

**Section–C**

**2×14=28**

**(Long Answer Type Questions)**

*Note* :- Answer any *two* questions. You have to delimit your each answer maximum up to **500** words.

Each question carries 14 marks.

10. Explain the file structure of UNIX operating system in detail.
11. What do you mean by Distributed Computing ? Also explain in brief various distributed Computing Model.
12. Write script of determine whether a given file exist or not, file name is supplied as command line argument. Also check for sufficient number of command line argument.
13. What is Buffering ? Enlist the different types of buffering with their brief functionality.

**BCA–13**

**December – Examination 2022**

**B.C.A. (Part III) Examination**

**Operating System–II**

**Paper : BCA-13**

*Time : 3 Hours ]*

*[ Maximum Marks : 70*

*Note* :- The question paper is divided into three Sections A, B and C. Write answers as per the given instructions.

**Section–A**

**7×2=14**

**(Very Short Answer Type Questions)**

*Note* :- Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 2 marks.

1. (i) What is a Dispatcher ?

- (ii) How do we declare variable in shell script ?  
Give an example.
- (iii) What is RTOS ?
- (iv) Why we need compression ?
- (v) Name any *four* types of Shell.
- (vi) Give any *two* differences between Distributed Systems and Parallel Computing.
- (vii) What is the Root Account ?

**Section-B** **4×7=28**

**(Short Answer Type Questions)**

*Note* :- Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 7 marks.

- 2. Give the comparison between 32-Bit *Vs* 64-Bit Architecture.
- 3. What are the desirable issues in IPC by Message Passing and Synchronization ?

- 4. What do you mean by a Real-time system ?  
Explain the major classification of Real-time System.
- 5. Why shell script is used ? What is the conditional statement in shell scripting ?
- 6. Discuss with the options on the ls command.  
What do the d, i, R and F options do ?
- 7. Explain chmod command with syntax and example. A file has got protection 744 (octal). What protections does it really have ?
- 8. Considering an ordered disk queue with respects evolving tracks 86, 1470, 913, 1774, 948, 1509, 1022, 1750, 130. If the read/write head is initially at track 123, what is the total distance that the disk arm moves to satisfy all the pending requests for FCFS ?
- 9. Explain the advantages and disadvantages of Linux in detail.