



First Term - 2071

Grade: XII
Time: 3:00 hrs.

Subject: Computer Science

FM: 75
PM: 30

Set 'A'

Group A

Attempt **all** questions: [4×10=40]

1. a. Draw a flowchart and C program to check number is odd or even.
b. Explain the major features of C language.
2. Differentiate between variable and constant. Explain the various types of constants with respective examples.
3. What is control statement? Write flowchart and C program to calculate factorial of given number.
4. What is entity relationship diagram (ERD)? Explain all the components of ERD and also draw a suitable example.

Group B

Attempt **all** questions [7×5=35]

5. What is information system? Explain the different types of information system.
6. What is feasibility study? Explain the different levels of feasibility study.
7. Define RDBMS. Explain different types of relationship involved in RDBMS.
8. What is normalization? Explain the normalization process up to 3NF with respective examples.
9. What is OSI reference model? Explain the layers of OSI reference model.
10. What is topology? Explain various types of topologies used in networking.
11. Write short notes: [2.5×2=5]
 - IP Address
 - SQL



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Set 'B'

Group A

Attempt **all** questions: [4×10=40]

1. a. Draw a flowchart and C program to find out greatest among three numbers.
b. Explain the compilation process of C language.
2. Differentiate between identifiers and keywords. Explain the various types of operators used in C language with respective examples.
3. Differentiate between branching and looping statement. Write flowchart and C program to display multiplication table of given number.
4. What is data flow diagram (DFD)? Explain all the components of DFD and also draw a suitable example.

Group B

Attempt **all** questions [7×5=35]

5. Who is System Analyst? Explain the characteristics and the responsibility of a good System Analyst.
6. What is prototype? Explain the prototype model of SDLC.
7. Define DB and DBMS. Explain the advantages of database system over flat file system.
8. Differentiate between centralized and distributed database system.
9. Define computer network. Explain various types of network on the basis of size.
10. What is network architecture? Differentiate between client server and peer to peer network architecture.
11. Write short notes on:
 - Repeater
 - Primary Key and Foreign Key