

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

PHD (ECE)
ADVANCED COMMUNICATION SYSTEMS

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

- Q1. Explain in detail about the PCM and DPCM digital modulation techniques.
- Q2. a) Discuss about the analog and digital communication systems in detail.
b) Explain about the WDM and TDM in detail.
- Q3. a) Discuss in detail about the telecommunication infrastructure.
b) Explain about the SONET and the concept of link management protocols in detail.
- Q4. Explain about the design of down links in detail. Also discuss in detail about the domestic satellite systems using small earth stations.
- Q5. Explain in detail about the FDMA, TDMA and CDMA multiple access techniques.
- Q6. a) What is the concept of Fading? Also explain about the switching techniques in detail.
b) Discuss about the transmission protocols in mobile communication in detail.
- Q7. Discuss in detail about the multiple access with on board processing in satellite communication. Also explain about the delta modulation in digital communication in detail.
- Q8. Explain about the various potential areas of research in advanced communication systems in detail.