



S J P N Trust's

**Hirasugar Institute of Technology, Nidasoshi.***Inculcating Values, Promoting Prosperity*

Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.

ECE Dept.

Exam.

Internal Assessment

Even Sem(2017-18)

**FIRST INTERNAL ASSESSMENT**

Sem: VIII

Date: 07/03/2018

Sub:Multimedia Communication

Time: 3:00pm-4:00pm

Sub. Code: 10EC841

Max. Marks:25

*Note: Answer two full questions, draw sketches wherever necessary.*

Q. No	Description of Question	Marks	CO	RBT Level
1	a Explain operational modes of multipoint conference.	6	C412A.1	L1,L2
	OR			
	b Derive the maximum block size that should be used over a channel which has a mean BER probability of $10^{-4}$ if the probability of block containing error and hence being discarded is to be $10^{-1}$ .	6	C412A.1	L1,L2
	c What is multimedia. State the basic form of representation of text, image, audio and video.	6	C412A.1	L1,L2
	OR			
d List the different type of multimedia networks.Explain any two networks in detail.	6	C412A.1	L1,L2	
2	a Explain with neat diagram the interactive television application for both cable and satellite network.	6	C412A.1	L1,L2
	OR			
	b Determine the propagation delay associated with the following communication channels. i)A connection through a private telephone network of 1km. ii)A connection through a PSTN of 200km. iii)A connection over a satellite channel of 50000km.	6	C412A.1	L1,L2
	c With the help of the digram explain the components of PSTN.	7	C412A.1	L1,L2
	OR			
d Explain the different types of operational modes of communication channel.	7	C412A.1	L1,L2	

Course Coordinator

Module Coordinator

HOD



**SCHEME OF EVALUATION**

Sem : VIII		Subject : Multimedia Communication	Sub Code : 10GC84	Date : 07/03/2018		
Q. No.	Bit	Description	Marks	CO's	RBT LEVEL	
1)	a)	Operational modes of Multipoint conference. i) centralized diagram with explanation	2M			
				CH2A.1	L1, L2	
		ii) Decentralized diagram with explanation	2M			
		iii) Hybrid diagram with explanation	2M			
		<p style="text-align: center;"><u>OR</u></p>				
1)	b)	$P_B = 1 - (1 - P)^N$ $0.1 = 1 - (1 - 10^{-4})^N \text{ and } N = 950 \text{ bits} \rightarrow 4M.$	4M.	CH2A.1	L1, L2	
		Alternatively $P_B = N \times P$ $0.1 = N \times 10^{-4} \text{ \& } N = 1000 \text{ bits} \rightarrow 2M.$	2M.			



**SCHEME OF EVALUATION**

Sem : VIII		Subject : MMC	Sub Code : 10EC84	Date : 07/03/2018		
Q. No.	Bit	Description	Marks	CO's	RBT LEVEL	
1)	c)	<p>multimedia means is to indicate that the information/data being transferred over the network may be composed of one or more following types</p> <p>i) text ii) Images iii) Audio iv) Video</p> <p>Each explanation 4 x 1.5M</p> <p style="text-align: center;"><u>OR</u></p>	1M 1M 4M	C412A1	L1, L2	
1)	d)	<p>Different type of multimedia networks.</p> <p>i) Telephone Networks. ii) Data Networks iii) Broadcast television Networks iv) Integrated services digital N/w. v) Broad based multimedia N/w.</p> <p>Any of the two above N/w explanation with block diagram 2x2M</p>	2M 4M	C412A1	L1, L2	



**SCHEME OF EVALUATION**

Sem : VIII		Subject : MMC	Sub Code : 10EC841	Date : 07/03/2018	
Q. No.	Bit	Description	Marks	CO's	RBT LEVEL
2)	a)	<p>Block diagram of interactive television</p> <p>(a)</p> <p>(b)</p> <p>STB = set-top box with integral modem</p> <p>Fig: (a) Cable TV (b) Satellite/terrestrial broadcast TV.</p> <p>Explanation. → 3M.</p> <p><u>OR</u></p>	3M	CU2A1	L1, L2
2)	b)	<p>i) <math>T_p = \frac{10^3}{2 \times 10^8} = 5 \times 10^{-6} \text{ s}</math></p> <p>ii) <math>T_p = \frac{200 \times 10^3}{2 \times 10^8} = 10^{-3} \text{ s}</math> → 3x2M</p> <p>iii) <math>T_p = \frac{5 \times 10^7}{3 \times 10^8} = 1.67 \times 10^{-1} \text{ s}</math></p>	6M	CU2A1	L1, L2

Staff-In-Charge

Module Coordinator

HOD



**SCHEME OF EVALUATION**

Sem : VII		Subject : MTC		Sub Code : 10EC41		Date : 07/03/2018		
Q. No.	Bit	Description				Marks	CO's	RBT LEVEL
2)	c)					3M		
		<p>Explanation of above block → 4M</p> <p><u>OR</u></p>						
2)	d)	<p>Different types of operational modes of communication Channel</p> <ul style="list-style-type: none"> <li>i) Unicast               <ul style="list-style-type: none"> <li>Simplex → 3M</li> <li>Half duplex → 3M</li> <li>Full duplex → 2M</li> </ul> </li> <li>ii) Broadcast → 2M</li> </ul>				3M		
		<p>Block diagram with explanation of all above modes</p>				2M		