

Integ. M.Sc. (CSF) Sem.-1 Examination

DSC-C-ICSF-111

Fundamentals of ICT

January-2024

Time : 2-00 Hours]

[Max. Marks : 50

Ques.1 Answer the following questions:

- i. Define Operating Systems and explain their characteristics. 5 Marks
- ii. Explain OSI Model in detail with a labelled diagram. 5 Marks

OR

- i. What is DBMS? Explain the features of DBMS. 5 Marks
- ii. Differentiate between CLI vs. GUI operating systems. 5 Marks

Ques.2 Answer the following questions:

- i. Explain in detail the types of Virtualizations. 5 Marks
- ii. What are System software and Application Software? Also, write five advantages and disadvantages. 5 Marks

OR

- i. What is SQL and how does it work? Also describe need of the SQL. 5 Marks
- ii. Explain in detail the Classification of IP. 5 Marks

Ques.3 Answer the following questions:

- i. Give 5 difference between RAM and ROM. 5 Marks
- ii. What is a hypervisor? Explain the classification in detail. 5 Marks

OR

- i. Explain Client server architecture in detail. 5 Marks
- ii. Give detail comparison between freeware and shareware. 5 Marks

Ques.4 Answer the following questions:

- i. What is Virtual Memory and Swap Memory? List 5 difference of Virtual Memory and Swap Memory. 5 Marks
- ii. Explain TCP/IP Model in detail with well labelled diagram. 5 Marks

OR

- i. What is CPU Core? Explain the types of core processor in detail. 5 Marks
- ii. Explain Packet Encapsulation. 5 Marks

Ques.5 Attempt any ten out of twelve.**10 Marks**

1. What is SRAM and DRAM?
2. What is MTU and VoIP?
3. Give 2 advantages and disadvantages of DBMS.
4. Define open-source software and give one example.
5. What is NFV?
6. What is DHCP? And what it does?
7. What is Router?
8. What is RAID?
9. Enlist the benefits of virtualization.
10. Give any 2 differences between hardware and software.
11. What is Static and Dynamic IP?
12. What is CPU? Mention its functionality.