

Note:

- *Appropriate extra time will be provided for the handicapped students and the alternative questions to the figure based questions should be prepared for blind students.*
- *Questions should be prepared by giving the context and one question may have more than one sub-questions.*
- *Application and higher ability questions can be made by relating the other content areas.*
- *Questions should be made by addressing all the sub-areas of content.*

CURRICULUM DEVELOPMENT CENTRE

Grade: 12

Subject: Applied Mathematics (Ama. 404)

Full Marks: 75

Time: 3 hrs.

Attempt all questions.

Group A (1 × 11 = 11)

1. The most appropriate distance between Baglung and Jumla based on the given scale is



a. 80

km

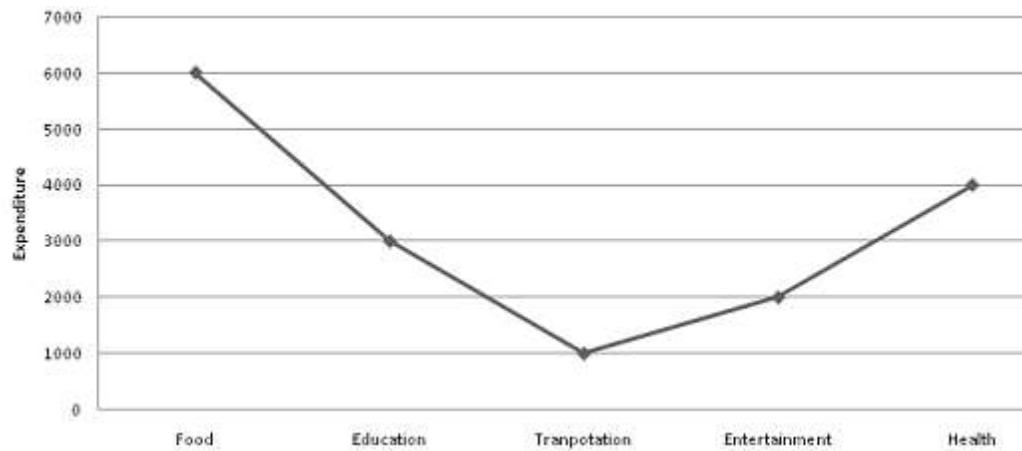
- b. 40 km
c. 60 km
d. 110 km

OR

If a teacher wants to make an equal group of students keeping 50% high achieving students in one group and the remaining 50% students are low achieving in another group. Which of the following statistical measure would fit the best?

- a. Mean
b. Mode
c. S.D.
d. Median

2. The following graph represents expenditures (in Rs) of a family under different headings:



What is the percentage of the expenditure under entertainment assuming that these five are only the headings of expenditure?

- a. $\frac{25}{2}$
- b. $\frac{21}{8}$
- c. $\frac{31}{5}$
- d. $\frac{2}{25}$

OR,

A person invests 20% of his/her income for entertainment this year which is equivalent to Rs. 20000. And, it is sure that his annual income increases by 20% each year. Then how much amount would he/she spend next year on entertainment?

- a. 24000
 - b. 40000
 - c. 20000
 - d. 22000
3. A person needs to select 4 types of fruits out of 6 types (apple, banana, orange, grapes, mango, and pineapple) available to her/him in which pineapple is compulsory. In how many ways can the person make up her/his selection?
- a. 6
 - b. 5
 - c. 24
 - d. 10
4. A farmer produces and sells her/his own production. She/he sold paddy in Nrs. 2000 per quintals, corn in Nrs. 1500 per quintals and wheat per Nrs. 1600 per quintals. Which one of the following

describes the best model for the farmer's annual revenue? (x, y, z represents the quantity produced for paddy, corn and wheat respectively)

- a. $2000x + 1500y + 1600z$
 - b. $2000 + 1500 + 1600$
 - c. $2000x \times 1500y \times 1600z$
 - d. $x + y + z$
5. If two children are born in a family, then the probability of having both sons is
- a. $\frac{1}{2}$
 - b. $\frac{1}{4}$
 - c. $\frac{1}{3}$
 - d. 1
6. The value of $0!$ is
- a. 1
 - b. 0
 - c. ∞
 - d. 10
7. If events A and B are independent cases, then
- a. $P(A \cap B) = P(A) + P(B)$
 - b. $P(A \cap B) = 0$
 - c. $P(A \cap B) = P(A) \cdot P(B)$
 - d. $P(A) = P(B)$
8. The objective function in LPP problems is _____
- a. The linear function that used for only maximize the function
 - b. The linear function that used for only minimize the function
 - c. The linear function used for optimizing the function
 - d. The linear function that is formed from the given constraints.
9. The following is a payoff (in rupees) table for three strategies and two states of nature:

Strategies	State of Nature	
	N ₁	N ₂
S ₁	40	60
S ₂	10	-20

S_3	-40	150
-------	-----	-----

Select a strategy using the decision of Maximin criteria

- a. S_1
 - b. S_2
 - c. S_3
 - d. N_1
10. X, Y, Z are three partners in a business. They invested Rs. 1200, Rs. 2400 and Rs. 3000 respectively. How much amount will X gets in the case of having a profit of Rs. 990 based on their investment?
- a. 280
 - b. 180
 - c. 360
 - d. 450
11. The pay off table best describes _____
- a. The benefit obtained from the given combination of decision alternative and state of nature
 - b. The loss obtained from the given combination of decision alternative and state of nature
 - c. The total revenue obtained from the given combination of decision alternative and state of nature
 - d. The cost obtained from the given combination of decision alternative and state of nature

Group B (5 × 8 = 40)

12. In order to find the correlation coefficient between the variables X and Y from 12 pair of records, the following results were found:

$$\sum x = 30, \sum y = 30, \sum x^2 = 670, \sum y^2 = 285, \text{ and } \sum xy = 334,$$

Later, on subsequent verification, it was found that the pairs X=15 and Y= 5 were copied wrong instead of the correct values X=10 and Y=12. Now, find the corrected value of the correlation coefficients. [5]

13. A rectangular plot of length 200m and breadth 150m has a crossroad from the middle of the length and breadth with the width of 7m, on the one side of the crossroad width of 1m should be left for the drain. How many pieces of land can be made of area 684.5m^2 each? [5]
14. The following table presents the rate of income tax according to the government rule. If a person earns Rs. 7, 50,000 in a year, calculate the following:

Tax Banding	Tax rates	
Individual	FY 2020-21	
(a) Band 1	First 400,000	1%*
(b) Band 2	Next 100,000	10%
(c) Band 3	Next 200,000	20%
(d) Band 4	Next 1,300,000	30%
(e) Additional Tax	Remaining above 2,000,000	36%**

- a. How much income tax should the person pay? [3]
- b. It is offered that 33% of the annual income is not taxable if it is saved in CIT fond. Also, Maximum Rs. 2,50,000 per annum is also not taxable if it is deducted for the insurance policy. If a person is interested to utilize any one policy, which option do you suggest so as to pay the minimum tax amount? [2]
15. A person has taken a loan of Rs. 500,000 from a bank with an interest rate of 15% per annum and invested in a business. It is already fixed that the person gets 40% profit each year from her/his business and, the loan will be reduced each year by the profit amount. How much loan will be left after 3 years? [5]
16. An investor on the share market is given the following investment alternatives and percentage rates of return.

Share related to	Market Conditions
------------------	-------------------

	Low	Medium	High
Hydropower	7%	10%	15%
Banking sector	-10%	12%	25%
Insurance company	-12%	18%	30%

- a. If a person wants to get certain rates of returns in all the market conditions, which of the above sectors do you suggest for the investor and why? [1]
- b. While observing the past 300 days, 150 days have been medium market conditions and 60 days have high market conditions and the remaining days have low market conditions. Based on these data, state the optimum investment strategy for the investment. [4]

17. What condition should be added to selecting objects for making it arranging the objects?

A student is required to answer 6 out of 10 questions which are divided into 2 groups each containing 5 questions and she/he is not permitted to attempt more than 4 from any group. In how many different ways can she/he make up her/his choice? [1 + 4]

18. A problem is given to three students A, B, C whose chance of solving it by A is 50%, by B is 75% and by C is just 25%. Find the probability that the problem is solved. [5]

19. The following table describes the production of wheat (in quintals) corresponding to the amount of rainfall (in mm) of certain land in the last few years:

Rainfall	0.8	1	1.4	1.8
Production	25	30	32	38

Now, estimate the production corresponding to the rainfall 2 mm. [5]

Group C (8 × 3 = 24)

20. The following table shows the result of the SEE examination of a school in recent 3 years. Answer the questions given below:

Year	Grade A+	Grade A	Grade B+	B	B-
2072	15	25	30	18	25
2073	20	18	35	26	20
2074	18	22	28	20	26

