

SECTION-E

9. Write briefly :

- What is the difference between batch and interactive system?
- Name any three metrics used for measuring performance analysis of scheduling algorithms.
- What is the difference between periodic and aperiodic tasks?
- Define Sporadic Tasks.
- What is NAS?
- Define Hybrid Cloud.
- What is KVM hypervisor?
- How KVM hypervisor is different from Xen hypervisor?
- Name any two grid monitoring software.
- Name any two schedulers used in cluster computing.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

Roll No.

Total No. of Questions : 09

Total No. of Pages : 02

MCA (2015 & Onwards) (Sem.-4) ADVANCED OPERATING SYSTEMS Subject Code : MCA-404 M.Code : 74122

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

- SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students have to attempt any ONE question from each SECTION.
- SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

SECTION-A

- Discuss the following features of distributed operating systems: Resource sharing, load balancing, availability and fault tolerance.
- Discuss the distributed file system. How inter-process communication is performed in distributed operating system?

SECTION-B

- Discuss the Micro, Nano and Monolithic kernel models of real time and embedded systems. Discuss the various applications or real life areas where real time and embedded operating systems are used.
- Discuss the need and characteristics of energy-aware CPU scheduling in detail.

SECTION-C

- Discuss the case study of any grid computing system in terms of features, scheduling and implementation details.
- Discuss various characteristics, architecture and implementation issues of MOSIX OS.

SECTION-D

- What are the advantages of virtualization in cloud? Discuss the various types of virtualization.
- Discuss the differences between IOS, Android and Windows Mobile OS mobile operating systems.