

**First Year B.Sc (MRT) Degree Supplementary Examinations  
September 2022**

**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) Discuss in detail the functions of the operating system.  
(b) Explain about any 3 looping statements with example in C. (10+10)
2. (a) Explain the structure of the Linux operating system.  
(b) Write a C program to add two 3x3 matrices in C. (10+10)

**Short notes:****(8x5=40)**

3. What are the functional units of digital computer.
4. Explain the use of primary and secondary memory with example.
5. Explain different types of computer networks.
6. What is the difference between pass by value and pass by reference
7. What is a flowchart and what are the symbols used in a flowchart.
8. The use of pre-processor directives in C, with example.
9. Different mechanisms of online learning.
10. Explain different types of malware.

**Answer briefly:****(10x2=20)**

11. What is the difference between digital and analog systems.
12. What is an assembly language.
13. List the functions of word and excel.
14. How to declare an array in a C program.
15. What is the bitwise operator.
16. 'Auto' storage class in C.
17. How to define variables and constants in C.
18. Use of telemedicine.
19. Explain PACS.
20. Explain the significance of HIS.