JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -1 EXAMINATION- 2023
B.Tech-V Semester (ECM)

COURSE CODE(CREDITS):23B11EM511(03) **MAX. MARKS: 15**

COURSE NAME: Operating System

COURSE INSTRUCTORS: Dr. Sunil Datt Sharma **MAX. TIME: 1 Hour**

Note: (a)All questions are compulsory.

(b)Marks are indicated against each question in square brackets.

(c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q1. What is the relationship between operating systems and computer hardware? **[1 Mark, CO-1]**

Q2. What are the primary differences between Network Operating System and Distributed Operating System? **[2 Marks, CO-1]**

Q3. What is the difference between Job and Process? **[1 Mark,CO-1]**

Q4. Explain the user and kernel modes of the operating system in brief? **[2 Marks, CO-1]**

Q5. Write the functions of the operating system. **[1 Mark, CO-1]**

Q6. What are advantages of the Linux operating system? **[1 Marks, C0-1]**

Q7. What is process management in operating systems? Also, explain the attributes of the process management. **[02 Marks, CO-2]**

Q8. Consider the processes in following table, where arrival time of each process is different. **[05 Marks, CO-2]**

Process id	Arrival time	Burst time
P1	0	3
P2	1	2
P3	2	1
P4	3	4
P5	4	5
P6	5	2

Use FCFS algorithm for CPU scheduling and find average waiting times.