The University of Burdwan

B.Sc.(H) 3rd Semester Examination, 2020(CBCS)
Paper Name: Operating System   Paper Code: CC-6
Subject: Computer Science

F.M:40   **Time:2 Hours.**

Answer *any eight* questions: **5×8=40**

1. Define process. Draw process state diagram.   2+3

2. Explain the various types of system calls with examples.   5

3. Write a short note on Process Control Block (PCB).   5

4. What is context switching? Differentiate between process and thread.   2+3

5. Explain page fault with an example.   5

6. Discuss the concept of virtual memory.   5

7. What are the differences between external and internal fragmentation? Define

   throughput and response time.   3+2

8. Explain preemptive priority scheduling algorithm with example.   5

9. Differentiate between deadlock and starvation. Write down the necessary   conditions

   for occurrence of deadlock.   2+3

10. Consider the following page reference string:

    4, 7, 6, 1, 7, 6, 1, 2, 7, 2.

    The number of frames in the memory is 3. Find out the number of page faults using

    FIFO Page Replacement Algorithm.   5