

M.Sc.(Computer Science) - I Second Semester (Old)
2MSC3 - Paper-III: Digital Communication and Networking

P. Pages : 2

Time : Three Hours



GUG/W/18/2863

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw a neat labelled diagram and use supporting data wherever necessary.
 3. Avoid vague answers and write specific answers related to questions.

1. Either:

- a) Explain different types of transmission impairment in detail. **8**
- b) Describe Data link control protocol in detail. **8**

OR

- c) Explain Analog and Digital Data Transmission in detail. **8**
- d) Write short notes on: **8**
 - i) Flow Control
 - ii) Error Control

2. Either:

- a) Explain Virtual Circuits and Data Grams in detail. **8**
- b) Write short notes on: **8**
 - i) X.25
 - ii) Traffic Control

OR

- c) Explain Circuit switching with suitable diagram. **8**
- d) What is Medium Access Control Protocols? Explain. **8**

3. Either:

- a) What is Internetworking? Explain the principles of Internetworking. **8**
- b) Write short notes on: **8**
 - i) Routers
 - ii) Bridges

OR

- c) Explain TCP/IP Protocol suite in detail. **8**
- d) What is connection oriented Internet-working? Explain in detail. **8**

4. Either:
- a) What are transport services? Explain in detail. 8
 - b) Explain Integrated digital Network in detail. 8

OR

- c) What is session? Explain the important characteristics of session. 8
 - d) What is ISDN? Describe the transmission structure of ISDN. 8
5. Solve all the questions.
- a) Explain Error detection technique in short. 4
 - b) What is Traffic Control? Explain. 4
 - c) Explain Internet Protocol in short. 4
 - d) Describe ISDN Protocols. 4
