BCA(III) —Ope. Sys. (302)

Core – VI

2019

Time : 3 hours

Full Marks : 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from all the Sections as directed.

Section – A

(Compulsory)

1. Choose the appropriate answer from each of the following multiple choice questions : 2×10 = 20

   (a) Which of the following is not an operating system ?

   (i) Windows

   (ii) Linux

   (iii) Mac OS

   (iv) MS. Office ✓

(b) Which of the following is not a state of process life cycle ?

    (i) Ready   (ii) Running

    (iii) Killed   (iv) Waiting

(c) The interval from the time of submission of process to the time of completion is termed as :

    (i) Waiting time   (ii) Turn around time

    (iii) Response time (iv) Throughput

(d) The _____ keeps the state information about the use of I/O components.

    (i) CPU   (ii) OS

    (iii) Kernel   (iv) Shell

(e) Which of the following file formal support in windows 7 ?

    (i) NTFS   (ii) BSD

    (iii) EXT   (iv) All of these

(f) Who is called a supervisor of computer activity ?

    (i) Memory   (ii) Operating system

    (iii) I/O Device   (iv) Control Unit

(g) When a thread need to wait for an event, it will :

   (i) Block   (ii) Execute

   (iii) Terminate   (iv) Update

(h) The _____ swaps processes in an out of the memory.

   (i) Memory management

   (ii) CPU

   (iii) CPU manager

   (iv) User

(i) Each entry in a segment table has a :

   (i) Segment Base   (ii) Segment Peak

   (iii) Segment value   (iv) None of these

(j) Which mechanism is used by worm process ?

   (i) Trap door   (ii) Fake Process

   (iii) Spawn Process   (iv) VAX Process

Section – B

Answer any **four** questions of the following :

$$5 \times 4 = 20$$

2. Differentiate between Multiprocessing and Multiprogramming.

3. What do you mean by Kernel ?

4. Describe the concept of virtual memory.

5. What do you mean by deadlock ?

6. Describe the working process of cache memory.

7. What do you mean by process synchronization ?

8. Differentiate between ready state and a wait state.

9. Write short notes on fire wall.

Section – C

Answer any **two** questions of the following :

15×2 = 30

10. What do you mean by process management in operating system ? Explain the various state of process management.

11. What do you mean by deadlock ? Discuss the necessary condition of deadlock.

12. What do you mean by Scheduling ? Disucss their types.

13. Justify your answer "Operating System is a backbone of computer system". Also discuss the category of operating system.

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