

Computer Science

Specification grid 2077

Grade: 11

Theory (Com. 427)

SN	Content Area	Working hour	Competency level												Content Area /Unit wise Marks											
			Remembering		Understanding			Applying			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							
1	Computer system	20																12								
2	Number system and conservation Boolean Logic	11																7								
3	Computer software and Operating system	12																8								
4	Application package	5	3	3	1	5	2	2	2	1	0	-	-	2	2	1	5	1	8	2	2	1	5	1	8	3
5	Programming Concepts and Logics	8																	5							
6	Web Technology I	8																5								
7	Multimedia	6																4								
8	Information security and Cyber law	10																6								
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	20 minutes
2	Short Question Answer	5	5	25	100 minutes
3	Long Question Answer	8	2	16	
Grand Total			16	50	2 hours

Remarks:

- Item format in composite should be met as per the specification grid.
- Designated weightage of the units/content areas should be met.
- 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. Higher ability includes analyzing, evaluating and creating level.
- 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 1 "OR" question.

Model Question

Grade XI

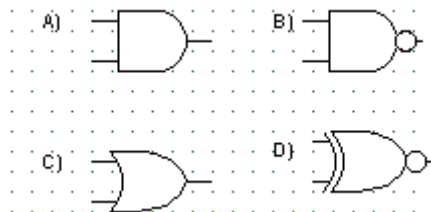
Time 2 Hours

Group A: Multiple Choice Questions

(9 x 1=9)

Tick the best alternative.

- Which one of the following is an input device?
a) speaker b) printer c) monitor d) mouse
- Which of the following is NOT a bus type?
a) Address bus b) Data bus c) Memory bus d) Control bus
- How to represent Boolean $F(x,y)=x.y$ in logic gate?



- Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
a) first-come, first-served scheduling c) shortest job scheduling
b) priority scheduling d) Round robin scheduling
- Which operator is used to start for enter the formula in in Excel cell?
a) \$ b) @ c) = d) +
- Which looping process checks the test condition at the end of the loop?
a) for b) while d) do-while d) Nested loop
- How to insert an image in web page using HTML tag?
a) <img=...> a) c) d)
- Which image format is best used for photographs and offers a small file size?
(U)
a) PNG b) GIF c) BMP d) JPEG
- Which of following is monitors user activity on internet and transmit that information in the background to someone else? (U)
a) Malware b) Spyware c) Adware d) Virus

Group 'B'

Give short answer to the following questions.

(5 x 5=25)

1. Explain different types of secondary memory of computer system.

OR

Describe the decimal to binary number conversion process with example.

2. What are the functions of operating system? Describe.
3. Define different types of CSS.

OR

Explain the different components of multimedia.

4. Differentiate between the do and while loop.
5. Suggest the prevention methods of cybercrime.

Group 'C'

Give long answer to the following question

(2 x 8=16)

6. Explain computer architecture with block diagram and functions of its components.

OR

Write a program to input the elements of 4 x 3 matrix and prints its elements properly using array.

7. Draw AND, OR, XOR and XNOR gates with truth table and logic gates.