

R09

Code: 9A12302

B.Tech II Year I Semester (R09) Supplementary Examinations June 2017

DATA COMMUNICATION SYSTEMS

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) List out data transmission techniques and explain with the neat sketch.
(b) List the components of data communication circuit and explain each with the neat sketch.
- 2 (a) State Snell's law for refraction and outline its significance in fiber-optic cables.
(b) List out and describe the losses associated with optical fibers.
- 3 (a) Write notes on quantization and the folded binary code.
(b) Explain linear versus nonlinear PCM codes.
- 4 List and give examples of three satellite evaluation categories
- 5 (a) Explain the caller ID Service. Give its ringing cycle and frame format.
(b) Define line conditioning and describe C- and D-type conditioning.
- 6 (a) Give a brief history of mobile telephone service.
(b) Describe edge-excited, center-excited and corner-excited cells.
- 7 (a) Determine double precision checksum for the five character ASCII message HORSE
(b) Determine the single precision checksum for the five character ASCII message HOUSE.
- 8 Write short notes on the following :
 - (a) ITU-T modem specification V.34 fast.
 - (b) Cable modems.
 - (c) Probability of error and bit error rate.
