

**(DMCA105)**

Total No. of Questions : 18]

[Total No. of Pages : 02

**M.C.A. DEGREE EXAMINATION, MAY – 2018****First Year****OPERATING SYSTEMS****Time : 3 Hours****Maximum Marks :70****SECTION - A****Answer any three of the following questions.****(3 x 15 = 45)**

- Q1)** Explain the various types of operating systems.
- Q2)** Explain implementation of producer's/Consumers problem using monitor.
- Q3)** What is paging? Discuss the various page replacement strategies.
- Q4)** Write about the following in detail:
- i) Disk structure
  - ii) Indexed allocation
  - iii) Shortest-Seek-Time-First (SSTF) scheduling.
- Q5)** Discuss about various threats are detecting prevented by the operating system.

**SECTION - B****Answer any five of the following questions.****(5 x 4 = 20)**

- Q6)** Describe different process states with neat diagram.
- Q7)** Explain about shortest job first scheduling algorithm with example.
- Q8)** Write about internal and external fragmentation.
- Q9)** Explain about overlays.
- Q10)** Explain the page fault handling routine with diagram.
- Q11)** Write short notes on kernel I/O subsystem.
- Q12)** State the various attributes of file and their purpose.
- Q13)** Explain the terms worm and viruses with example.

**SECTION - C**

**Answer all of the following questions. (5 x 1 = 5)**

**Q14)** What is turnaround time of process scheduling?

**Q15)** Define segmentation.

**Q16)** Define critical section.

**Q17)** Define demand paging.

**Q18)** Define deadlock.



www.FirstRanker.com