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]**

a) List down the architectural styles in distributed operating system & explain any one in detail.

b) What is deadlock? Explain different ways of deadlock recovery.

c) List down different file allocation methods explain any one in detail.

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

a) Differntiate between cluster, grid & cloud computing.

b) 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

i) What are the contents of matrix need?

ii) 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]**

a) 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.

b) Write a short note on kernel architecture of mobile OS.