



First Term - 2072

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 find the greatest among three numbers.
- b. Define unary operator. Explain postfix and prefix unary operation with suitable program.
2. What is control statement? Describe various types of looping statements with respective syntax, flowchart and suitable program.
3. Write flowchart and C program to calculate factorial of given number.
4. What is ERD? Explain the components of ERD and Also write the importance of ERD. Draw suitable ERD of one to one, one to many and many to many relationships

**Group B**

Attempt **all** questions: [7×5=35]

5. What is feasibility study? Explain the different levels of feasibility study.
6. Who is system analyst? Explain the characteristics of good system analyst.
7. Define DB and DBMS. Explain any five major advantages of database system.
8. Differentiate between centralized and distributed database system.
9. What is computer network? Explain the advantages and disadvantages of computer network.
10. What is OSI reference model? Explain the seven layers of OSI reference model.
11. Write short notes on
  - Router
  - Preprocessor

*\*Good Luck\**



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**Set 'B'  
Group A**

Attempt **all** questions: [4×10=40]

1. a. Draw a flowchart and C program to check the number is odd and even.
- b. What is type casting? Explain implicit type casting and explicit type casting with respective examples.
2. Explain various types of branching statements with respective syntax, flowchart and suitable program.
3. Write flowchart and C program to display multiplication table of given number.
4. What is DFD? Explain the components of DFD and also write the importance of DFD. Draw suitable zero level DFD and first level DFD of library management system.

**Group B**

Attempt **all** questions: [7×5=35]

5. What is SDLC? Explain the importance of system analysis and system design phases.
6. Explain the responsibility of a good system analyst.
7. What is normalization? Explain the normalization process up to 3NF with respective examples.
8. Differentiate between hierarchical database model and network database model.
9. Explain various types of computer networks on the basis of geographical area.
10. What is topology? Explain the various types of topology used in computer networking.
11. Write short notes on
  - Repeater
  - Header File

*\*Good Luck\**