- a. Suggest the best year for the school on the basis of the performance. [2]
- b. Suggest the worst year for the school on the basis of the performance. [2]

c. Represent the data into a suitable diagram. [4]

21. A cuboid-shaped room is to be decorated by coloring in five faces whereas the bottom face is to be marbleized. The rate of coloring on the top surface is Rs. 105 per square feet whereas the rate of coloring for the four walls is Rs. 90 per square feet. And the rate of marbling for the bottom face is 110 per square feet.

a. Create the mathematical model to calculate the total cost of decorating the room in the function of length, breadth and height of the room. [6]

b. If the length, breadth and height of the room are 15 feet, 12 feet, 10 feet respectively, calculate the total cost for decorating the room. [2]

22. The following table describes the total stationery items (basket of goods) brought and rate in different years:

Items	Years					
	2017		2018		2019	
	Quantities	Rate	Quantities	Rate	Quantities	Rate
Pen	12	8	12	10	10	12
Pencil	6	4	4	5	6	5

Calculate the inflation rate from 2017 to 2018 and 2018 to 2019 taking 2017 as the base year with the help of the Consumer Price Index (CPI) and describe it. [3 + 3 + 2]

The End

22. Business Mathematics (Bmt. 406)

Test Specification Chart, 2078

Grade: 12

Subject: Business Mathematics (Bmt. 406)

SN	Content Area	Working hour	Competency level																		Area wise Marks	Number of Questions				
			Knowledge				Understanding						Application						Higher Ability							
			MCQ		SAQ		MCQ		SAQ		LAQ		MCQ		SAQ		LAQ		MCQ				SAQ		LAQ	
No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks			
1	Algebra	21																							13	MCQ: 3 SAQ: 2
2	Calculus	40																							25	MCQ: 2 SAQ: 3 LAQ: 1
3	Financial Math	17	2	2	2	10	5	5	1	5	1	8	2	2	4	20	1	8	2	2	1	5	1	8	11	MCQ: 3 LAQ: 1
4	Linear Programming Problem	10																							6	MCQ: 1 SAQ: 1
5	Statistics	20																							12	MCQ: 2 SAQ: 2
6	Probability	12																							8	LAQ: 1
Total Marks		120	12				18						30						15						75	MCQ: 11 SAQ: 8 LAQ: 3

Question format plan								
S.N.	Types of Questions	Marks per question	Number of questions				Total number of questions	Total Marks
			Knowledge	Understanding	Application	Higher Ability		
1.	Multiple Choice Question	1	2	5	2	2	11	11
2.	Short Answer Question	5	2	1	4	1	8	40
3.	Long Answer Question	8	0	1	1	1	3	24
Grand Total			4	7	7	4	22	75

Note:

- *Appropriate extra time will be provided for the handicapped students and the alternative questions to the figure based questions should be prepared for blind students.*
- *Questions should be prepared by giving the context and one question may have more than one sub-questions.*
- *Application and higher ability questions can be made by relating the other content areas.*
- *Questions should be made by addressing all the sub-areas of content.*
- *At least one multiple choice question should be asked from each area (Statistics and Probability).*

Grade: 12

Subject: Business Mathematics (Bmt. 406)
Time: 3 hrs.

Full Marks: 75

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all questions.

Group A ($1 \times 11 = 11$)

Write the correct option in your answer sheet.

1. Two matrices A and B can be multiplied if

- (a) Both matrices are rectangular
- (b) Both matrices are square
- (c) No. of columns of A = No. of rows of B
- (d) No. of rows of A = No. of columns of B.

2. If the $x^{00213014} = 3$, then the value of x is

- (a) 1
- (b) 3
- (c) 0
- (d) 2

3. Let $A = \begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$, then $\text{Adj.}(A)$ is

- (a) $\begin{pmatrix} 4 & -2 \\ -3 & 1 \end{pmatrix}$
- (b) $\begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$
- (c) $\begin{pmatrix} 4 & 2 \\ -3 & 1 \end{pmatrix}$
- (d) $\begin{pmatrix} 1 & -2 \\ 3 & -4 \end{pmatrix}$

4. The function $f(x) = 2x^2 - 3x$ is increasing at

- (a) $(-1/4, \infty)$
- (b) $(-3/4, \infty)$
- (c) $(1/4, \infty)$
- (d) $(3/4, \infty)$

5. The value of $\int_0^1 x e^x dx$ is

- (a) 1
- (b) 0
- (c) $x e^x$
- (d) e

6. If $k - 1$, $k + 8$ and $k + 26$ are in G.P., then the value of k is

- (a) 12
- (b) 9
- (c) 10
- (d) 8

7. A project would normally be undertaken if its net present value is

- (a) Negative
- (b) Zero

(c) Exactly the same as the NPV of existing projects

(d) Positive

8. A machine whose scrap value after 10 years is Rs. 1500, depreciated at the rate of 12% per annum on the reducing balance, then the original cost is

- (a) Rs. 5386
- (b) Rs. 1500
- (c) Rs. 2500
- (d) Rs. 15009

9. In simplex method, the feasible basic solution must satisfy the

- (a) non negative constraint
- (b) negative constraint
- (c) basic constraint
- (d) common constraint

10. In a distribution, the difference of the two quartiles is 20 and their sum is 70 and the median is 36, then the coefficient of skewness is

- (a) 0.1
- (b) -0.1
- (c) 25
- (d) 45

11. Two events are mutually exclusive if

- (a) the sum of their probabilities must be greater than one
- (b) if the occurrence of one event excludes the occurrence of other
- (c) the sum of their probabilities must be equal to zero
- (d) the difference of their probabilities must be equal to one

Group B (5 × 8 = 40)

12. State the Hawkins-Simon conditions for the viability of the system. The output levels of machinery, electricity and oil of a small country are 3000, 5000 and 2000 respectively. Each unit of machinery requires inputs of 0.3 units of electricity and 0.3 units of oil. Electricity requires inputs of 0.1 units of machinery and 0.2 units of oil. Oil requires inputs of 0.2 units of machinery and 0.1 units of electricity. Determine the machinery, electricity and oil available for export. [1 + 4]

13. Solve the following system by using Gauss elimination method:

$$x - 2y + 3z = 2, 2x - 3y + z = 1, 3x - y + 2z = 9.$$

[5]

14. Suppose that the demand equation for a certain commodity is $D = 100 - 2P$. Is demand elastic or inelastic at $P = 200$? Prove that the relation

$MR = AR \left(1 - \frac{1}{\epsilon}\right)$, where ϵ is the elasticity of demand, AR and MR are average and marginal revenue respectively. Use this relation to find AR if MR is 25 and ϵ is 2.

[1 + 3 + 1]

15. The demand equation for a certain commodity is $p = 20 - Q$ and the total cost function $C = Q^2 + 8Q + 2$, determine the total profit, revenue and cost under profit maximization.

[5]

16. (a) The population growth rate of Nepal is 1.8% in a year. Model the situation using a differential equation. What will be the population after t years? If the current population of Nepal is 30 million, what will the population after 10 years?

[2]

(b) A perfectly competitive market has the demand and supply functions

$$Q_d = 170 - 8P \text{ and } Q_s = -10 + 4P.$$

When the market is out of equilibrium the rate of adjustment of price is a function of excess demand such that $dP/dt = 0.5(Q_d - Q_s)$. In the initial time period price P_0 is 10, which is not its equilibrium value. Derive a function for P in terms of t , and comment on the stability of this market.

[3]

17. Solve the following linear programming problem by simplex method to maximize $z = 7x + 5y$ subject to $x + 2y \leq 6$, $4x + 3y \leq 12$, $x, y \geq 0$. [5]

18. State Bayes' theorem. A company has rated 75% of its employees as satisfactory and 25% as un-satisfactory. Personnel records indicate that 80% of the satisfactory workers had previous work experience, while only 40% of the unsatisfactory workers had any previous work experience. If a person with previous work experience is hired, what is the probability that this person will be a satisfactory employee? If a person with no previous work experience is hired, what is the probability that this person will be a satisfactory employee? [1 + 4]

19. The mean and variance of binomial distribution are 4 and $4/3$ respectively. Find $P(X \leq 1)$.

[5]

Group C (8 × 3 = 24)

20. (a) Find the area bounded by the x-axis and the curve $f(x) = x^3 - x^2 - 2x$.

[2]

(b) If the marginal revenue function (MR) = $6x^2 + 4x + 3$, find the total revenue function. Also, deduce the demand function. [2]

(c) The demand and supply curves of an item are given by the equations $P_d = 20 - 3Q - Q^2$ and $P_s = Q - 1$ respectively. Find the difference between consumer and producer surplus at equilibrium price. [4]

21. (a) Divide Rs. 2708 between Ram and Shyam so that Ram's share at the end of 5 years be equal to Shyam's share at the end of 7 years, C.I. being calculated at 8% p.a.

