Class/Sem: Third Year / III		Subject: Operating System
Date: 26/08/2014	Duration: 1 Hrs.	Marks: 20
Q.1]: Attempt any five.		[05M]*[02M]=[10M]
a]: Define Operating System. List	the objectives of O.S.	
b]: What are different functions o	f O.S.?	
c]: List down different states of p	rocess?	
d]: Define process and thread.		
e]: What are the kernel modes of	operation?	
f]: What is scheduling? List differ	rent scheduling algorithms?	
Q.2]: Attempt any one.		[01M]*[05M]=[05M]
a]: What is system call? Explain	different types of system cal	1.
Or		
b]: What are different types of sc	hedulers? Explain their worl	king with neat diagram.
Q.3]: Attempt any one.		[01M*[05M]=[05M]
a]: Explain process state transition	n diagram.	
Or		

b]: Calculate Average waiting time of Round Robin Scheduling for processes P1,P2,P3 with burst time 24,3,3 respectively. Consider time slice of 4ms.

Class/Sem: Third Year / III	Subject: Advance Databas	ject: Advance Database Management System	
Date: 26/08/2014	Duration: 1 Hrs.	Marks: 20	
Q.1]: Attempt any 5.		[05M]*[02M]=[10M]	
i]: Define UNIQUE constraint.			
ii]: Define trigger in SQL.			
iii]: Define any two DDL Command wi	th example.		
iv]: Define NOT NULL constraint.			
v]: Define VIEW with example.			
vi]: Define FOREIGN KEY constraint.			
Q.2]: Attempt any 1.		[01M]*[05M]=[05M]	
i]: Explain advance database recovery	technique ARIES.		
ii]: Explain View seralizability in trans	action.		
Q.3]: Attempt any 1.		[01M]*[05M]=[05M]	
i]: Explain multi version two phase loo	cking protocol with certify lock.		

ii]: Explain concept of sub query with example.

Class/Sem: Third Year/ V		Subject: Open Source Technologies
Date: 27/08/2014	Duration: 1 Hrs.	Marks: 20

Note: Q.1 is compulsory. Solve any one question from Q.2 and Q.3.

Q.1]: Solve any five.	[10M]
A]: Differentiate: Open Source vs. Closed Source S/w	[02M]
B]: Differentiate: YUM vs. RPM .	[02M]
C]: Explain with example how you change access permission in Linux.	[02M]
D]: Explain Web Server.	[02M]
E]: Explain Authorized accesses to FTP.	[02M]
F]: Explain static and dynamic IP addresses.	[02M]
Q.2]:	
[A]: Explain 3 modes of VI editor.	[05M]
[B]: Explain any five System Admin Tasks.	[05M]
Q.3]:	
A]: Explain five basic Networking Commands with example.	[05M]
B]: Explain FHS (File system Hierarchy Standard) in Linux.	[05M]

Class/Sem: Third Year/ III Subject: Computer Graphics & Y		& Virtual Reality
Date: 27/08/2014	Duration: 1 Hrs.	Marks: 20
Note: 1. Q. no 1 is compulsory.		
2. Attempt any one out of	Fremaining. [Q.2 Or Q.3].	
Q.1]: Answer any five.		[10M]
A> List differences betwe	en random and raster scan display.	
B> Write note on bitmap a	and vector based graphics.	
C> Write only transforma	tion matrix for 2D rotation and scaling.	
D> Write transformation	natrix for 3D shearing and reflection	
about any one axis.		
E> Write a note on CRT.		
F> Explain any two applic	cation of Computer graphics.	
O 21: $A > Write transformation$	matrix for all 2D transformation	[05M]
D. Evaloin Sutherland II	Jadaaman Dalyaan alinning algorithm	[05M]
B> Explain Sumerianu −r.	iodgeman Porygon cupping argorium.	[0314]
Q.3]: A> Explain the algorithm	for midpoint subdivision line clipping .	[05M]
B> Use DDA algorithm to	o find coordinates of pixel for line AB	[05M]
where $A=(2,3)$ and $B=(5,$	6)	

Class/Sem: Third Year / III Subject: Micro Control		roller & Embedded System
Date: 28/08/2014	Duration: 1 Hrs.	Marks: 20
Note: Attempt any two.		
Q.1]: A]: Draw and explain archite	ecture of 8051.	[06M]
B]: Draw & explain PSW SFR.		[04M]
Q.2]: A]: Explain TMOD register.	Generate a square wave of 5KH	z using timer 0 mode 1.
Assume crystal frequence	cy of 12MHz.	[06M]
B]: Explain different addressing modes of 8051.		[04M]
Q.3]: A]: Explain Timer 1 mode 2		[04M]
B]: WAP to send text "WEI	COME" serially. At baud rate 9	600, 8 bit data & 1 stop bit.
		[04M]
C]: Explain any two instruct	tions given below	[02M]
i]: MUL AB ii]: (CJNE Rn,#data rel iii]: RF	RC A