

BCA-07 / DCA-102
June - Examination 2016
BCA Pt. II / DCA Examination
Operating System - I
Paper - BCA-07 / DCA-102

Time : 3 Hours]

[Max. Marks :- 100

Section - A

10 × 2 = 20

(Very Short Answer Questions)

Note: Answer **all** questions. Limit to 30 words. All carries 2 marks.

- 1) (i) Explain system cells.
- (ii) Explain trashing.
- (iii) Explain file attributes.
- (iv) What is virtual memory?
- (v) What is first-fit, best-fit?
- (vi) Explain swapping.
- (vii) What is process?
- (viii) Give necessary conditions of deadlock.
- (ix) Explain about disk structure.
- (x) Explain about overlays.

Section - B**4 × 10 = 40**

(Short Answer Questions)

Note: Answer **any four** questions. Limit your answer to 200 words. All carries 10 marks each.

- 2) Explain various scheduling algorithms.
- 3) Discuss busy, wait implementation of semaphore.
- 4) Explain demand paging and segmentation.
- 5) Explain deadlock avoidance with bankers algorithm.
- 6) Explain all file allocation methods.
- 7) Explain the concept of virtual memory.
- 8) Explain different types of operating systems.
- 9) Describe Process State Transition diagram in detail.

Section - C**2 × 20 = 40**

(Long Answer Questions)

Note: Answer **any two** questions. Limit your answer to 500 words. All carries 20 marks.

- 10) Explain threading issues in detail.
- 11) Discuss any two page replacement algorithms.
- 12) Compare RR and FCFS scheduling algorithms.
- 13) Compare preemptive and non-preemptive scheduling.