

QP CODE:106018

Reg. No: .....

**First Year B.Sc (MRT) Degree Supplementary Examinations  
September 2025**

**Computer Science**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay**

**(2x20=40)**

1. a) Explain the following components of a computer: I/O devices, CPU, Hard Drive and ROM.  
b) What is a flow chart. Write an algorithm to print even numbers in a given list of 'n' numbers. (The user inputs the value of 'n' and the 'n' number of values of the list)  
(10+10)
2. a) What is a 2 dimensional array in C. Write a C program to read 'n' values into an array and to print the largest among the 'n' values. The elements stored in the array must be accessed for comparison using pointer.  
b) Explain about Hospital Information Systems, practice management systems, Electronic Medical records and Electronic health records.  
(10+10)

**Short notes:**

**(8x5=40)**

3. Explain 'malloc' function used for dynamic memory allocation in C programming language with the help of a suitable statement as example.
4. Explain time sharing and real time system in detail.
5. Explain if and switch statement in C with an example for each.
6. How is MAN different from WAN. Discuss any two differences in detail.
7. Write a function to swap two integer values stored in integer variables by passing address of each variable to the function.
8. Write a program to find the length a string given as input.
9. Explain the role of multimedia in Health services. Explain about ethical aspects of IT in health.
10. Explain web server and web browser.

**Answer briefly:**

**(10x2=20)**

11. Explain Super Computers. Where are these used.
12. Explain any two hardware components of a computer network.
13. Compare between firewall and proxy server.
14. Explain the use of constants in programming language.
15. Explain any two logical operators in C.
16. Explain float data type in C programming Language.
17. What is a computer virus.
18. What is a Web TV. Explain the additional hardware required when compared to a traditional TV.
19. What is an application software.
20. What is Operating System. Why is it important

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