Ahmedabad University

School of Arts and Sciences

CSE340 Operating Systems

End-Term Examination 2024-25 (Monsoon Semester)

Total Marks = 50 **Time – 2 hours**

Enrolment Number:

Date: 04-12-2024

No. of printed pages: 1

Section - A: Each question carries 05 marks. **[20 Marks]**

Q1. Write a C program to discuss system calls.

Q2. How do you cancel a thread in a graceful manner?

Q3. If the number of registers is finite in a system, how does OS allocate dedicated registers for each process and its threads?

Q4. How do base and limit registers provide protection in memory management?

Section - B: Each question carries 10 marks. **[30 Marks]**

Q6. Illustrate the pros and cons of a first-come, first-served algorithm for scheduling processes. How can you improve its performance?

Q7. What is Thread-Local pattern? Describe in detail with a use case in Java.

Q8. Create a page table for an 8B process, with 32B memory and 4B page size to describe the process of paging in detail.