

3EC -203

SEAT NO:-----

GANPAT UNIVERSITY

M. Tech. Semester II(EC) Regular Examination, MAY JUNE 2012

DATA COMMUNICATIONS AND NETWORKS (3EC 203)

Max. Time: 3Hrs.]

[Max. Marks: 70

Instructions:

1. Attempt all questions.
2. Answers to the two sections must be written in separate answer books.
3. Figures to the right indicate full marks.
4. Assume suitable data, if necessary.
5. Question number Three & Six are compulsory

SECTION I

- 1 (A) What do you mean by YCM method to represent the image? Differentiate between de facto and de jure as far as standards are concerned. 6
- (B) How ISO is different from OSI and what is best-effort delivery? 3
- (c) Give a brief on Data link layer. 3
- OR
- 1 (A) What are the full forms of RJ 45 and BNC connectors? Give an overview of classes of transmission media. 6
- (B) What is a message-switched network? Prove that in a three stage switch the numbers of cross points are less than cross points of single stage switch for same function. 6
- 2 (A) What is masking and how it is used for PN offset? 5
- (B) Explain flow diagram of CSMA /CD 6
- OR
- 2 (A) What is stop-and-wait protocol? Explain it. 5
- (B) Write short note on Piggybacking. 6
- 3 (A) Write in brief regarding PIIF cables. 5
- (B) Why upstream bandwidth is not same as downstream bandwidth in ADSL? 4
- (c) Differentiate between 800 services with 900 services. 3

3EC- 203

SEAT NO:-----

SECTION-II

- 4 (A) Explain key features of IP V 4. 4  
(B) Give summary of standard Ethernet implementations. How 10base5 8  
implementation is named so?
- OR
- 4 (A) Explain key features of IP V 6. 4  
(B) How repeater is different from an amplifier? Explain spanning tree concept 8  
with the help of diagram.
- 5 (A) Draw a diagram of simple networking showing SONET equipment and 7  
explain it in detail.  
(B) Explain the concept of add-drop in context of optical communication. 4
- OR
- 5 Write short notes on 11  
(A) ATM  
(B) Frame relay.
- 6 (A) Why wireless LAN cannot implement CSMA /CD? 5  
(B) What is hidden station problem and how it is different from exposed station 6  
problem?  
(C) Give generic formula for Bluetooth carrier frequency. 1

---

THE END OF PAPER