

Saraswati Education Society's  
**Saraswati College of Engineering, Kharghar**  
**Information Technology Department**  
**Academic Year 2013-14 (Odd Sem)**  
**Unit Test-2**

Class/Sem: Third Year/ V

Subject: Computer Graphics & Virtual Reality

Date: 14/10/2013

Duration: 1 Hrs.

Marks: 25

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Q.1]: Compulsory and solve any Three.

[1] Describe the various warping techniques. [10M]

**OR**

[1] Describe Halftoning, Thersholding and Dithering in detail.

[2] What are fractals in computer graphics. [5M]

[3] What are the five classic components of VR system. [5M]

[4] Compare boundary fill and flood fill algorithm. [5M]

[5] What are Bezier Curves? [5M]

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Class/Sem: Third Year/ V

Subject: OSCD

Date: 14/10/2013

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**Note: Q.1 is compulsory.** Attempt any 2 from remaining questions.

[1] What is deadlock? What are four conditions necessary to create deadlock? [5M]

[2] Calculate Hit and Faults using FIFO, OPT and LRU page replacement policies for following page sequences:

2   3   5   4   2   5   7   3   8

Assume page frame size is 3.

[10M]

[3] What are various buffering techniques? Explain each in detail. [10M]

[4] Given five memory partitions of 100kb,500kb,200kb,300kb,600kb (in order) How would be first fit, best fit, and worst fit algorithms place processes of 212kb, 417kb,112kb and 426kb(in order)? Which algorithm makes the most efficient use of memory and how? [10M]

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Subject: CTNC

Date: 15/10/2013

Duration: 1 Hrs.

Marks: 25

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Q.1]: Compulsory and solve any Three.

[1] What are various types of traffic? Explain leaky bucket in brief? [10M]

**OR**

[2] What do you mean by Encryption? Explain Symmetric Key and Asymmetric Key. [5M]

[3] Explain TMN in Detail? [5M]

[4] Explain general GSM Architecture? Also explain different GSM channel used? [5M]

[5] What is difference between Traffic shaping and policing? How can Shaping avoid Policing, explain with a example? [5M]

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Class/Sem: Third Year/ V

Subject: Manufacturing Processes, Planning and Systems

Date: 15/10/2013

Duration: 1 Hrs.

Marks: 25

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Q.1]: Compulsory and Attempt any four in remaining.

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|---|------|
| [Q.1] Write a short note on Group Technology.                             | [5M] |
| [Q.2] Explain Lean manufacturing.   | [5M] |
| [Q.3] Explain Ergonomics with its importance in manufacturing industry.   | [5M] |
| [Q.4] Explain role of forecasting in Capacity planning.                   | [5M] |
| [Q.5] Explain in brief the Make-to-stock (MTS) manufacturing environment. | [5M] |
| [Q.6] Write a short note on product layout .                              | [5M] |
| [Q.7] What are purpose of automation.                                     | [5M] |

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Class/Sem: Third Year/ V

Subject: Object Oriented Analysis & Design

Date: 17/10/2013

Duration: 1 Hrs.

Marks: 25

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**Note: Q.1 is compulsory and solves any one question from remaining Two.**

Q.1]: Draw Sequence Diagram for Withdrawals from ATM?

Q.2]: [A] Explain the following Design principles:-

Divide & Conquer Cohesion, Coupling and Abstraction and Reusability. [5M]

[B] Explain Single Tone design pattern [5M]

Q.3]: [A] Write Short Note on Alpha and Beta Testing [5M]

[B] Draw deployment diagram for E-commerce Application. [5M]

Q.4]: [A] Differentiate-White Box Testing and Black box Testing with suitable examples. [5M]

[B] Draw State Diagram for vending machine. [5M]

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Class/Sem: Third Year/ V

Subject: OSSL

Date: 17/10/2013

Duration: 1 Hrs.

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**Note: Each Question carries 5 marks.**

Q.1]: Explain the following commands with syntax:cd, ls, cp, mv, cat.

Q.2]: Which command can be used for changing file permissions. Explain details.

Q.3]: What is a vi editor? Explain modes of vi editor.

Q.4]: Write a script to check a year is leap year or not.

Q.5]: Explain for and while loop in shell script with syntax.