04-05-20 Section-A BCA IV Sem. O.S.

1. What is the difference between real time and embeded operating system?

2. Explain the difference between multiprograming, multiuser and multi tasking operating system.

3. What is File system ?

4. What is the difference between a scheduler and a dispatcher ?

5. How would you prevent from deadlock ?

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries 7½ marks. Short answer is required not exceeding 200 words. 7½×2=15

6. Explain the mechanism of round robin scheduling and consider the following scenario of processes with time quantum = 2.

Process	Arrival Time	Executive Time
P_1	0	9
P_2	1	5
P_3	2	3
P_4	3	4

Draw the Gantt chart for the execution of the processes. Showing their start time and end time using round robin scheduling. Calculate the turn around time, waiting time, average turn around time and average waiting time for the system.

7. What is difference between deadlock avoidance and detection ?

8. Distinguish between any two of the following :

   (a) Static and dynamic allocation

   (b) Logical and Physical address

   (c) Swapping and paging.

Section-C

(Detailed Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 15 marks. Answer is required in detail. 15×3=45

9. What do you understand by Bare machine approach ? Explain.

10. Write an short note on any two of the following :

    (i) Deadlock characterization

    (ii) Contiguous link memory

    (iii) Dynamic protection structures.

11. What is multiprocessor scheduling ? Explain.

12. What do you understand by virtual memory ? Explain.

13. Explain the evaluation of operating system.