(4)

Code No. : AC-395

Q.3 What is page replacement? Discuss the replacement algorithms.

OR

Discuss the SCAN scheduling algorithm with giving suitable example.

Q.4 Explain the general model of file system.

OR

Describe the indexed allocation performance with giving suitable example.

Q.5 Discuss the dead lock avoidance-bankers algorithm.

OR

Explain how to recovery from dead lock process termination.

----X----

Roll No.....

Total No. of Sections: 03Total No. of Printed Pages: 04

Code No. : **A.B.C-395**

Annual Online Examination 2021

BCA Part - III

BCA - 303

OPERATING SYSTEM

Max.Marks: 100

Time: 3 Hrs.

Min.Marks: 40

Note : Section 'A', containing 10 very short-answer-type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

Section - 'A'

Answer the following very short-answer-type questions in one or two sentences : $(2 \times 10=20)$

- Q.1 Give the example of batch operating system.
- Q.2 MS Windows XP is which type of operating system.
- Q.3 What is multi programming operating system?
- Q.4 What do you mean by round robin algorithm.

Q.5 What is virtual memory?

- Q.6 What do you mean by cache memory?
- Q.7 Write the full form of file system FAT & NTFS.
- Q.8 What do you mean by linked allocation?

(2)

Code No. : A.B.C-395

Q.10 What is resource allocation graph?

Section - 'B'

Answer the following short answer type questins in word limit 150-200: (6×5=30)

Q.1 Discuss the basic terminology of operating system.

OR

Explain the spooling.

Q.2 Explain the basic concept of scheduling.

OR

Discuss multi processor scheduling.

Q.3 Explain the fragmentation.

OR

Explain the swapping.

Q.4 Explain the types of file.

OR

Discuss the linked allocation.

Q.5 Discuss Dead-lock characterization.

OR

Explain the Dead lock detection.

Section - 'C'

Answer the following long answer type questins in word limit 300-350 : (10x5=50)

Q.1 Describe the types of operating system.

OR

Discuss that operating system working as resource manager.

Q.2 What is priority scheduling algorithm? Calculate the average waiting time of following table using priority scheduling algorithm.

| Process | Burst time (Miliseconds) | Priority |
|-----------------------|--------------------------|----------|
| P ₁ | 10 | 3 |
| \mathbf{P}_2 | 01 | 1 |
| P ₃ | 02 | 4 |
| \mathbf{P}_4 | 01 | 5 |
| P ₅ | 05 | 2 |
| | OR | |

Write the Round-Robin scheduling algorithm? Calculate the average waiting time of following given table using Round-Robin algorithm.

| Process | Burst time (Miliseconds) |
|----------------|--------------------------|
| P ₁ | 24 |
| P ₂ | 3 |
| P ₃ | 3 |

P.T.O.