**DEPARTMENT OF INFORMATION TECHNOLOGY(IF)**

**Vision:**

- To Visualize the creation of skilled, proficient IT Professionals to meet current challenges.

**Mission:**

- To encourage young minds for training & entrepreneurship.
- To convey standard education with rapidly changing environment with ethical values. · To provide an environment where students can continuously learn, apply & communicate knowledge.

**Name Of Program :-** Diploma in Information Technology
**Date :-**
**Course Title :-** Data Communication (22322) Sem-III (2023 -24)
**Course Outcome :- CO**
**Chapter Name :- Introduction to Data Communication.**

# Assignment No:-01

Q.1 Define Data Communication. Explain the components of Data Communication with diagram.

Q.2 Explain the term Protocol in detail.

Q.3 Explain the Modes of Communication in detail.

Q.4 Differentiate between Analog Signal and Digital Signal.

Q.5 Define Standard. Name any four Standard Organizations.

Q.6 Explain the term Analog-to-Analog Conversion in detail.

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**Name Of Program :-** Diploma in Information Technology
**Date :-**
**Course Title :-** Data Communication (22322) Sem-III (2023 -24)
**Course Outcome :-** CO
**Chapter Name :- Transmission Media.**

# Assignment No:-02

Q.1 What is Guided Media? Enlist its types.

Q.2 What is Unguided Media? Enlist its types.

Q.3 Differentiate between Twisted Pair Cable, Coaxial Cable and Fiber Optic Cable.

Q.4 Explain Satellite Communication with diagram.

Q.5 Describe construction of co-axial cable with neat diagram.

Q.6 Describe Fiber Optic Cable with neat labeled diagram.

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**Name Of Program :-** Diploma in Information Technology
**Date :-**
**Course Title :-** Data Communication (22322) Sem-III (2023 -24)
**Course Outcome :- CO**
**Chapter Name :- Multiplexing and Switching.**

# Assignment No:-03

Q.1 What is Multiplexing? List types of Multiplexing and explain them.

Q.2 Give difference between FDM and TDM.

Q.3 Explain Circuit Switching with suitable diagram.

Q.4 Explain Packet Switching for datagram approach.

Q.5 Give difference between Circuit Switching and Packet Switching.

Q.6 Give difference between FHSS and DSSS.

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**Name Of Program :-** Diploma in Information Technology
**Date :-**
**Course Title :-** Data Communication (22322) Sem-III (2023 -24)
**Course Outcome :-** CO
**Chapter Name :- Error Detection and Correction.**

# Assignment No:-04

Q.1 Explain OSI Reference Model with diagram.

Q.2 Explain Error is data communication. Enlist different types of transmission errors.

Q.3 Explain VRC method of error detection with suitable example.

Q.4 Describe CRC with example.

Q.5 Explain the functions of Network Layer in OSI Model.

Q.6 Explain the functions of Data Link Layer in OSI Model.

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**Name Of Program :-** Diploma in Information Technology
**Date :-**
**Course Title :-** Data Communication (22322) Sem-III (2023 -24)
**Course Outcome :- CO**
**Chapter Name :- Wireless Communication.**

# Assignment No:-05

Q.1 What is Bluetooth? Explain its Architecture with neat labeled diagram..

Q.2 Explain the terms related to Mobile Telephone System.

Q.3 Describe Fourth Generation(4G) of Mobile Telephone System.

Q.4 Explain IEEE Wireless Standards.

Q.5 Explain the Frame Format of Bluetooth.

Q.6 Short note on Next Generation of Mobile Communication.

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