[4]

(b) A man retires at the age of 60 and gets a pension of Rs. 1,200 per year in half-yearly installments for the rest of his life. Taking his expectation of life to be 13 years further, that the interest is at 4% p.a. payable half yearly, what single sum is equivalent to this pension? [4]

22. The following table shows the relation between price and demand of certain item:

Price (X)	10	12	20	?	24	26
Demand (Y)	16	15	14	12	11	10

(a) Calculate the correlation coefficient by Karl Pearson's method if arithmetic mean of X is 19. [4]

(b) How can you find the correlation coefficient by using regression coefficient? [1]

(c) Find the equation of the line of regression of X on Y. Estimate the value of X when Y = 30. [3]

23. Library and Information Science (410)

Test Specification Chart 2078

Library and Information Science

Grade 12

S N	Unit/Area	WH	Marks	Remembering		Understanding			Applying			Higher ability			No. of questions			Marks			Total Marks
				VSQ	SQ	VS Q	S Q	L Q	VS Q	S Q	L Q	VS Q	S Q	L Q	VS Q	S Q	L Q	VS Q	S Q	L Q	
1	Information: Concept, Types and Sources	10	6	2	1	2	-	1	-	1	-	-	1	-	4	3	1	4	15	8	27
2	Application of Information and Communication Technology (ICT) in Libraries	18	11																		
3	Library Automation	15	10																		
4	Library and Information Services	15	10	1	-	1	1	-	-	1	1	1	1	-	3	3	1	3	15	8	26
5	Reference Services and Tools	15	9																		
6	Library Legislation and Policies	12	7																		
7	Library Associations	8	5	1	1	2	1	-	1	-	-	-	-	1	4	2	1	4	10	8	22
8	Periodical and Non-book Material Management	14	9																		
9	Library Statistics, Publications and Annual Reports	13	8																		
Total		120		4	2	5	2	1	1	2	1	2	1	2	11	8	3	11	40	24	75

Question and Mark Distribution

SN	Types of questions	Number of questions	Marks per question	Full Marks	Time
1	Very Short Questions (VSQ)	11	1	11	3 Hours
2	Short Questions (SQ)	8	5	40	
3	Long Questions (LQ)	3	8	24	
Total		22		75	

Library and Information Science [Lib.....]

Grade: XII

Time: 3 Hrs.

Full Marks: 75

The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Group "A"

Answer the following questions in very short.

11 x 1 = 11

1. Name any two types of information sources.
2. Identify one use of Computer hardware.
3. Define library automation.
4. Mention any two modules of library automation software.
5. What is library orientation?
6. In what cases one should use dictionaries, maps and biographies.
7. Why library policies are necessary? Give any two reasons.
8. When International Federation of Library Associations and Institutions (IFLA) was established?
9. Write any two importance of library association.
10. What does periodical mean?
11. Which publication of an organization can cover overall activities?

Group "B"

Answer the following questions in short.

8 x 5 = 40

12. Describe three different types of information with suitable examples.

or

Differentiate between data and information at any three points.

13. What are the devices used for information and communication technology? Explain in brief.
14. How will you apply library automation software for circulation work? Elaborate it.
15. Describe in detail the process of delivering current awareness services about new arrivals.
16. How many types of reference services are there? Briefly describe them.
17. What Nepal Library Association (NLA) should do to promote librarianship in Nepal?

or

How Nepal Library Association can advocate to promote librarianship in Nepal?

18. identify the needs and importance of library statistics in our daily life activities.
19. Which are the major sections of a library that provide necessary statistics for compiling library statistics? Explain in brief.

Group "C"

Answer the following long questions.

(3 x 8 = 24)

20. How will you assist users to access international journal's articles from your library?
Elaborate the procedures in detail.

or

Assume that you are working a research institutions library and information center. Your organization acquires journals and periodicals to support research and innovation. Your main job is to manage the journals as per the rules of library and information science in a scientific way. In this, case, how do you manage the collected journals and periodicals so that you can provide service in an efficient way? Elaborate.

21. How Library legislation and policies can apply to library management and service delivery. Elaborate in detail.
22. How to manage collected periodicals in a library? Explain in detail.

CURRICULUM DEVELOPMENT CENTRE

24. Home Science [Hos.412]),

Subject Area		Test Specification Chart																		
		Plan for Question and distribution of marks covered																		
		Unit	Content Area	Teaching Hours	Knowledge			Comprehension			Application			Higher efficiency			Total Question covered			Total
VS	S				L	VS	S	L	VS	S	L	VS	S	L	VS	S	L			
Human Nutrition	1	Nutritional Requirements and Food Habits	8																	
	2	Digestion, Absorption and utilization mechanism of Food in Human Body	5																	
	3	Meal Planning and cooking of food	8																	
	4	Food safety and hygiene	9	1	-	-	-	-	1	-	1	-	-	1	-	1	2	1	4	19
Child Development	1	Play and its importance in childhood	8																	
	2	Concept of Growth and Development	5																	
	3	Early Childhood Development	6																	
	4	Adolescence and Family	11	2	-	-	2	-	-	1	-	1	-	1	-	5	1	1	7	18
Home Management	1	Money Management	8																	
	2	Resource management	8																	
	3	Interior Decoration	10																	
	4	Income Generation Activities	4	2	1	-	1	1	-	-	1	-	-	-	-	3	3	0	6	18
Clothing and Fashion Designing	1	Costume Development Theories	6																	
	2	Fashion and Design	9																	
	3	Dyeing, printing and Stain Remove	9																	
	4	Body Measurement and Decorative Stitches	6	-	1	-	2	1	-	-	-	-	-	1	2	2	1	5	20	
Total			120	5	2	-	5	2	1	1	2	1	0	2	1	11	8	3	22	75

Notes:

1. The alternative short and long questions will be asked from appropriate chapters taking in to account the nature, depth and coverage of the contents.
2. Very short question will be of one (1) mark and there will be eleven (11) questions from each of the chapters to the possible extent.
3. Short question will be of five (5) marks and there will be eight (8) questions from each of the chapters to the possible extent. All the questions shall be compulsory. However, two alternative questions will be added to any two questions among the total questions asked.
4. There will be three long questions carrying eight (8) marks. All the questions shall be compulsory. However, one alternative question will be added to any one of the three questions.

Types of Question

Types of Question	Numbers of Question	Total marks
Very short answer type	11	$11 \times 1 = 11$
Short answer type	8	$8 \times 5 = 40$
Long answer type	3	$3 \times 8 = 24$

Note: Numbering of the questions should be arranged from first very short questions (Q.N. 1 to 11), short answer questions (Q.N. 12 to 19) and long answer questions (Q.N. 20 to 22).

गृह विज्ञान (Home science [Hos.412])

कक्षा(Grade): XII

समय(Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।
(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

1. अवशोषण भनेको के हो ?
What is absorption?
2. बालविकासमा प्रभाव पार्ने कुनै दुई कारक लेख्नुहोस् ।
Write any two influencing factors of child development.
3. वृद्धि र विकासबिचको कुनै एक फरक लेख्नुहोस् ।
Write any one difference between growth and development.
4. बालबालिकाको वृद्धि र विकासमा वातावरणीय तत्त्वले कसरी प्रभाव पार्छ ?
How do environmental factor influence on growth and development of child?
5. प्रारम्भिक बालविकासका कुनै दुई क्षेत्र उल्लेख गर्नुहोस् ।
Mention any two domains of early childhood development.
6. तपाईं प्रारम्भिक बाल्यअवस्थामा सामाजिक भाषाको विकास गर्न कसरी सहयोग गर्नुहुन्छ? कुनै दुई प्रक्रिया उल्लेख गर्नुहोस् ।
How do you help to develop social language in early childhood? Mention any two processes.
7. आय सृजना गर्ने गतिविधि उल्लेख गर्नुहोस् ।
State income generating activities.
8. दिगो खेतीपातीका लागि जैविक मल किन महत्त्वपूर्ण छ ? कुनै दुई कारण दिनुहोस् ।
Why organic manures important for sustainable farming? Give any two reasons.
9. रङ्गचक्र निर्माणका लागि कुनै दुई आधारभूत रङ्गका नाम दिनुहोस् ।
Name any two basic colors for making a color chart.
10. वातावरणीय अनुकूलन सिद्धान्तको कुनै एक प्रयोग लेख्नुहोस् ।
Write any one application of environmental adoption theory.
11. सुन्दर पोसाक निर्माणका लागि अनुपात किन जरुरी छ ? कुनै दुई कारण लेख्नुहोस् ।
Why proportion is necessary for making beautiful dress? Give any two reasons.

