

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018
(Fourth Semester)

Branch – PHYSICS

DIGITAL COMMUNICATIONS

Time: Three Hours

Maximum: 75 Marks

Answer ALL questions

ALL questions carry EQUAL marks (5 x 15 = 75)

- 1 a Describe the suppressed carrier amplitude modulation with necessary mathematical analysis.
OR
b Explain in detail the single side band transmitters and BFO receivers.
- 2 a Explain the action of Direct FM and PM modulators using varactor diode.
OR
b With a neat circuit diagram, explain the action of FM and PM limiter circuits.
- 3 a Write in detail the principle and theory of ASK, FSK and PSK modulation.
OR
b Write briefly about high speed modems and also explain the working principles of four level dual converters.
- 4 a Explain in detail about the evolution of cellular telephone.
OR
b Write an essay on the global system for mobile communication.
- 5 a Explain in detail about the networking concepts.
OR
b Write notes on (i) Broadband ISDN (ii) ATM networks (iii) Wi-Fi.

Z-Z-Z

END