*Question Bank*

*DBMS:*

* *Explain the purpose of database system. OR drawbacks of file processing system.*
* *Short note on view of data. OR*

*Explain in details the different levels of abstraction.*

* *Explain database architecture with the help of diagram. OR*

*Differentiate between 2 tier and 3 tier architecture.*

* *Give importance of transaction management.*
* *List and explain DDL commands.*
* *Define:*
  1. *Primary key*
  2. *Foreign key*
  3. *Candidate key*
  4. *Database*
* *Give and explain the syntax of ‘Create Table’ with the help of example.*

*MATHS:*

* *Find the inverse using adjoin method.*
* *Find whether the given vector is linearly dependent or independent.*
* *Find the Eigen values and any one Eigen vectors.*
* *Find the square root of complex numbers.*
* *Find the nth root of complex number.(De Movis Theorem)*
* *Homogenous differential equations.(Y=vx)*
* *Separable differential equations.*

*CN:*

* *Explain the following terms with respect to data communication:*

1. *Half duplex*
2. *Full duplex*
3. *Simplex*
4. *Protocol*
5. *Standard*

*Pg No: 6,7 one sentence with diagram*

*Pg No: 23 all standards with maturity level diagram*

* *Explain microwave in brief.*

*Pg no.200*

*Diagram: parabolic dish antenna, horn antenna*

*Applications*

* *Explain the 5 components of data communication.*

*Pg No: 4*

* *Write a short note on Star topology*

*Pg No: 10, 11*

* *What are the responsibilities of data link layer*

*Pg No: 39*

*Diagram Pg No: 36 Layers in TCP/IP protocol suite.*

* *Describe causes of impairment in detail*

*Pg No: 77, 79 include noise distortion n attenuation.*

*Diagram Pg No: 77 Causes of impairment*

* *Write a short note on Fiber-optic cable with advantages and disadvantages.*

*Pg No: 192 1st para, last para + include modes + connectors + performance*

*Diagram 195*

* *Explain the concept of Time Division Multiplexing*

*Pg No: 163 time slots and frames*

* *Explain the layered structure of OSI model.*

*Pg No: 38 explain each layer in 1 sentence*

*Diagram Pg No: 44*

* *Define protocol and explain its key elements.*
* *Define Frequency Division Multiplexing.*

*Pg No: 157*

*What is the minimum bandwidth of a link on which 12 voice channels of 4 kHz bandwidth with guard bands of 500 Hz are multiplexed?*

* *Define Network Throughput. A network can pass only 1200 frames in 60 sec with each frame carrying 1000 bits. Calculate the throughput of this network in bits/sec.*

*Python:*

* *Explain the features of Python.*
* *Explain recursive functions.*
* *Differentiate between void and fruitful functions.*
* *Explain dictionaries.*
* *Explain list methods.*
* *Explain any 5 string methods with syntax and examples.*
* *What is type conversion? Explain various type conversions functions in python.*
* *What is file? Explain various file opening modes in python.*
* *Write a short note on Exception Handling.*
* *Define an exception. List and explain any 5 built-in exceptions in python.*