

Total No. of Questions : 5]

SEAT No. :

P5157

[Total No. of Pages : 2

[5823]-601

T.Y.B.Sc. (C.S.)

**CS-361 : OPERATING SYSTEM-II
(2019 Credit Pattern) (Semester - VI)**

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *All question are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any eight of the following.

[8×1=8]

- a) List any four attributes of files.
- b) What is starvation?
- c) List the features of ios. mobile OS?
- d) What is Access Transparency?
- e) Define mobile OS?
- f) Define rational latency?
- g) Define claim edge?
- h) Wha is cloud computing?
- i) Define P2P architecture?
- j) Define native level programming?

Q2) Attempt any four of the following

[4×2=8]

- a) Define cluster computing. State the advantages and disadvantages of cluster operating system.
- b) Differentiate mobile OS and desktop OS.
- c) Explain disk formatting in disk management.
- d) What is distributed operating system? List the purpose of distributed operating system”?
- e) List down the advantages and disadvantages of windows mobile OS?

P.T.O.

Q3) Attempt any two of the following. [2×4=8]

- List down the architectural styles in distributed operating system & explain any one in detail.
- What is deadlock? Explain different ways of deadlock recovery.
- List down different file allocation methods explain any one in detail.

Q4) Attempt any two of the following. [2×4=8]

- Differentiate between cluster, grid & cloud computing.
- Consider the following snap shot of a system with 5 processes P_0, P_1, P_2, P_3, P_4 and resources A, B, C.

Process	Allocation			Max		
	A	B	C	A	B	C
P_0	2	3	2	9	7	5
P_1	4	0	0	5	2	2
P_2	5	0	4	11	0	4
P_3	4	3	3	4	4	4
P_4	2	2	4	6	5	5

Available		
A	B	C
3	3	2

Answer the following using Banker's algorithm

- What are the contents of matrix need?
 - Is the system in a safe state? If yes find safe sequence.
- c) Write a note on tree structured directories.

Q5) Attempt any one of the following [1×3=3]

- Suppose the request sequence is 176, 79, 34, 60, 92, 11, 41, 114, and initial head position is 50. Calculate total head movements using SSTF disk scheduling algorithm.
- Write a short note on kernel architecture of mobile OS.

