

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(Fifth Semester)

Branch – ELECTRONICS

ELECTRONIC COMMUNICATION - II

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- 1 The main purpose of interlacing in television scanning is to _____.
(i) reduce flicker (ii) brighten the TV picture
(iii) sharpen picture outline (iv) increase channel bandwidth
- 2 The main function of electron gun in a cathode-ray tube is to ---- electrons.
(i) deflect (ii) produce
(iii) size (iv) aspect
- 3 In klystron amplifier, the input cavity is called _____.
(i) buncher (ii) catcher
(iii) Pierce gun (iv) collector
- 4 Microwave resonators are used in _____.
(i) microwave oscillators (ii) microwave narrow band amplifier
(iii) microwave freq (iv) All the above
- 5 In optical communication ____ acts as a transmission medium.
(i) Coaxial cable (ii) Waveguide
(iii) Optical fiber cable (iv) None of the above
- 6 The bandwidth in fiber optic communication is represented in terms of _____.
(i) Wavelengths (ii) Frequencies
(iii) Both a and b (iv) None of the above
- 7 A communication satellite is a repeater between _____.
(i) a transmitting station and a receiving station
(ii) a transmitting station and many receiving station
(iii) many transmitting station and many receiving station
(iv) none
- 8 A geosynchronous satellite _____.
(i) has the same period as that of the Earth (ii) has a circular orbit
(iii) rotates in the equatorial plane (iv) has all of the above
- 9 Which of the following is a type of wireless communication?
(i) LAN (ii) WAN
(iii) PAN (iv) All of the mentioned
- 10 Which type of transmission technique is employed by paging system?
(i) Multicasting (ii) Unicasting
(iii) Hybrid (iv) Simulcasting

Cont...

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a Explain about Composite video signal.
OR
b Discuss about DTH.
- 12 a Describe about Microwave concept.
OR
b State the function of Lens Antenna.
- 13 a Discuss about Applications of Fiber.
OR
b Illustrate the function of passive optical networks.
- 14 a Classify Geo synchronous orbits.
OR
b Discuss the function of Transmitter sub system.
- 15 a Explain about wireless LAN.
OR
b Analyze the term IR PANs.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a Draw & explain the function of Scanning.
OR
b Classify the function of HDTV.
- 17 a Describe the function of waveguide hardware and accessories.
OR
b Design the circuit of Horn antenna & slot antenna. .
- 18 a Discuss about optical communication system .
OR
b Explain the function of connectors & splicing with diagrams.
- 19 a Enumerate the points about satellite communication system.
OR
b Highlight the function of GPS receiver.
- 20 a Differentiate PANs and Bluetooth .
OR
b Summarise important aspects of RFID.

Z-Z-Z

END