

8. (a) With the help of diagram, explain the complete process for connecting setup and connection release in FTP. **10**
- (b) Compare and contrast SMTP and POP protocols. **10**

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Roll No.

F-111

B. Tech. EXAMINATION, May 2018

(Sixth Semester)

(Old Scheme) (Re-appear Only)

(IT)

IT302

COMPUTER NETWORKS

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Draw the comparative table of switch, hub, router and bridge. **10**
 - (b) What are the challenges faced by wireless networks ? **5**
 - (c) What are the main characteristics of WAN ? **5**
2. Draw the layered architecture of OSI model. Explain the functions of different layers of OSI reference model in detail. **20**

Unit II

3. (a) What is Manchester encoding ? Explain with the help of example. **6**
 - (b) Compare and contrast copper and fibre optics transmission media. **8**
 - (c) What is dispersion ? **3**
 - (d) What is jitter latency ? **3**
4. (a) Briefly explain different error detecting codes. **13**

- (b) Explain the working principle of CSMA/CD protocol. **7**

Unit III

5. What is classful addressing ? Explain bitwise division of various address classes. What are the problems faced by classful addressing scheme. How subnetting and supernetting helped in solving these problems ? **20**
6. (a) With the help of example, explain IGRP protocol. **10**
- (b) Differentiate between TCP and UDP protocol. **10**

Unit IV

7. Write short notes on the following :
- (a) VLAN's
 - (b) Polling
 - (c) Windows NT
 - (d) TELNET. **5×4=20**