# ST. JOSEPH'S EVENING COLLEGE (AUTONOMOUS) II SEMESTER BCA EXAMINATIONS APRIL 2018

## **OPERATING SYSTEM**

Duration: 2.5 Hours Max. Marks: 70

### **SECTION - A**

# I) Answer any SIX of the following questions.

(6x3=18)

- 1. What is Operating System? Mention any two functions of an OS.
- 2. What is Thrashing?
- 3. What is Segmentation? Explain briefly.
- 4. List differences between Batch Processing and Multiprogramming OS.
- 5. What is Spooling?
- 6. Explain Semaphore.
- 7. What is Page fault? Explain the steps involved in page fault.
- 8. Mention the functions of memory management.

#### **SECTION - B**

# II) Answer any FOUR of the following questions.

(4x8=32)

- 9. What are OS services? Explain any three of them.
- 10. Explain different methods of deadlock prevention.
- 11. Explain Round Robin Scheduling with an example.
- 12. Explain Critical Section problem and process communication.
- 13. Write a short note on Virtual Memory.
- 14. Explain Contiguous memory allocation with its advantages and disadvantages.

#### SECTION - C

## III) Answer any TWO of the following questions.

(2x10=20)

- 15. Explain a) Paging Scheme. b) Demand Paging.
- 16. Write a note on File system and file allocation methods in detail.
- 17. Write a short note on:
  - a) Pre-emptive and non pre-emptive scheduling
  - b) Resource allocation Graph method for deadlock avoidance