Roll No. _____ [Total No. of Pages : 2]

BCVS-361-B-19
B.C.A V Semester Degree Examination
COMPUTER SCIENCE
Paper - BCA 5.1
Operating System Principles

Time : 3 Hours   Maximum Marks : 80

Instructions to Candidates:Answer all Sections.

SECTION - A

Answer all questions: (10×2=20)

1. a) What is Process? Mention its Components.

    b) Define Turn around time and response time.

    c) Define Operating System.

    d) What is external fragmentation?

    e) Mention different disk scheduling Polices.

    f) Define computer security.

    g) What is SMP?

    h) Define virtual memory.

    i) Define file and Directory.

    j) What are advantages of Micro Kernel?

SECTION - B

Answer any **Four** questions: (4×5=20)

2. Explain functions of Operating System.

3. Explain state transaction diagram of process.

4. What is Segmentation? Explain how segmentation is done.

5. Explain the schema for defining logical structure of a single level directory.

6. What are Scheduling criteria? Explain briefly.

7. Explain various components of LINUX operating system.

BCVS-361-B-19/2019   (1)   [Contd....

SECTION- C

Answer any **Four** questions: (4×10=40)

8. Explain the structure of operating system with layered approach.

9. Explain FCFS and SJFS algorithms with example.

10. What do you mean by shell script? Write shell script program to find largest of 3 numbers.

11. Explain SCAN & C-SCAN disk scheduling with an example.

12. Explain deadlock detection using Bankers algorithm for general instances of a resource type along with data structure used.

13. Explain the UNIX/ LINUX File System.