

Total marks : 80

Duration : 3 Hours

N.B : 1) Q.1 is compulsory .

2) Attempt Any 3 out of remaining .

3) Assume suitable data wherever required .

Q.1 a) Explain in detail Design issues in Distributed Operating System . (10)

b) What is the need of Advanced Operating System? Discuss various types of Advanced Operating Systems. (10)

Q.2 a) What are the different classes of distributed deadlock detection algorithms? Explain CMH algorithm with the help of an example. How many messages are exchanged at most to detect a deadlock involving 14 processes and 4 sites using this algorithm? (10)

b) Define Real Time Operating System (RTOS). Compare and contrast EDF and LST real time scheduling algorithms. (10)

Q.3 a) Explain in detail Synchronization in Multiprocessor OS. (10)

b) Discuss the advantage of DSM. Explain migration algorithm for implementing DSM . (10)

Q.4 a) Discuss in detail various scheduling strategies for Symbian OS. (10)

b) Describe Two phase Locking protocol. (10)

Q.5 a) What is memory coherence? Explain with examples sequential consistency and PRAM consistency algorithms. (10)

b) What are physical clocks? How can synchronization be achieved in various physical clocks? Discuss with examples. (10)

Q.6 Write a note on :( Any 2) (20)

a) Cloud OS

b) Gang Scheduling

c) Affinity Based scheduling

d) Android OS

M. E U CBGS

COMP

1/12/2016

Elective II - Storage Area N/w

**QP Code : 62489**

**Duration: 3 Hours**

**Total Marks assigned: 80**

N.B.: (1) Question No. 1 is compulsory.

(2) Attempt any **three** of remaining **five** questions.

(3) Draw the **relevant** diagram neatly.

1. A) Compare and Explain the, DAS, NAS, SAN with suitable application. 10  
B) Explain different port used in fiber channel storage area network and the login process in detail. 10
2. A) Explain FC-AL and FC-SW working in detail. 10  
B) Explain in detail the data storage and retrieval process in CAS environment. 10
3. A) An application generates 8000 IOPS with 30% being READ operation with disk Handling capacity of 190IOPS. Determine the disk load and number of disks required in RAID 5 configuration. {Given write penalty of RAID 5 is 4}. 10  
B) Explain role of Lock manager in database sharing. 10
4. A) How the virtualization can be implemented in both SAN and NAS environment? 10  
B) Explain different ways to minimize the impact of backup on application. 10
5. A) Explain in detail storage security domain and implementation in storage networking. 10  
B) What is DMZ? Explain network layer firewall. 10
6. Write a note on any TWO. 20
  - a. Backup in NAS Management
  - b. Highly available data
  - c. LUN and LUN Masking

**BB-Con. 7348-16.**

Decision making & Adaptive  
Business Intelligence

QP Code : 62479

Total Marks:80

Duration:3 Hours

Note:

- 1) Q:1 is compulsory.
- 2) Attempt any three questions from remaining five questions.
- 3) Figures on the right, Indicate full marks.
- 4) Assume suitable data whenever required.

Q1) Answer the following

(20)

- 1) Explain the term Business intelligence How it is different from adaptive business intelligence.
- 2) Explain how Travelling salesman problem is the complex problem?
- 3) Differentiate between MADM and MODM
- 4) Explain Recurrent Neural Networks.

Q 2) Explain SAW, WPM and AHP method and solve the following example using all methods. (20)

	0.4	0.2	0.3	0.1
	Cost	Profit	Profit	cost
A1	13	9	9	8
A2	5	3	5	12
A3	7	5	7	6

Consider beneficial and non-beneficial attributes and normalized data.

Q3 a) Explain logic method for prediction. Also Explain considerations that must be taken into account when selecting the "best" prediction method. (10)

b) Explain agent based modeling. (10)

Q 4 a) Explain prediction and optimization module w.r.t. Car distribution example. (10)

b) Explain Evolutionary algorithm in optimization. (10)

Q 5 a) Explain hybrid system for prediction in detail. (10)

b) Explain Tabu search in detail. (10)

Q 6) Write short note on any two (20)

1) Emergency Response services

2) Representation of solution in optimization problem

3) Inference System

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