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.) (8 x 5 = 40)

12. दुध छाडेको बच्चा र स्कूल जाने बच्चाको खाने बानीलाई तपाईं कसरी व्यवस्थित गर्नुहुन्छ ? कुनै पाँच तरिका उल्लेख गर्नुहोस् ।
How do you maintain food habits of weaning child and school going children? Suggest any five ways.
13. घरायसी स्तरमा खाद्य सुरक्षा र पोषणको अवस्था व्यवस्थित गर्न खाद्य र व्यक्तिगत सरसफाइको कार्यान्वयन कसरी गर्न सकिन्छ ?
How can food hygiene and personal hygiene be implemented in household level in maintaining food safety and good nutritional status?
14. " बाल्यकालमा खेल आवश्यक छ" पुष्टि गर्नुहोस् ।
"Play is necessary for childhood". Justify.
15. बजेट निर्माणका चरणको सूची बनाउनुहोस् र प्रत्येकको छोटकरीमा वर्णन गर्नुहोस् ।
List the steps involved in making budget and describe each briefly.
अथवा(Or),
पारिवारिक बजेटका प्रकारको वर्णन गर्नुहोस् ।
Discribe types of family budget.
16. पुष्प सजावट गर्दा ध्यान दिनुपर्ने कुराहरूको वर्णन गर्नुहोस् ।
Describe the things to be considered while decorating flowers.
17. परिवारका सदस्यको ज्ञान, सिप, क्षमता र मनोवृत्तिलाई किन महत्त्वपूर्ण मानव स्रोतको रूपमा लिइन्छ ?
व्याख्या गर्नुहोस् ।
Why knowledge, skills, abilities and attitude of the family members are considered as important human resources? Explain.
18. शरीर मापनका उपयुक्त तरिका के के हुन् ?
What are the appropriate ways of body measurement?
19. फेशन र डिजाइनबिचका कुनै पाँच फरक लेख्नुहोस् ।
Write any five differences between fashion and design.
अथवा(Or),
सुन्दर पोसाकका तत्व व्याख्या गर्नुहोस् ।
Explain the components of beautiful dress.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.) (3 X 8 = 24)

20. खाना पकाउनुका कुनै चार कारण पहिचान गर्नुहोस् र खाना पकाउने कुनै दुई तरिकाको व्याख्या गर्नुहोस् ।

Identify any four reasons for cooking foods and explain any two methods of cooking.

अथवा(Or),

खाना दूषित हुने प्रक्रिया र मानव स्वास्थ्यमा यसको प्रभाव व्याख्या गर्नुहोस् ।

Explain the process of food contamination and its effects on human health.

21. तपाईं परिवारमा कसरी सद्भावपूर्ण सम्बन्ध विकास गर्नुहुन्छ ? यसमा परिवारका सबै सदस्यको भूमिका वर्णन गर्नुहोस् ।

How you develop harmonious relationship within family? Elaborate the role of all family members.

22. मानौं तपाईं कुनै गार्मेन्ट उद्योगमा काम गर्नुहुन्छ, तपाईंले तयार गर्न लागेको पोसाकमा दाग लाग्यो । यस अवस्थामा तपाईं उक्त दागलाई कसरी हटाउनुहुन्छ ? यसको सम्पूर्ण प्रक्रिया विस्तार गर्नुहोस् ।

Suppose you are working in a garment factory and the cloth you are about to make are stained. In this situation how can you remove stain from the cloth? Elaborate the practical processes.

22. Environmental Science (414)

Test Specification Chart

Class 12

S. N.	Unit/Area	WH	Marks	Remember/ Knowledge			Understand/ Comprehension			Apply/ Application			Higher ability			No. of questions			Marks			Total
				VSQ	SQ	LQ	VSQ	SQ	LQ	VSQ	SQ	LQ	VSQ	SQ	LQ	VSQ	SQ	LQ	VSQ	SQ	LQ	
1	Atmospheric environment	12	8	1	1	-	1	-	-	-	1	-	-	-	1	2	2	1	2	10	8	20
2	Hydrospheric Environment	10	6																			
3	Lithospheric Environment	10	6																			
4	Biodiversity Assessment	10	6	1	-	-	1	1	-	1	-	-	1	1	-	4	2	-	4	10	-	14
5	Climate Science	12	8																			
6	Solid Waste Management	14	9	1	1	-	1	1	1	-	1	-	1	-	-	4	3	1	3	15	8	26
7	Environmental toxicology	12	7																			
8	Pollution Control Approaches	15	10																			
9	Environmental tools and techniques	12	7	1	-	-	1	-	-	-	-	1	-	1	-	2	1	1	2	5	8	15
10	Environmental Policies	13	8																			
	Total	120	75	4	2	-	4	2	1	1	2	1	2	2	1	11	8	3	11	40	24	75

Question and Mark Distribution

SN	Types of questions	Number of questions	Marks per question	Full Marks	Time in minutes
1	Very Short Questions (VSQ)	11	1	11	180 minutes (3 hrs)
2	Short Questions (SQ)	8	5	40	
3	Long Questions (LQ)	3	8	24	
Total		22		75	

Remarks:

- Weightage in the combined cell should be met, but ± 2 marks variation will be allowed within the combined cells. But cannot be nil.
- In total cognitive distribution should met. ± 2 marks variation will be allowed within the cognitive levels.
- SQ and LQ can be structured (have two or more sub-items). SQ and LQ can be distributed to two or more cognitive behaviours.
- The distribution of questions based on cognitive domain will be nearly 20% knowledge/remembering, 30% understanding, 25% applying and 25% higher ability level. Higher ability covers analysing, evaluating and creating levels.
- In the case of short question there will be 2 "OR" questions and in the case of long question there will be 1 "OR" question.

Grade: 12

Full Marks: 75

Subject: Environmental Science

Time: 3 hours

Candidates are required to give their answers in their own words as far as practicable.

The figures at the right margin indicate the full marks.

Attempt ALL the questions.

A. Very Short Questions

11×1 = 11

1. Define lentic environment.
2. Give any one importance of humus on environment.
3. Write any one importance of biodiversity on agricultural sector.
4. Mention any one activity that you can follow to reduce greenhouse gases emission.
5. What is climate change resilience?
6. Write any one implication of vegetation sampling in biodiversity conservation.
7. Define zero waste management.
8. Mention any two impacts of bio-magnification in ecosystems.
9. "Vermicomposting is more suitable than any other compost as manure". Justify it any one point.
10. Define Geo-referencing.
11. Write any one use of topographic map in environmental studies.

B. Short Questions

8 × 5 = 40

12. "Water is life supporting component of an environment". How unique properties of water support the above statement?
13. How can we use the knowledge of hydro-logical cycle in agriculture? Explain the procedures.
14. Why is sampling sites selection important during biodiversity assessment? Explain one method used to collect data on biodiversity.
15. How has global warming affected the world so far? Analyse critically.

OR

- Critically analyze the impacts of climate change in Nepal and explain any two of them in details.
16. Differentiate between bio-accumulation and bio-magnification in the ecosystem with examples.
 17. Let's suppose that there is a factory nearby your locality that releases toxic effluent into the river. Suggest how such effluent can be treated so that it does not harm the biotic ecosystem.
 18. Describe the legal approaches for pollution control in Nepal.

OR

Describe the 3R principal of solid waste management.

19. What are the applications of GIS in environment studies?

C. Long Questions

3 × 8 = 24

20. Compare the changes in meteorological parameters in the vertical zonation's of atmosphere and analyse how such variation affects the overall climatic activities.

21. What is integrated solid waste management? Describe the different methods of solid waste management in Nepal.

OR

How is solid waste management done in your locality? Explain with reference to hierarchy of solid waste management.

22. What kind of procedure will you follow if you are appointed as EIA officer in a national project? Explain such procedures.

CURRICULUM DEVELOPMENT CENTRE

26. General Law-II (416)

Class:12

Test Specification Chart																				
Plan for Question and distribution of marks covered																				
Unit	Content Area	Teaching Hours	Knowledge			Comprehension			Application			Higher ability			Total Question covered			Total	Total Marks	
			VS	S	L	VS	S	L	VS	S	L	VS	S	L	VS	S	L			
1	Nature, Theories and Classification of Rights	14																		
2	Enforcement of Fundamental Rights in Nepal	16					1													
			1	1		1					1					2	2	1	5	20
3	Law Relating to Land and Property in Nepal	14																		
4	Law Relating to Intellectual Property	16				1					1			1	1	2	2	1	5	20
5	Laws Relating to Transaction and Secured Transaction	12																		
6	General Introduction to legal Deeds and Drafting of Deeds	16																		
			1	1				1								1	1	1	3	14
7	Introduction to Criminal Law and New Forms of Crimes	10																		
8	Criminal Investigation and Prosecution system in Nepal	10																		
			2			1	1						1		3	2		5	13	
9	Jurisdiction of Courts and Quasi-Judicial Bodies in Nepal	12																		
			2			1	1								3	1	0	4	8	
		120	7	2	0	4	3	1		1	1		2	1	11	8	3	22	75	

Notes:

1. The alternative short and long questions will be asked from appropriate chapters taking in to account the nature, depth and coverage of the contents.
2. Very short question will be of one (1) mark and there will be eleven (11) questions from each of the chapters to the possible extent.
3. Short question will be of five (5) marks and there will be ten (8) questions from each of the chapters to the possible extent. All the questions shall be compulsory. However, two alternative questions will be added to any two questions among the total questions asked.
4. There will be three long questions carrying eight (8) marks. All the questions shall be compulsory. However, one alternative question will be added to any one of the three questions.
5. The weightage of the question shall not exceed twenty percent in knowledge level, no less that 20 percent in higher efficiency and in other level question may be asked as per necessity.

