Section - A

Q1) *(10 × 2 = 20)*

a) What is virtual memory?
b) Define preemptive and non preemptive scheduling.
c) Define critical section.
d) What is deadlock?
e) What are the different objectives for the operating system to decide scheduling?
f) Differentiate between a page and a frame.
g) Differentiate between program and process.
h) Differentiate between protection and security.
i) What is a Process Control Block?
j) What are semaphores?

Section - B

(4 × 5 = 20)

Q2) What is Operating System? Discuss various classification of operating system.

Q3) What do you mean by page-faults? When do page-faults occur? Describe the action taken by the O.S when page fault occurs

Q4) What is fragmentation? Explain the difference between internal fragmentation and external fragmentation.

Q5) What is CPU scheduling? What is its need? List various scheduling algorithms.

Q6) What are distributed and non distributed operating systems?

Section - C

(2 × 10 = 20)

Q7) What is deadlock? List and explain four necessary conditions for dead lock to occur? Explain different algorithms for prevention and avoidance of deadlocks.

Q8) Compare and contrast Public - key cryptography technique with.Conventional cryptography technique.

Q9) (a) What is paging? Explain different paging techniques.
(b) Explain the concept of segmentation taking suitable examples.