AMOOR - III 2004 Course) : WINTER - 2016

Subject : Computer Architecture & Operating System

Day : Tuesday
Date : 06/12/2016

S.D.E. 33269

Time : 10.00 AM TO 1.00 PM
Max Marks : 80 Total Pages : 1

N.B.:

1) Attempt **ANY FIVE** questions from Section – **I.**
2) Attempt **ANY TWO** questions from Section – **II.**
3) Figures to the right indicate **FULL** marks.
4) Answers to both sections should be written in **SAME** answer book.

SECTION - I

Q.1 Define Operating System. Explain various functions performed by operating system. **(10)**

Q.2 Explain various instruction formats in detail. **(10)**

Q.3 Describe stack organization with neat diagram. **(10)**

Q.4 What is Virtual Memory? Explain working of virtual memory. **(10)**

Q.5 What is interprocess synchronization? Explain need of interprocess synchronization. **(10)**

Q.6 What is semaphore? Explain queuing implementation of semaphore. **(10)**

Q.7 Write short notes on **ANY TWO** of the following: **(10)**

a) Hardwired Control Unit

b) Cache Memory

c) File System

SECTION - II

Q.8 What is deadlock? Explain deadlock handling mechanism with neat diagram. **(15)**

Q.9 Describe various process scheduling algorithms with suitable example. **(15)**

Q.10 What is Paging? Explain Page replacement algorithm with neat diagram. **(15)**

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