VVM's

Shree Damodar College of Commerce & Economics , Margao Goa

S.Y.B.C.A, SEM IV, MAY/JUNE SUPPLEMENTARY EXAMINATION 2018

Computer Networks - BCA-402

Duration: 2 Hours **Total Marks:** 50

Instructions : 1.All questions are compulsory
2.Figures to the right indicate marks
3.Answer each question on a fresh page

Q.1 Answer the following **10 marks**

A) Define the following terms : (5 X 1 =5)

i) Attenuation ii)Mesh topology iii)Net id iv)Framing v)Routing

B) Answer the following (5 X 1 =5)

1. Classify the following devices according to the layers of OSI model
Router ,gateways ,hub , switch ,fibre optics cable , repeater

2.Which layer of OSI model ensures error free delivery of data ? What are the different techniques available for error checking and correction ?

3.Which transmission medium is considered to be most secured ? Justify .

4.What is cryptography ? Give an example to illustrate cryptography .

5.What is Piggybacking ?

Q.2 Answer the Following **10 Marks**

a)How do you find TCP model different from OSI model ? (2 Marks)

b)What do you understand by transmission impairment ? What are the different types of impairment (3 Marks)

c)Give five points of differences of communication between Fibre Optics Cable and satellite (5 Marks)

Q.3 Answer the Following **10 Marks**

a) Give an appropriate example to illustrate Parity method of error detection ? (2 Marks)

b)Give three points of differences between stop and wait protocol and sliding window protocol . (3 Marks)

c) problem on CRC . (5 Marks)

Q.4 Answer the Following **10 Marks**

a) Identify the class , net id and host id of the following IP addresses (2 Marks)
145.78.90.45 , 233.45.10.9

b)Describe the following three fields of TCP header
i) Sequence Number ii) Data offset iii)Urgent pointer (3 Marks)

c) For the subnet shown below , how Dijkstra Algorithm would find shortest path from source A to destination M (5 Marks)
i)

Q.5 Answer the Following **10 Marks**

a) Give two points of differences between ARP and RARP (2 Marks)

b) Write a short note on DHCP (3 Marks)

c) What are the key features of session layer and transmission layer (5 Marks)