

This question paper contains 2 printed pages.

B.C.A. (Part - II)

Roll No. \_\_\_\_\_

233

Ope. Sys.

**B.C.A. (PART II) EXAMINATION - 2018**  
**(Faculty of Science)**  
**(Three-year Scheme of 10 + 2 + 3 Pattern)**  
**Paper - 233**  
**OPERATING SYSTEMS**

**Time allowed : Three Hours**

**Maximum Marks : 100**

**PART - I: Each question is of 2 marks. Words limit for the answers is 40 words.**

**PART - II: Each question is of 4 marks. Words limit for the answers is 80 words.**

**PART - III: Each question is of 12 marks.**

**PART - I**

1. Give short answers to the following- [10 x 2 = 20]
- What do you mean by Database Management System?
  - Explain Direct Memory Access Buffering.
  - Write difference between Serial Processing and Batch Processing.
  - Write any two functions of operating system.
  - How operating system control I/O management?
  - What do you understand by Client-Server structure of operating system?
  - Define FCFS.
  - Write the definition of Program.
  - What is "Scheduler" ?
  - Write about Turn Around Time [TAT].

**PART - II**

2. What is a Process? Describe five state of process. Also illustrate diagram. [4]
3. Write in brief- [1½+1¼+1¼] = [4]
- Long Term Scheduler
  - Short Term Scheduler
  - Medium Term Scheduler
4. What is the difference between non-preemptive and preemptive scheduling? (Min. 3 differences) [2x2] = [4]
5. Explain "Process Synchronization" in brief. [4]
6. What do you mean by Semaphore? Discuss. [4]

**PART - III**

7. What do you mean by Multi Processor Solution [ Bak-erry solution]? Describe all points with complete example. [12]

**OR**

- What is Critical Section Problem? Also describe all possible solutions of Critical Section Problem.  
8. What is Thread? Write in detail about life cycle of Thread with Diagram [12]

**OR**

- Write in detail "Banker's Algorithm. Also give an example  
9. Differentiate Single Instance Resource type and Multiple Instance Resource Type. Explain method of Deadlock Recovery in brief. [12]

**OR**

- Explain in detail Partition Selection Algorithm Strategies  
10. Write in detail about "Paging" with examples. [12]

**OR**

- What is "Thrashing"? Write causes of Thrashing. Give two preventions also.  
11. Discuss the "Directory Implementation". Also describe its two methods. [12]

**OR**

Write short notes on-

- (a) Remote Procedure call
- (b) Message Passing
- (c) Encryptions
- (d) Parallel Processing [Any Two]

<https://www.uoronline.com>

Whatsapp @ 9300930012

Send your old paper & get 10/-

अपने पुराने पेपर्स भेजे और 10 रुपये पायें,

Paytm or Google Pay से