

**ABV- Indian Institute of Information Technology &
Management, Gwalior**
Operating Systems (IT207)

Minor Examination — Session 2024

Time: 1.5 Hours

Max Marks: 25

Note: All questions carry equal marks unless stated otherwise.

1. Define a process. Explain process states and the role of the Process Control Block (PCB). (5 Marks)
2. Discuss the concept of CPU scheduling. Differentiate between preemptive and non-preemptive scheduling. (5 Marks)
3. Explain context switching with an example. Why is it considered overhead? (5 Marks)
4. What is the difference between a kernel and a shell? Give two examples of each. (5 Marks)
5. Write short notes on: (a) Thrashing (2.5 Marks)
(b) Real-time operating system (2.5 Marks)