Types of Question

Types of Question	Numbers of Question	Total marks
Very short answer type	11	11x1=11
Short answer type	8	8x5=40
Long answer type	3	3x8=24

Note: Numbering of the questions should be arranged from first very short questions (Q.N. 1 to 11), short answer questions (Q.N. 12 to 19) and long Answer questions (Q.N. 20 to 22).

साधारण कानून (General Law[Gel.416])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ । (The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरू हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

1. शिक्षासम्बन्धी अधिकारलाई परिभाषित गर्नुहोस् ।
Define the Right of Education.
2. नेपालको संविधानले संरक्षित गरेका ज्येष्ठ नागरिकका दुई दुईओटा अधिकार उल्लेख गर्नुहोस् ।
State any two right of senior citizens protected by the constitution of Nepal.
3. बौद्धिक सम्पत्ति के हो ?
What is intellectual property?
4. विद्युतीय सम्पत्तिका कुनै दुईओटा उदाहरण लेख्नुहोस् ।
Write any two examples of cyber properties.
5. दर्ता गर्नुपर्ने कुनै दुई लिखतको नाम उल्लेख गर्नुहोस् ।
Write the name of any two deeds to be registered.
6. अपराधका प्रमुख दुई तत्व औल्याउनुहोस् ।
Point out two major elements of crime.
7. कसले जाहेरी दरखास्त दर्ता गर्न सक्छ?
Who can file First Information Report (FIR)?
8. विद्युतिय अपराधका कुनै दुई उदाहरण लेख्नुहोस् ।
Write any two examples of cybercrime.
9. नेपालमा विषेश अदालत कतिओटा छन् ?
How many Special Courts are there in Nepal?
10. नेपालमा कुन अदालतलाई अभिलेख अदालत भनेर चिनिन्छ ?
Which court is known as record of court in Nepal?
11. नेपालमा जिल्ला अदालतको दुईओटा क्षेत्राधिकार लेख्नुहोस् ।
Write any two jurisdiction of district court in Nepal.

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(8 x 5 = 40)

12. अधिकार भनेको के हो ? यसको प्रकृति उल्लेख गर्नुहोस् ।
What is right? State its nature.
13. कानुनी अधिकार र मौलिक अधिकारबिच भिन्नता छुट्टाउनुहोस् ।

Differentiate between legal rights and fundamental rights.

14. तपाईं XYZ निजी कम्पनीको कानुनी सल्लाहकार हुनुहुन्छ । XYZ कम्पनीको औद्योगिक डिजाइन अर्को ABC कम्पनीले प्रयोग गरेको अवस्थामा यस्तो विवादमा कानुनी सल्लाह दिनुहोस् ।

If you are the legal consultant of XYZ private company, XYZ Company's industrial design is used by another ABC private company. Give legal advice for this issue.

15. नेपालमा परिवार वा नागरिकका लागि जग्गाको हदबन्दी सम्बन्धमा भएको प्रावधान विश्लेषण गर्नुहोस् ।

Analyze the provisions regarding Land ceiling for a family or a citizen in Nepal.

16. लेनदेन के हो ? लेनदेनका चारओटा कानुनी प्रावधान उल्लेख गर्नुहोस् ।

What is transaction? Point out the four legal provision of transaction.

अथवा (Or),

बकसपत्रको कानुनी प्रावधान उल्लेख गर्नुहोस् ।

Write down the legal provision of deed of will.

17. फौजदारी कानूनको मुख्य सिद्धान्तको सङ्क्षिप्त व्याख्या गर्नुहोस् ।

Explain major principle of Criminal law in brief.

18. नेपालको फौजदारी अभियोजन प्रणालीबारे आफ्नो राय दिनुहोस् ।

Give your opinion about the criminal prosecution system of Nepal.

19. नेपालमा अर्ध न्यायिक निकायको पाँचओटा कार्यको वर्णन गर्नुहोस् ।

Explain five function of the quasi- judicial bodies in Nepal.

अथवा (Or),

नेपालको सर्वोच्च अदालतको असाधारण क्षेत्राधिकार बारेमा औल्याउनुहोस् ।

Point out the right of extra jurisdiction in Supreme Court of Nepal.

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.) (3 X 8 = 24)

20. नेपाली नागरिकको मौलिक अधिकारको रूपमा रहेको आवाससम्बन्धी हकको कार्यान्वयन कसरी भइरहेको छ ?

How is the fundamental right to housing implemented for Nepalese citizen?

अथवा (Or)

नेपालको वर्तमान संविधान बमोजिम गोपनीयताको अधिकारको बारेमा व्याख्या गर्नुहोस् । तपाईं आफ्नो दैनिक जीवनमा यो मौलिक अधिकारलाई कसरी प्रयोग गर्नुहुन्छ ?

Explain the right to privacy according to present Nepalese constitution. How do you use this fundamental right in your daily life?

21. सार्वजनिक सम्पत्तिलाई किन सुरक्षित राख्नुपर्छ ? सार्वजनिक सम्पत्ति र सरकारी सम्पत्तिमा कुनै भिन्नता छ ?

Why are the public properties required to be protected? Is there any difference between public property and Government Property?

22. वारेसानामा भनेको के हो ? साधारण वारेसनामा र अधिकृत वारेसनामा बिच भिन्नता छुट्याउनुहोस् ।
What do you mean by power of attorney (warisnama)? Differentiate power of attorney and authorize power of attorney.

CURRICULUM DEVELOPMENT CENTRE

प्रश्न योजना तथा अङ्कभार वितरण																						
एकाइ	क्षेत्र/एकाइ	पाठ्य भार	ज्ञान			बोध			प्रयोग			उच्च दक्षता			जम्मा प्रश्न संख्या			जम्मा अङ्कभार			जम्मा अङ्क	
			अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो		
१.	परिचय	१०	१			१	१			१					२	२		२	१०		१२	
२.	वित्तीय विवरणहरू तथा प्रतिवेदन प्रस्तुतिकरण	८																				
३.	वित्तीय विश्लेषण	१२	१	१		१				१				१	३	१	१	३	५	८	१६	
४.	पुँजीको श्रोत	१३																				
५.	पुँजी संरचना	१५	१							१	१	१			२	१	१	२	५	८	१५	
६.	ऋणपत्र र सेयर मूल्यांकन	१२																				
७.	लगानी निर्णयका तरीकाहरू	१६	१	१			१							१	१	२	१	१	१०	८	१९	
८.	कार्यशील पुँजी र चालु सम्पत्ति व्यवस्थापन	१४																				
९.	लाभांश तथा लाभांश वितरण प्रक्रियाहरू	१०	१			१	१			१				१	३	२		३	१०		१३	
१०.	अन्तरराष्ट्रिय वित्तशास्त्र	१०																				
	जम्मा	१२०	५	२		३	३			३	२	१		१	२	११	८	३	११	४०	२४	७५

द्रष्टव्य : १. अति छोटो प्रश्न १ अङ्कका हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ११ प्रश्न रहने छन् । छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म एकाइको प्रतिनिधित्व हुने गरी ८ प्रश्न रहने छन् । लामो प्रश्न ८ अङ्कका हुने छन् र ३ प्रश्न रहने छन् ।

२. ज्ञान तहमा पूर्णाङ्कका २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकतानुसार प्रश्न रहने छन् ।

३. सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्च दक्षताअन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहनेछन् ।

वित्तशास्त्र (Finance [Fin.418])

कक्षा (Grade): XII

समय (Time): 3 Hrs.

