SE - 432



## II Semester B.Voc. Degree Examination, September 2020 (CBCS (Repeaters) Scheme) (2016-17 and Onwards) INFORMATION TECHNOLOGY 203 : Operating System

Time: 3 Hours

Max. Marks: 70

Instruction: Answer all Sections.

SECTION - A

Answer any 10 questions.

 $(10 \times 2 = 20)$ 

- 1. What is paging
  2. Define RAID technology.
  SMSCW
  LIBRARY
- 5. What is race condition?
- 6. Define segmentation.
- 7. What is critical section?
- 8. What is a Kernel?
- 9. Define multithreading with an example.
- 10. What is interprocess communication?
- 11. Differentiate between logical and physical address.
- 12. What is fragmentation and what are its types?



## SECTION - B

| Answer any 5 questions.   | (5×10=50) |
|---|-----------|
| <ul><li>13. a) Explain deadlock prevention and avoidance.</li><li>b) How to recover from deadlock?</li></ul>              | (5+5)     |
| <ul><li>14. a) What is virtual memory ?</li><li>b) Explain demand paging.</li></ul>                                       | (5+5)     |
| <ul><li>15. a) Explain critical section problem.</li><li>b) Explain FCFS and RR scheduling algorithms.</li></ul>          | (5+5)     |
| <ul><li>16. a) Explain memory allocation methods.</li><li>b) Explain magnetic disk storage with a neat diagram.</li></ul> | (5+5)     |
| 17. a) What is a process? Briefly explain its states. b) Explain process synchronization detail.                          | (5+5)     |
| 18. a) Explain any 2 disk scheduling algorithm?  b) Explain multithreading in detail.                                     | (5+5)     |
| <ul><li>19. a) Describe interprocess communication.</li><li>b) Explain dining philosopher's problem.</li></ul>            | (5+5)     |
| <ul><li>20. a) Explain parallel and distributed systems.</li><li>b) Explain SCAN and C-SCAN disk scheduling.</li></ul>    | (5+5)     |