SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No: [   ]   Total number of pages: | |

MCA 4ᵗʰ Sem
Advanced Operating System
Subject Code : MCA-404
Paper ID:

Batch:2004 onwards/2011onwards/2015 onwards[Tick Relevant]

Time allowed: 3 Hrs   Max Marks: 404

Important Instructions:

- All questions are compulsory
- Assume any missing data
- Additional instructions, if any

PART A (10x 2marks)

Q. 1.   Short-Answer Questions:

a) What is load balancing?
b) Differentiate RAM and ROM.
c) Explain the term grid monitoring.
d) What is the meaning of resource sharing?
e) Explain the concept of virtualization.
f) What is mobile computing?
h) Describe the elements of network.
i) Define real time embedded operating system.
j) Write short note on iPhone.

PART B (5×16marks)

CO1

Q2 Write short note on:
a) Sockets
b) Remote Procedure Call
c) Logical Clock
d) Mutual Exclusion

OR

Explain the design and development challenges for distributed operating system. CO1

Q3 Explain in detail the Multiprocessor and distributed OS.

CO2

OR

Discuss any two approaches of servicing periodic requests.

CO2

Q4) Describe the MOSIX operating system. Explain its building blocks.

CO3

OR

Explain Grid monitoring along with its architecture.

CO3

Q5) What is Grid computing? What are types of grids? Discuss the grid architecture. CO4

OR

Explain real time operating systems. What are its characteristics? What are the hardware elements of real time system?

CO4

Q6) What is mobile computing? Explain its design principles of mobile computing? CO5

OR

Explain the structure of real time embedded operating system.

CO5