पूर्णाङ्क (Full Marks): 75

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ ।

(The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् (Attempt All Questions)

(11 x 1 = 11)

- व्यावसायिक वित्तशास्त्र भनेको के हो ? (What is business finance?)
- वार्षिक प्रतिवेदनको अर्थ लेख्नुहोस् । (Write the meaning of annual report.)
- चल अनुपात २:१ लाई व्याख्या गर्नुहोस् । (Interpret current ratio 2:1.)
- एउटा अल्पकालीन ऋणदाता (साहु) का रूपमा तपाईं कुन अनुपातमा लगानी गर्न इच्छुक हुनुहुन्छ ? र किन ? (As a short term creditor, at which ratio would you interested to invest ? and why?)
- दीर्घकालीन ऋणका मुख्य दुई फाइदाको सूची तयार पार्नुहोस् । (List out two major advantages of long term debt.)
- व्यावसायिक जोखिम र वित्तीय जोखिमविचको कुनै दुई भिन्नता देखाउनुहोस् । (Show any two differences between business risk and financial risk.)
- अग्रधिकार सेयरका कुनै दुईओटा विशेषता उल्लेख गर्नुहोस् । (Mention any two features of preferred stock.)
- लगानी फिर्ता अवधि भनेको के हो ? (What is payback period?)
- सेयर लाभांशको अर्थ लेख्नुहोस् । (Write the meaning of stock dividend.)
- मान्नुहोस् एउटा सङ्गठनले प्रतिसेयर रु.१० नगद लाभांश घोषणा गछ । १०० ओटा सेयर भएका लगानीकर्ताले कति लाभांश पाउलान् ? (Assume that a company declares Rs. 10 per share cash dividend. How much cash dividend the investor with 100 shares of the stock will receive?)
- विनिमय दरलाई उपयुक्त उदाहरणसहित परिभाषित गर्नुहोस् । (Define the exchange rate with an appropriate example.)

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(8 x 5 = 40)

१२. कुनै सङ्गठनका लागि वित्तीय व्यवस्थापकको भूमिका वर्णन गर्नुहोस् । (Describe the roles of the financial manager in a firm.)

१३. वित्तीय विवरणका प्रमुख प्रयोगकर्ता को को हुन् ? व्याख्या गर्नुहोस् । (Who are the major users of financial statements? Explain.)

१४. यदि उदारो सम्झौता २/१०, ३० दिन भएमा वार्षिक प्रतिशत लागत र प्रभावकारी वार्षिक दर पत्ता लगाउनुहोस् । (Find out the annual percentage cost and effective annual rate when the credit terms are 2/10, net 30.)

(2+3)

१५. सूर्य कम्पनीको स्थिर सञ्चालन लागत रु.३ मिलियन, प्राइमर पेन्ट उत्पादन गर्दा लाग्ने परिवर्तित सञ्चालन लागत रु.१७५ प्रति लिटर र औस्त बिक्री मूल्य रु.२०० प्रति लिटर रहेको छ । वार्षिक सञ्चालन समविन्दु लिटरमा र रुपियाँमा कति हो ? (Surya Company has fixed operating cost of Rs. 3 million a year. Variable operating cost is Rs. 175 per liter of primer paint produced, and averaging selling price is Rs. 200 per liter. What is the annual operating break-even point in liters and rupees?)

१६. ज्योति निर्माण कम्पनीको वार्षिक बिक्री रु.५,००,००० साथै मौज्जात बिक्रीसम्बन्धी अनुपात १० रहेको छ । आसामी/प्राप्य परिणत अवधि २० दिन र भुक्तानी स्थगन अवधि १५ दिन छ र मानौँ एक वर्षमा ३६० दिन हुन्छ ।

(Jyoti manufacturing has annual sales of Rs.5,00,000 with an inventory turnover ratio of the 10 times. It has receivable collection period of 20 days, and a payable deferral period of 15 days. Assume 360 days in a year.)

(क) मौज्जात परिमाण अवधि कति हो ?(What is its inventory conversion period?)

(2)

(ख) नगद परिणत चक्रको गणना गर्नुहोस् । (Calculate cash conversion cycle of the firm.)

(3)

१७. सङ्गठनले नगद राख्नुका उद्देश्यहरु के के हुन् ?व्याख्या गर्नुहोस् । (What are the motives for holding cash by a firm? Explain.)

१८. लाभांश भुक्तानीका प्रचलित प्रक्रियाहरु व्याख्या गर्नुहोस् । (Explain the dividend payment procedures in practice.)

१९. चालुदर र भावीदरलाई परिभाषित गर्नुहोस् । तिनीहरूबिचको भिन्नता देखाउनुहोस् । (Define spot rate and forward rate. Distinguish between them.)

(3+2)

अथवा(or)

मिस्टर न्यौपाने एक हप्ता भ्रमणको लागि चीन जाँदै हुनुहुन्छ । उहाँलाई भ्रमणको लागि ५,००० यान आवश्यक पर्छ । नेपाल राष्ट्र बैङ्कको विक्रीदर प्रति यान १७.९७ छ भने उक्त भ्रमणको खर्च कति लाग्नेछ ?

(Mr. Neupane is going to China for one week tour. He needs CNY 5,000 for his tour. How much will cost him if the selling rate of Nepal Rastra bank for CNY is NPR 17.97?)

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्न हल गर्नुहोस् । (Attempt All Questions.)

(3 X 8 = 24)

२०. दिप्सन कम्पनीको निम्नानुसारको सूचना रु.मिलियनमा उपलब्ध छ (The following information is available from Dipsan company; Rs. in million):

नगद(cash)	Rs.100
स्थिर सम्पत्ति(Fixed Assets)	Rs. 283.50
शीघ्र अनुपात(Quick Ratio)	2 गुणा(times)
दैनिक विक्री भुक्तानी अवधि(Days sales outstanding)	40 दिन(days)
विक्री(Sales)	Rs. 1000
खुद नाफा(Net income)	Rs.50
चल अनुपात (Current ratio)	3 गुणा(times)
इक्विटीमा प्रतिफल(Return on equity)	12%
गणना ३६० दिनमा आधारित छ(calculation is based on 360 days)	

गणना गर्नुहोस् (Calculate):

क. आसामी विक्री रकम (Accounts receivable)

ख. चल दायित्व (Current liabilities)

ग. चल सम्पत्ति (Current assets)

घ. कुल सम्पत्ति (Total assets)

ङ. सम्पत्तिमा प्रतिफल (Return on assets)

च. साधारण इक्विटी (Common equity)

छ. दीर्घकालीन ऋण (Long term debt)

ज. खुद नाफा अनुपातको परिचय दिनुहोस् । (Define net profit margin ratio.)

२१. तल दिएका ऋणपत्रको गणना गर्नुहोस् । (Compute the value of following bond.) (3+5)

क. परिपक्व अवधि (Maturity period) 10 yrs.

अङ्कित मूल्य (Par value) Rs. 1000

ब्याजदर (Interest rate) 0%(Zero coupon bond)

प्रतिफलको दर (Rate of return) 12%

ख. एउटा सङ्गठनले रु.१००० अङ्कित मूल्य भएको, १०% अविच्छिन्न ऋणपत्र जारी गर्‍यो । जसको बट्टादर १२% छ, उक्त ऋणपत्रको मूल्य कति हुनुपर्छ ?(A firm has issued Rs. 1000 par, 10% coupon perpetual bonds. If required rate of return to bond holder is 12%, what should be the value of bond?)

अथवा(or)

साधारण सेयरको परिचय दिनुहोस् । यसका विशेषता वर्णन गर्नुहोस् । (Define common stock. Explain its features.)

(3+5)

२२. कोसी यातायात प्रा.लि. ले झापा देखी काठमाडौंसम्म ५ वर्ष सेवा दिन एउटा नयाँ बस थप गर्ने तयारीमा छ । सो बसको लागत रु.३०,००,००० छ र ५ वर्षका लागि सो बसको वार्षिक नगद प्रवाह निम्नानुसार हुने छः(Koshi Yatayat Pvt. Ltd. is considering to add one new bus to provide service from Jhapa to Kathmandu daily for 5 years. New bus costs Rs. 3,000,000. Annual net cash inflow for five years will be as follows);

वर्ष (Year)	नगद प्रवाह (Cash flow)
0	(30,00,000)
1	10,00,000
2	9,00,000
3	8,50,000
4	7,00,000
5	8,00,000

क. कोसी यातायात प्रा.लि.को फिर्ता अवधि कति हो?(What is the payback period of Koshi Yatayat pvt.ltd.?)

