

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION DECEMBER 2018  
(Fifth Semester)

Branch - ELECTRONICS

**ELECTRONIC COMMUNICATION -1**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 Define Noise.
- 2 Write note on Modulation.
- 3 What are the SSB Filters?
- 4 Write the power distribution.
- 5 What is meant by angle modulation?
- 6 Define Noise suppression.
- 7 What is Tracking?
- 8 Write any two FM Discriminator characteristics.
- 9 Expand PAM.
- 10 Define PSK.

**SECTION - B (25 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Write short notes on Ionospheric layer.  
OR  
b Explain the electromagnetic spectrum.
- 12 a Elucidate the mechanical filters.  
OR  
b Describe the SSB demodulation.
- 13 a Draw the FM generator and explain it.  
OR  
b What is De-emphasis? Explain in detail.
- 14 a Write short notes on Mixer.  
OR  
b Explain the operation of Diode detector.
- 15 a What is meant by PWM? Explain it.  
OR  
b Write short notes on Quantization.

**SECTION - C (30 Marks)**

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Explain in detail about the communication systems.
- 17 Describe the phase shift SSB transmission.
- 18 Draw and explain the PLI. FM Transmitter.
- 19 Elucidate the PEL Demodulator.
- 20 Explain the working principle of QPSK.