

# Bankura University

## B.Sc(Honours) THIRD SEMESTER EXAMINATIONS, 2021

**Subject: Computer Science**

**Course ID: 31512**

**Course Title: Operating System**

**Full Marks: 25**

**Time: 1hr 15 min**

**The figures in the margin indicate full marks**

**Answer all the questions.**

### UNIT I

**1. Answer *any five* of the following questions: (5×1=5)**

- a) What is an operating system?
- b) Name a multi-user operating system
- c) What do you mean by the shell of an OS?
- d) What do you mean by system program?
- e) What is process?
- f) What is virtual memory?
- g) What is a file?
- h) What are the different types of process scheduling?

### UNIT II

**2. Answer *any two* of the following questions: (2×5=10)**

- a) Write a short note on different types of operating systems
- b) Discuss process state-transition with a suitable diagram
- c) Discuss the critical section problem in brief
- d) Write a short note on device management

### UNIT III

**3. Answer *any one* of the following questions:**

**(1×10=10)**

- a) Discuss any two techniques for memory management with suitable diagrams.
- b) Discuss any two techniques for CPU scheduling with suitable examples.