

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Fifth Semester)

Branch – ELECTRONICS

ELECTRONIC COMMUNICATION - II

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

1. Which antenna is preferred for aerial TV receiver in monochrome TV receiver?
a) Loop
b) Dipole
c) Yagi-Uda
d) Helix
2. Microwave frequencies are used for communication with deep space probes primarily because they do not suffer.
a) Attenuation in space
b) Fading
c) Velocity distortion and phase distortion
d) Refraction by ionosphere
3. Which one of the following is not a guided medium of transmission?
a) Fiber-Optic cable
b) Coaxial cable
c) Twisted-pair cable
d) The atmosphere
4. What is the reason for shifting from c band to ku band in satellite communication?
a) Lesser attenuation
b) Less power requirements
c) More bandwidth
d) Overcrowding
5. Which ZigBee Device is used for passing the data between devices?
a) Zigbee Coordinator Device
b) Zigbee Router
c) Zigbee End Device
d) None of the above

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Mark (5 x 3 = 15)

6. a. What do you understand by PAL –D Colour system?
OR
b. What are the requirements of receiving antenna?
7. a. What are the advantages of microwave communication?
OR
b. What is convection current of TWT?
8. a. What is the difference between splices and connectors?
OR
b. Define is passive optical fiber.
9. a. Define payload and transponder.
OR
b. Define dilution of precision in GPS.
10. a. Why was the WiMAX system introduced?
OR
b. What are the Security issues in Wireless Networks?

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Draw the block diagram of monochrome TV transmitter and explain.
OR
b. Explain difference between LCD and LED.
- 12 a. Explain in detail about Magnetron.
OR
b. Briefly explain the microwave antennas.
- 13 a. Briefly discuss about principles of Optical Fiber Communications.
OR
b. Explain in detail about WDM.
- 14 a. Describe the operation of typical VSAT system. State briefly where VSAT system.
OR
b. Briefly explain the GPS receivers.
- 15 a. Mention the design goals of WLANs.
OR
b. Explain the following i) PANS ii) Zigbee.

Z-Z-Z

END