C.U.SHAH UNIVERSITY
Winter Examination-2018

Subject Name : Advanced Operating System

Subject Code : 4CS03AOS1   **Branch: M.Sc. CA & IT (Integrated)**

Semester : 3   **Date : 04/12/2018**   **Time : 02:30 To 05:30**   **Marks : 70**

Instructions:
(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1	**Attempt the following questions:**	**(14)**
a)	What is Operating System?	1
b)	Enlist the types of Operating System.	1
c)	Enlist the Static Scheduling Policy.	1
d)	Enlist the Dynamic Scheduling Policy.	1
e)	What is deadlock?	1
f)	**Define term :** File	1
g)	**Define term :** Shell Script	1
h)	**Define term :** Kernel	1
i)	What is vi Editor?	1
j)	What is the Full Form of RTOS?	1
k)	What is the Full Form of FIFO?	1
l)	What is the Full Form of EDF?	1
m)	What is batch Operating System?	1
n)	What is Paging?	1

Attempt any four questions from Q-2 to Q-8

Q-2	**Attempt all questions**	**(14)**
(A)	Explain RTOS and Batch Operating system in brief.	**(10)**
(B)	Explain LIFO Scheduling policy with example.	**(04)**

Q-3	**Attempt all questions**	**(14)**
(A)	Write a brief note on **"deadlock".**	**(7)**
(B)	Write a brief note on **"Paging".**	**(7)**

Q-4	**Attempt all questions**	**(14)**
(A)	What is PCB? Explain in brief.	**(7)**
(B)	Enlist the file types in Operating System. Explain any one in brief.	

Q-5		**Attempt all questions**	**(14)**
	(A)	Write a brief note on **"UNIX Architecture"** with diagram.	**(8)**
	(B)	Write a brief note on **"Vi Editor"** in Unix Shell Script writing..	**(6)**
Q-6		**Attempt all questions**	**(14)**
	(A)	Write a Shell Script which print given number is even number or odd number. (N as a Input number)	**(7)**
	(B)	Write a Shell Script which print given number is prime number or not prime number. (N as a Input number)	**(7)**
Q-7		**Attempt all questions**	**(14)**
	(A)	What is process? Explain Process State Diagram in brief.	**(10)**
	(B)	Explain EDF Scheduling Policy with example	**(04)**
Q-8		**Attempt all questions**	**(14)**
	(A)	What is thread? Explain thread processing with diagram.	**(10)**
	(B)	Explain FPS Scheduling Policy with example	**(04)**