(2)

ख. कोसी यातायात प्रा.लि.को अधिकतम लागत फिर्ता समय ५ वर्ष भएमा सो बस खरिद गर्छ ? (Should Koshi Yatayat purchase the bus if its maximum cost recovery period is 5 years?) (2)

ग. यदि प्रतिफलको दर १०% छ भने उक्त प्रा.लि.को खुद वर्तमान मूल्य गणना गर्नुहोस् । (If required rate of return is 10%, calculate the net present value of Koshi Yatayat Pvt.Ltd.) (4)

CURRICULUM DEVELOPMENT CENTRE

28. Computer Science (428)

Specification grid 2077

Grade: 12

Subject: Computer Science Theory (Com. 428)

SN	Content Area	Working hour	Competency level																Content Area /Unit wise Marks					
			Remembering				Understanding				Applying				Higher Ability									
			MC	Q	SA	Q	MC	Q	SA	Q	LA	Q	MC	Q	SA	Q	LA	Q						
			No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks		No. of Questions	Marks			
1	Database Management System (DBMS)	12																	8					
2	Data communication and Networking	15																	9					
3	Web Technology II	12																	8					
4	Programming in C	12	3	3	1	5	2	2	2	10	-	-	2	2	1	5	1	8	2	2	1	5	1	8
5	Object-oriented Programming (OOP)	10																						
6	Software Process Model (SPM)	10																						
7	Recent Trends in Technology	9																						
Total Marks		80	8				12				15				15				50					

Item format plan					
S.N.	Type of item	Score per item	Total item	Total score	Time
1	Multiple Choice Questions	1	9	9	25 minutes
2	Short Question Answer	5	5	25	95 minutes
3	Long Question Answer	8	2	18	
Grand Total			16	50	2 hours

Remarks:

- Item format in composite should be met as per the specification grid.
- Designated weightage in the combined cell should be met, but ± 3 marks variation will be allowed within a unit/content area. But no unit can be nil.
- In the case of SAQ and LAQ, these should ensure that 1 mark will be assigned per element expected as correct response.
- The distribution of cognitive domain of questions should be nearly 15% knowledge/remembering, 25% understanding, 30% applying and 30% higher ability level, but ± 5 percent variation will be allowed in overall question set.
- SAQ and LAQ can be structured (have two or more sub-items). SAQ and LAQ can be distributed to two or more cognitive behaviors.
- In such case these will be added to their respective cognitive behavior. In sum the distribution of cognitive behavior should be approximately to the required distribution. In case of SAQ there will be 2 "OR" questions and in case of LAQ there will be 2 "OR" question.

Model Question
School Leaving Certificate Examination
2078

Grade: Grade XII

Subject: Computer Science (Th)

Subject code: 428

Full Marks: 50 (9 marks Obj + 41 Marks Sub)

Time: 2 Hours

Group A: Multiple Choice questions (9 x 1=9)

Time: 20 minutes

Tick the correct answer.

1. Which of the statements are used in DDL?
A) Create, alter and drop B) Create, insert and select
C) Insert, update and delete D) Delete, alter and drop
2. With SQL, how do you select all the records from a table named "Persons" where the value of the column "FirstName" ends with an "a"?
A) SELECT * FROM Persons WHERE FirstName='a'
B) SELECT * FROM Persons WHERE FirstName LIKE 'a%'
C) SELECT * FROM Persons WHERE FirstName LIKE '%a'
D) SELECT * FROM Persons WHERE FirstName='%a%'
3. Which of the following statements is true about a star network topology?
A) Each device is connected to a switch or hub
B) Each device is connected to each other
C) Each device is connected in a trunk
D) Each device is connected to a terminal
4. Which of the following is the correct syntax to display "Stay Safe" in an alert box using JavaScript?
A) alert-box("Stay Safe"); B) confirm("Stay Safe");
C) msgbox("Stay safe"); D) alert("Stay Safe");
5. What is the use of <A> tag?
A) To insert an image B) To create a link
C) To create a hyperlink D) To create a list

6. What is the output of given C program?

```
void main(){
    char str1[] = "FIRST"; char str2[20]; strcpy(str2,str1);
    printf("%s %s ",str1,str2); printf("%d", (str1!=str2));
    printf("%d", strcmp(str1,str2)); }
```

- A) FIRST FIRST 0 0 B) FIRST FIRST 1 1
C) FIRST FIRST 1 0 D) FIRST FIRST 0 1
7. Where is a class derived in inheritance?
A) Superclass B) Subclass C) Subsetclass D) Relativeclass
8. Which of these is the correct order of the SDLC?
A) Analysis, Design, Coding, Testing, Implementation
B) Analysis, Design, Testing, Implementation, Coding
C) Implementation, Coding, Analysis, Design, Testing
D) Design, Testing, Implementation, Coding, Analysis
9. Why is cloud computing popular nowadays?
A) Cost-sharing and easily accessible
B) As modern technology and costly
C) Accessible and freely available
D) Affordable to all

Model Question
School Leaving Certificate Examination
2078

Grade: Grade XII

Subject: Computer Science (Th)

Subject code: 232

Full Marks: 50 (9 marks Obj + 41 Marks Sub)

Time: 2 Hours

Group B: Short Answer Questions (5 x 5=25)

1. Explain 2NF and 3NF with examples.

OR

Demonstrate the basic DML statement with an example.

2. Write a function to add any two numbers in Javascript.

OR

Demonstrate the external CSS implemented in the web page.

3. Describe any five features of OOPs.
4. What are the different stages of software planning? Describe.
5. Define the concept of AI and IoT. (2+3)

Group C: Long Answer Questions (2 x 8=16)

6. How do you implement the Class C IP address in the local area network? Describe.
7. Write a program to enter ten integer numbers into an array, sort and display them in ascending order.

OR

Write a program to read the marks of any 5 students in a subject and count how many students are pass and fail.

Appendix

Test Matrix

SN	Content Area	Working hour	Competency level																Content Area /Unit wise Marks				
			Remembering				Understanding				Applying				Higher Ability								
			MC Q		SA Q		MC Q		SA Q		LA Q		MC Q		SA Q		LA Q						
			No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks	No. of Questions	Marks					
1	Database Management System (DBMS)	12	1	1			1	1								1	1	1	5			8	
2	Data communication and Networking	15					1	1							1	8						9	
3	Web Technology II	12	1	1							1	1	1	5								8	
4	Programming in C	12														1	1				1	8	8
5	Object-oriented Programming (OOP)	10			1	5						1	1									6	
6	Software Process Model (SPM)	10	1	1				1	5													6	
7	Recent Trends in Technology	9						1	5													5	
Total Marks		80	8				12				15				15				50				

Note: This is the test matrix prepared for this set only but for other sets of questions test matrix may be varied.

२९. सौन्दर्यकला [Beh. 432]

सौन्दर्यकला कक्षा १२																					
प्रश्न योजना तथा अङ्कभार वितरण																					
एकाई	एकाई क्षेत्र	पाठ्यभार	ज्ञान			बोध			प्रयोग			उच्च दक्षता			प्रश्न संख्या			जम्मा प्रश्न	जम्मा अंकभार		
			अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो				
१	सौन्दर्य तथा केशकला शिक्षाको परिचय	५																			
२	शरीरका अनावश्यक रौँ हटाउने तरिका	८	१			१			१					१			३	१	४	८	
३	हात र खुट्टाको शृङ्गार	१०																			
४	केश काट्ने र केशको शृङ्गार	१५	१			१	१			१							२	१	१	४	१५
५	फेसियल	१०																			
६	अनुहारको शृङ्गार	१५	१			१				१				१			२	१	१	४	१५
७	स्पा र मसाज	५																			
८	मेहन्दी	६																			
९	कपालमा रसायन र रङको प्रयोग	६	१			१	१			१							२	२		४	१२
जम्मा		८०	४			४	२		१	२	१		१	१		९	५	२	१६	५०	

द्रष्टव्य : अति छोटो प्रश्न १ अङ्कका हुने छन् र सकेसम्म सबै एकाइ समेटिने गरी ९ प्रश्न रहने छन् ।

- छोटो प्रश्न ५ अङ्कका हुने छन् र सकेसम्म सबै एकाइको प्रतिनिधित्व हुने गरी ५ प्रश्न रहने छन् साथै कुनै दुई प्रश्नमा विकल्प दिन सकिने छ ।
- लामो प्रश्न ८ अङ्कका हुने छन् र २ प्रश्न रहने छन् साथै कुनै एक प्रश्नमा विकल्प दिन सकिने छ ।
- ज्ञान तहमा २० प्रतिशतमा नबढ्ने गरी, उच्च दक्षता तहमा २० प्रतिशतमा नघट्ने गरी र अन्य तहमा आवश्यकतानुसार प्रश्न रहने छन् ।
- सबै तहमा विषयको प्रकृति र आवश्यकतानुसार अति छोटो, छोटो र लामो प्रश्न रहने छन् । सबै तहमा सबै खालका प्रश्न रहनुपर्ने अनिवार्यता हुँदैन । उच्च दक्षता अन्तर्गत विश्लेषण, मूल्याङ्कन र सिर्जनात्मक तहका प्रश्न रहने छन् ।

सौन्दर्य तथा केशकला (Beautician and Hair Dressing [Beh. 432])

कक्षा (Grade): XII

समय(Time) : 2 Hrs.

