SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No: ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total number of pages:[1]

BCA4ᵗʰSem
Operating System
Subject Code:BSBC-403
Paper ID:

Time allowed: 3 Hrs   Max Marks:60

Important Instructions:

- **All questions are compulsory**

PART A (10x 2marks)

Q. 1.   Short-Answer Questions:

(a) What do you mean by context switch?

(b)What are real time systems?

(c) What is SJF scheduling?

(d) List applications of threads.

(e) What is paging?

(f) What is page replacement?

(g) What are threads?

(h) Define Inter process communication.

(i) Define virus and Trojan horse.

(j) What is encryption?

PART B (5×8marks)

Q. 2.   What is Operating System? Explain its functions.   CO1

OR

Write a short note on: CO1

a) Preemptive and Non Preemptive Scheduling

b) Scheduling Queues

Q. 3.   Explain the concept of Paging in Memory Management schemes.   CO2

OR

Explain Fragmentation and its disadvantages.   CO2

Q. 4.   Explain various CPU Scheduling algorithms.   CO3

OR

Explain various synchronization methods.   CO3

Q. 5.   What is file and directory? Explain various file access methods and file operations.   CO4

OR

Write a short note on: CO4

a) Virtual Memory   b) Thrashing

Q. 6.   Explain various security measures used by the operating system.   CO5

OR

     CO5