1 + 2 = 3.

B.C.A./ 4ᵗʰ Sem

Operating System

Subject Code: BSBC-403 (RP)

Paper ID : M|18
(2011- 2015 batch)

Time allowed: 3 Hrs

Max Marks:60

Important Instructions:

* **All questions are compulsory**

PART A (10 x 2marks)

Q. 1.   Answer in brief:

(a) Define thrashing?

(b) What are Fragmentation and its side effects?

(c) Discuss the preemptive scheduling?

(d) What is context switch?

(e) What are applications of threads?

(f) What are semaphores? Explain their role.

(g) How interrupt is different from trap?

(h) Differentiate multi tasking and time sharing systems?

(i) What is Process Control Block?

(j) Explain Denial of Service attack.

PART B (5×8marks)

Q. 2.   What is meant by Operating System? Give its classification.   CO1

OR

Compare and contrast multiprogramming, multitasking, distributed and real time   CO1
operating system?

Q. 3.   What is process scheduling? Explain various CPU scheduling algorithms with their   CO2
merits and demerits?

OR

Explain synchronization process and issues associated with it.   CO2
CO3

Q. 4.   Explain various ways for inter process communication.   CO3

OR

Differentiate preemptive and non-preemptive scheduling algorithms.   CO3
CO4

Q. 5.   What do you mean by Memory management? Differentiate between physical memory   CO4
and logical memory?

OR

What do you mean by paging and demand paging? Explain.   CO4
CO5

Q.6.   Write the short notes on the following:

(a) firewalls   b) Encryption and Decryption

OR   CO5

Explain various types of file access methods.