



**II Semester B.Voc. Examination, May/June 2018
(CBCS) (F + R)
(2016-17 and Onwards)
INFORMATION TECHNOLOGY
203 : Operating Systems**

Max. Marks : 70

Time : 3 Hours

Instruction : Answer all Sections.**SECTION – A****(10×2=20)**Answer **any ten** questions.

1. What is an operating system ?
2. Define batch processing.
3. Explain (a) waiting time (b) turn around time.
4. What is race condition ?
5. Define deadlock.
6. Define fragmentation. List different types of fragmentation.
7. Define trashing.
8. What are the various file 0 attributes ?
9. List the function of file management system.
10. What is directory ? What are its different structures ?
11. Define tracks, sectors and cylinders.
12. What is Trojan horse ?

SECTION – BAnswer **any five** of the following.**(5×10=50)**

13. a) What are the main objectives of an operating system ? Explain. **5**
- b) Explain the function of file management and I/p O/p system management. **5**

P.T.O.

SM – 722



- 14. a) Explain process control block.
- b) Explain FCFS and RR scheduling algorithm with an example.
- 15. a) What is semaphore ? Explain different types of semaphores.
- b) Explain resource allocation graph.
- 16. a) Explain different methods of deadlock prevention.
- b) Explain contiguous memory allocation with its advantages and disadvantages.
- 17. a) Differentiate between paging and segmentation.
- b) State Belady's anomaly and its importance in demand paging.
- 18. a) Write a note on file protection.
- b) Explain SCAN and C-SCAN disk scheduling.
- 19. a) Explain disk structure.
- b) What is password ? Explain password vulnerabilities.
- 20. Write short notes on :
 - a) Virtual memory.
 - b) File system in linux.

4
6
5
5
5
5
5
5
5
5
5
5