**Model Question (SET-1)**

**ADVANCED COMMUNICATION ENGINEERING**

**Semester-6TH SEM Branch-E&TC**

**F.M- 80**

1. Answer all. (2\*10)

1. What is the need of Duplexer?
2. Write down the difference between omnidirectional and isotropic antenna.
3. State the advantages and disadvantages of the Radar.
4. Name the types of Aids to Navigation.
5. Why GEO satellites are called as geostationary satellite?
6. State the function of DBS.
7. List out the application of communication satellites.
8. Write down the difference between reflection and refraction.
9. Name the different parts of optical fiber.
10. Define the Index profile of optical fiber.

2. Answer any six question. (5\*6)

1. Explain the performance factor of radar.
2. Discuss the GEO, LEO and MEO with advantages and disadvantages.
3. With neat diagram describe the general structure of satellite link system.
4. Explain the operation of PIN diode.
5. Describe the three types of optical fiber configuration.
6. Discuss the operation of electronic telephone system. (Telephone set)
7. Define Doppler Effect and explain the block diagram of C.W. radar.
8. Explain the concept of Navigational Satellite System.

3. Define RADAR and describe the operation of MTI radar with neat diagram. (10)

4. Define multiple accessing and discuss the code division multiple accessing with its advantages and disadvantages. (10)

5. Compare the advantages and disadvantages of optical fiber metallic cables and describe the block diagram of an optical fiber communication system. (10)

6. Discuss the function of switching system and explain the principle of space and time switching. (10)

**Model Question (SET-2)**

**ADVANCED COMMUNICATION ENGINEERING**

**Semester-6TH SEM Branch-E&TC**

**F.M- 80**

1. Answer all. (2\*10)

1. State the application of RADAR.
2. How transmitter power and antenna size affect the performance factor of the Radar?
3. What is the need of low noise amplifier in pulsed radar system?
4. What is the meaning of stationary targets?
5. Why Instrument Landing System is required?
6. List the advantages and disadvantages of Geo satellites.
7. Define uplink, downlink, crosslink and transponder.
8. What is soft handoff?
9. Which type of optical fiber, optical source and detector used for short distance communication?
10. State the difference between crossbar and multistage switching.

2. Answer any six question. (5\*6)

1. With neat diagram describe the block diagram of pulsed radar system.
2. Explain the aircraft landing system.
3. Write a short note on VSAT system.
4. Explain the operation of LASER diode.
5. Discuss different types of optical connectors and splices.
6. Define PBX. Explain the operation of a PBX.
7. Explain the concept of digital satellite radio.

3. Derive the radar range equation and state the application of radar. (10)

4. Define multiple accessing and discuss the Time Division Multiple Accessing with its advantages and disadvantages. (10)

5. Discuss different losses in optical fiber.(Absorption losses, Scattering losses, Bending losses and dispersion) (10)

6. Describe the operation of Internet protocol telephony. (10)