

**First Year B.Sc (MRT) Degree Supplementary Examinations
September 2024
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 functional units of a computer with a suitable figure. Explain any two different types of memory present in a computer.
(b) Explain algorithm, flow chart, application software and system software in detail.
(10+10)
2. (a) Write a program to reverse the order of the elements stored in an array using pointer. The array is initialized within the program and is of size 10. Display the individual elements of the array before reversing as well as after reversing. Accessing of elements in the array must always be performed using pointer.
(b) Explain in detail about PACS and telemedicine.
(10+10)

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

3. Explain in detail about – Internet, intranet and extranet.
4. What is static and dynamic memory allocation. Give examples of each.
5. Explain about arrays and pointer in C. Explain the similarity between A and ptr when declared as:
`int A[10], *ptr;`
6. Explain any five DOS commands in detail with an example of its use in each case.
7. Explain any parameter passing technique in detail.
8. What is a string in C? Explain how a string is stored in memory in C.
9. Explain the social, economic, political and Ethical Perspective of IT.
10. Explain any four common HIT applications.

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

11. Explain Super computer and main frame Computers.
12. What is a router in computer networks.
13. Explain double data type in C.
14. What is a keyword. What is the rule for forming correct variable names in C.
15. Explain any one unary operator with an example.
16. What is a web server.
17. Explain about any two challenges in using HIT.
18. What are the components of an Operating System.
19. What is Machine language.
20. Explain any two applications of IT.
