Roll No. ☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CSE) / (AI&ML) / (CE) / (CSE) (IOT) (Sem.–4)
OPERATING SYSTEM
Subject Code : BTCS-402-18
M.Code : 77628
Date of Examination : 07-07-22

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A** is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. **SECTION-B** contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. **SECTION-C** contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Write briefly :

1. PCB

2. Protection

3. Threshold

4. System Calls

5. Soft RTS

6. Multi-programming OS

7. Waiting Time

8. Logical Address

9. Preemptive

10. Frame.

SECTION-B

11. What is an Operating System and its services?

12. Explain the FIRST fit, and Worst fit allocation algorithms with the help of example.

13. Explain Belady's Anomaly.

14. Write a detailed note on paging and segmentation.

15. List down various protection problems that an operating system might have to deal.

SECTION-C

16. A block manager for a variable size region strategy has a free list of blocks of size 600, 1400, 1000, 2200, 1600 and 1050 bytes. What block size will be selected to honor a request for 1605 bytes using best fit policy?

17. What is thrashing? How it is eliminated?

18. What is Page Fault? Explain the process with the help of diagram. Also, define swapping.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.