

VVM's Shree Damodar College of Commerce & Economics, Margao Goa
S.Y.B.C.A., Semester IV, May/June Supplementary Examination 2017
Computer Networks (BCA -402)

Duration : 2hours

Max Marks : 50

Instructions : All questions are compulsory
Figures to the right indicate full marks

Q.1) Explain the following terms with diagrams . (2mks x 5 =10 mks)

- a) Maximum Transfer Unit
- b) Piggybacking
- c) Reverse Address Resolution Protocol
- d) UDP Frame Format
- e) Router

Q.2 Answer the following (10 marks)

- a) Explain how Internet model different from the OSI model ? 2
- b) Explain character count Framing technique of Data Link Layer for the given data:
3 7 8 5 1 2 3 4 2 5 6 4 1 2 3 . Discuss its limitations. 3
- c) Explain different Modes of Data Communication. 5

Q.3 Answer the following (10 marks)

1. How is multicast different from Broadcast message ? 2
2. Explain the various addressing levels used in the TCP/ IP protocols . 3
3. $G(x)=x^3 + 1$, Data : 11001110 . Use CRC to send the data and verify the same at receivers end. 5

Q.4 Answer the following (10 marks)

1. For the given binary notation : 10110000 10100101 00001111 11101111
Find the IP address in decimal notation , Class id , Host id . 2
2. Explain with diagram the three way handshake for establishing connection 3
3. Draw & explain the IP frame format. 5

Q.5 Answer the following : (10 marks)

1. What is the maximum and minimum size of TCP header and justify your answer. 2
2. Write short note on types of Guided Transmission Medium. 3
3. Explain the different types of frames of HDLC 5
