BE Semester- III (ATKT IT) Question Bank
Data communication Techniques
All questions carry equal marks (10 marks)

Q.1	What is Data Communication? Explain with its component
Q.2	Define Protocols & Standards
Q.3	What is line configuration? Explain Point to Point & Multipoint
Q.4	Define topology. List types of topology. Explain with diagram
Q.5	Explain different transmission mode
Q.6	Explain Local Area Network (LAN), Metropolitan Area Network (MAN), Wide Area Network (WAN)
Q.7	Explain analog and digital signal
Q.8	Explain Aperiodic & Periodic Signals
Q.9	Explain time and frequency domains, composite signal, Complex Signals, Frequency Spectrum and Bandwidth
Q.10	Explain Amplitude, Period And Phase, Decomposition Of A Digital Signal, Medium Bandwidth And Significant Bandwidth
Q.11	Explain types of Analog To Analog Encoding
Q.12	Explain Amplitude Modulation (AM), Frequency Modulation (FM) , Phase Modulation (PM).
Q.13	Explain Analog To Digital Encoding: Pulse Amplitude Modulation (PAM), Pulse Code Modulation (PCM).
Q.14	Explain Digital To Digital Encoding
Q.15	Explain Digital To Analog Encoding :
Q.16	Explain Amplitude Shift Keying (ASK), Frequency Shift Keying (FSK), Phase Shift Keying (PSK)
Q.17	What is attenuation, distortion, noise, throughput,
Q.18	Explain Guided Media with example
Q.19	Explain Types of Multiplexing
Q.20	Explain types of errors with example
Q.21	Explain OSI model
Q.22	Explain TDM in detail.

Q.23	What are the criteria required for efficient and effective network?
Q.24	Explain NRZ and RZ coding schemes.
Q.25	What are the types of propagation of Radio wave transmission?
Q.26	Explain pulse code modulation in detail.
Q.27	Write short note on satellite communication.
Q.28	Explain CRC in detail.
Q.29	Write short note on cellular telephony.
Q.30	What are the advantages and disadvantages of optical fibre cable? Also explain the working of fibre optic cable.
Q.31	Explain RS – 232 interface standard.
Q.32	Explain polar encoding in detail.
Q.33	What is null modem? Explain the importance of DTE and DCE in null modem.
Q.34	Write a short note on FDDI in detail.
Q.35	Compare slotted aloha and pure aloha in detail.
Q.36	How is CRC superior to LRC? Explain CRC in detail.
Q.37	Explain the radio communication band in detail.
Q.38	Explain Unipolar encoding in detail.
Q.39	What is check sum? Give steps to create check sum.
Q.40	Explain the user interfaces of ISDN.