



Sanjay Ghodawat University, Kolhapur

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2018-19

EXM/P/09/01

Year and Program: 2018-19

F.Y. M. Tech.

School of Technology

Department of Electronics Engineering

Course Code: EES5082

Course Title: Communication  
Network Processors

Semester – II

Day and Date: Monday  
27/05/2019

End Semester Examination  
(ESE)

Time: Max Marks: 100  
2.30 to 5.30 pm.

**Instructions:**

- 1) All questions are compulsory.
- 2) Assume suitable data wherever necessary.
- 3) Figures to the right indicate full marks.

Q.1	Attempt the following	Marks	Bloom's Level	CO
a)	If the Receiver uses CRC for error detection, examine whether the message $M(x)$ with the generator polynomial $P(x)$ will be accepted or rejected? $P(x) = 110011$ & $M(x) = x^4 + x^3 + 1$	7	L <sub>4</sub>	CO1
b)	With the help of block diagram explain the working of STREAM architecture? State its advantages.	7	L <sub>2</sub>	CO2
OR				
b)	Compare & contrast processes versus tasks.	7	L <sub>5</sub>	CO2
Q.2	Attempt the following			
a)	Illustrate, how the inefficiency of the multiple decrements is addressed by a differential timeout scheme?	7	L <sub>3</sub>	CO3
OR				
a)	With the help of neat diagram explain the STREAMS buffer scheme in details.	7	L <sub>3</sub>	CO3
b)	Illustrate different components of multiboard systems? List the functions of Line card & control card.	7	L <sub>4</sub>	CO4
Q.3	Attempt any two of the following			
a)	With the help of neat diagram explain the RS232 DB9S interface used for serial communication.	6	L <sub>2</sub>	CO1
b)	Classify different architectures used for communication equipment's. Explain any one in details.	6	L <sub>3</sub>	CO4

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	c) Describe the options available for accessing the variables in distributed environment?	6	L <sub>2</sub>	CO4
<b>Q.4</b>	<b>Attempt any Two of the following</b>			
	a) What are the applicability issues of using PFair scheduling algorithms for packet processing routers.	9	L <sub>2</sub>	CO5
	b) Illustrate with the help of example, the PD <sup>2</sup> tie breaks algorithm.	9	L <sub>3</sub>	CO5
	c) Discuss on how flow gating is used for packet handling in TRIBE architecture.	9	L <sub>3</sub>	CO6
<b>Q.5</b>	<b>Attempt any Two of the following</b>			
	a) Explain how the processor scheduling is done using pipelined approach	9	L <sub>2</sub>	CO5
	b) With the help of neat diagram explain the fiber channel to infiniband protocol converter.	9	L <sub>2</sub>	CO5
	c) Sketch the block diagram of massively multithreaded processor(Porthos). Explain the architecture in details	9	L <sub>3</sub>	CO5
<b>Q.6</b>	<b>Attempt any Three of the following</b>			
	a) What do you understand by thread migration? Explain how it is done in TRIBE architecture.	8	L <sub>3</sub>	CO6
	b) With the help of neat diagram explain the ASR 1000 series router architecture.	8	L <sub>3</sub>	CO6
	c) With the help of neat diagram explain the packet path through ESP.	8	L <sub>3</sub>	CO6
	d) Enlist the processes handled by RP1 in ASR 1000 router?	8	L <sub>2</sub>	CO6

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