पूर्णाङ्क (Full Marks): 50

परीक्षार्थीले सकेसम्म आफ्नै शब्दमा मौलिक उत्तर दिनुपर्ने छ । किनारामा दिइएका अङ्कले पूर्णाङ्कलाई जनाउँछ । (The candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.)

समूह क (Group A)

अति सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Very Short Answer Questions)

सबै प्रश्नहरूको उत्तर दिनुहोस् (Attempt All Questions.)

(9 x 1 = 9)

1. सौन्दर्यकलाको परिचय दिनुहोस् ।
2. डेपिलेसन किन आवश्यक छ? कुनै दुई कारण दिनुहोस् ।
3. थ्रेडिङका लागि आवश्यक सामग्रीको सूची बनाउनुहोस् ।
4. हातखुट्टाको शृङ्गारको लागि आवश्यक कुनै चार सामग्रीको नाम लेख्नुहोस् ।
5. शेङ्गारमा केश कटिङको कुनै दुई महत्त्व उल्लेख गर्नुहोस् ।
6. घरेलु पद्धतिअनुसार छालाको स्याहार गर्ने कुनै दुई विधि लेख्नुहोस् ।
7. फेसियल गर्नु अगाडि थाहा पाउनुपर्ने कुरा के हो ?
8. तपाईँ अनुहारको शृङ्गारका लागि उपयुक्त विधिको छनोट कसरी गर्नुहुन्छ ?
9. कपालमा हेयर स्ट्रेट लोसन कति समय राखिन्छ ?

समूह ख (Group B)

सङ्क्षिप्त उत्तरात्मक प्रश्नहरू (Short Answer Questions)

सबै प्रश्नहरूको उत्तर दिनुहोस् । (Attempt All Questions)

(5 x 5 = 25)

१०. तपाईँले बसोबास गर्नुभएको स्थानमा सौन्दर्यकला तथा केशकला बजारको अवस्था बारेमा आफ्नो धारणा प्रस्तुत गर्नुहोस् ।

अथवा

मेहेन्दी बनाउने तरिका उल्लेख गर्नुहोस् । यसलाई ट्रिटमेन्टका रूपमा कसरी प्रयोग गर्न सकिन्छ ?

११. हातखुट्टा सरसफाइ गर्ने विधि के के हुन् ? छोटकरीमा लेख्नुहोस् ।
१२. सुक्खा छालाको फेसियल गर्ने विधिको बारेमा प्रस्ट पार्नुहोस् ।
१३. स्पा र मसाज थेरापीको महत्त्वका बारेमा व्याख्या गर्नुहोस् ।

अथवा

सौन्दर्य भनेको के हो ? व्याख्या गर्नुहोस् ।

१४. कपालमा रसायन वा रङको प्रयोग गर्दा के के कुरामा ध्यान दिनुपर्छ ? वर्णन गर्नुहोस् ।

समूह ग (Group C)

लामो उत्तरात्मक प्रश्नहरू (Long Answer Questions)

सबै प्रश्नको उत्तर दिनुहोस् । (Attempt All Questions) (2 X 8 = 16)

१५. केश कटिड तथा केश शृङ्गारको परिचय दिनुहोस् । स्थानीय संस्कृति र प्रचलन अनुसार केश शृङ्गार गर्ने विधि उल्लेख गर्नुहोस् ।

अथवा

एपिलेसन र डेपिलेसन विधिको भिन्नता देखाउनुहोस् । अनुहारको संरचनाअनुसार आँखीभौँका सेपहरू कसरी निर्धारण गरिन्छ ?

१६. शृङ्गारका प्रकारहरू वर्णन गर्नुहोस् । परम्परागत शृङ्गार र आधुनिक शृङ्गारको तुलनात्मक विश्लेषण गर्नुहोस् ।

३०. भाषाविज्ञान (Lin 218)

विशिष्टीकरण तालिका

विषय : भाषाविज्ञान

कक्षा १२

एकाइ	पाठ्यवस्तु	ज्ञान र बोध			व्यावहारिक सिप			उच्च दक्षता			सोधने प्रश्न सङ्ख्या	उत्तर दिनुपर्ने प्रश्न सङ्ख्या	अङ्क भार	
		अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो	अति छोटो	छोटो	लामो				
१	ध्वनिविज्ञान	२				२					१	५	४	१५
२	वर्णविज्ञान	२				१						३	३	७
३	रूपविज्ञान					१					२	३	२	१३
४	वाक्यविज्ञान	१				१						२	२	६
५	अर्थविज्ञान	१				१						२	२	६
६	भाषा परिवर्तन	१				१						२	२	६
७	भाषा शिक्षण	२				२					१	५	४	१५
८	मातृभाषा र बहुभाषिक शिक्षा	२				१						३	३	७
जम्मा		११				१०					४	२५	२२	७५

द्रष्टव्य : प्रश्न न. राख्दा पहिले अति छोटो प्रश्न प्रश्न १ देखि ११ सम्म, छोटो उत्तर प्रश्न १२ देखि १९ सम्म र लामो उत्तर आउने प्रश्न न. २० देखि २२ सम्म कायम गर्नुपर्ने छ। छोटो उत्तर आउने प्रश्नमध्ये कुनै दुई प्रश्न तथा लामो उत्तर आउने कुनै एक प्रश्नमा विकल्प दिनुपर्ने छ।

नमुना प्रश्नपत्र २०७८

विषय : भाषाविज्ञान (Lin 218)

कक्षा- १२

समय : ३ घण्टा

विद्यार्थीले उत्तर दिँदा सिर्जनात्मक र मौलिकताका आधारमा दिनुपर्ने छ ।

समूह 'क'

१. तलका प्रश्नको अति छोटो उत्तर दिनुहोस् :

१ × ११ = ११

- (क) उच्चारणका कुनै चार अवयवको नाम लेख्नुहोस् ।
(ख) स्वरध्वनीको वर्णन गर्दा विचार पुऱ्याउनु पर्ने कुनै कुनै तीन आधार लेख्नुहोस् ।
(ग) संवर्णको उदाहरण दिनुहोस् ।
(घ) बलाघात भन्नाले के बुझिन्छ ?
(ङ) वाक्यको परिचय दिनुहोस् ।
(च) अनेकार्थी शब्दका कुनै दुई उदाहरण दिनुहोस् ।
(छ) ध्वनीतात्विक परिवर्तन भनेको के हो ?
(ज) त्रुटी विश्लेषण भनेको के हो ?
(झ) शैक्षणिक व्याकरण भन्नाले के बुझिन्छ ?
(ञ) मातृभाषामा शिक्षा किन आवश्यक छ ?
(ट) विषयका रूपमा नेपालमा शिक्षण भएका कुनै ४ भाषाको नाम उल्लेख गर्नुहोस् ।

२. तलका प्रश्नको छोटो उत्तर दिनुहोस् :

५ × ८ = ४०

- (क) ध्वनीको वर्गीकरणका बारेमा चर्चा गर्नुहोस् ।
अथवा
ध्वनि विज्ञानका बारेमा उदाहरणसहित लेख्नुहोस् ।
(ख) वर्ण र संवर्णविचको भिन्नता उदाहरणसहित देखाउनुहोस् ।
(ग) व्युत्पादन र रूपायनविचको भिन्नता देखाउनुहोस् ।
(घ) वाक्यको आधारभूत संरचनाका बारेमा व्याख्या गर्नुहोस् ।
(ङ) विरोधार्थ, निहितार्थ, पर्यायार्थ, विपरीतार्थ र समावेशार्थको दुई दुईओटा उदाहरण दिनुहोस् ।
(च) भाषा परिवर्तन स्वभाविक प्रक्रिया हो । उदाहरणसहित पुष्टि गर्नुहोस् ।
(छ) व्यतिरेकी विश्लेषणको व्याख्या गर्नुहोस् ।
अथवा
भाषा परीक्षणका बारेमा लेख्नुहोस् ।
(ज) बहुभाषिक शिक्षा भन्नाले के बुझिन्छ ? चर्चा गर्नुहोस् ।

३. तलका प्रश्नको लामो उत्तर दिनुहोस् :

३ × ८ = २४

- (क) अन्तर्राष्ट्रिय ध्वनितात्विक वर्णमालाको बारेमा चर्चा गर्नुहोस् ।
(ख) रूपिमको परिचय दिँदै पूर्वसर्ग, मध्यसर्ग र परसर्गको उदाहरणसहित व्याख्या गर्नुहोस् ।
अथवा
शब्द निर्माण प्रक्रियाको उदाहरणसहित व्याख्या गर्नुहोस् ।
(ग) त्रुटि विश्लेषणका चरणको उदाहरणसहित व्याख्या गर्नुहोस् ।

*****The End*****