Code No.: 20526 | MR12

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)
Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad

IVB.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, NOVEMBER - 2017

SUBJECT: **COMPUTER GRAPHICS**
(BRANCH: **CSE**)

Time: **3 Hours** Max Marks:**75**

Answer any 5 questions **5 x15=75M**

1. Explain in detail about
   a) Raster scan systems (8M)
   b) Random scan systems (7M)
2. Write Pseudocode for DDA. algorithm. Using a suitable example, explain working of this algorithm?
   Write the scan line fill algorithm and use the algorithm to fill polygon bounded by lines joining vertices: (1,1), (2,3), (4,2) and (5,1).? (7 M +8M)
3. a) Give the homogeneous co-ordinate transformation matrices for the following transformations:
   i) Entire picture three times as large
   ii) Counter clock-wise rotation about the origin, by 90 degrees. (8 M +7 M)
   b) Derive the transformation matrix to rotate a point about an arbitrary point.
4. a) Define window and viewport, write in detail about window -to- viewport co-ordinate transformation (7M)
   b) Discuss in detail how to clip lines using Cohen Sutherland Line clipping algorithm (8M)
5. a) Enumerate the major differences between Bezier curve, B-spline curves. [9 M]
   b) Explain about (3 M +3 M)
   i) Polygon meshes ii) Polygon Tables.
6. a) Explain 3-D rotation about an axis that is parallel to the co -ordinate axis (7M)
   b) Discuss about parallel and perspective projections (8M)
7. a) Explain about the different methods available in visible surface detection method. (7 M)
   b) What are Octrees and why are they useful? How are they implemented? (8 M)
8. a) Write a morphing program to transform a sphere into a specified polyhedron.
   b) What are the issues involved in design of a story board layout with accompanying key frames for an animation of a single polyhedron..? (7 M +8M)

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IVB.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, OCTOBER - 2017

SUBJECT: **DATA WAREHOUSING AND DATA MINING**

(BRANCH: **CSE**)

Time: **3 Hours** Max Marks: **75 Marks**

Answer any **5** question **5 x 15=75M**

1. a) Explain major issues involved in data mining ? [8+7]
   b) Explain in detail about cleaning?
2. a) Write a short notes on following servers [3+3+3+6]
   i)ROLAP
   ii)MOLAP
   iii)HOLAP
   b) Explain data warehouse architecture with neat sketch?
3. a) Write the Apriori algorithm for discovering frequent item sets for mining boolean association rules ? [8+7]
   b) Write the FP-growth algorithm ?
4. a) Explain classification by back propagation ? [7+8]
   b) How to evolute accuracy of a classifier, explain with help of confusion matrix ?
5. a) Discuss the categorization of major clustering methods ? [8+7]
   b) Explain K-Means algorithm ?
6. a) Explain trend analysis ? [7+8]
   b) Explain sequence pattern in biological data ?
7. a) What are data mining tasks performed on text database ? [7+8]
   b) Describe mining of complex data objects ?
8. a) What are the social impacts of data mining ? [7+8]
   b) Explain how data mining is used for retail industry ?

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IVB.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, OCTOBER – 2017

SUBJECT: **Linux Programming**

(BRANCH: **CSE**)

Time: **3 Hours** Max Marks: **75 Marks**

Answer any 5 questions **5 x 15 M=75M**

1. a) Explain about process utilities and disk utilities? [7+8]
   b) What are the addresses and operations performed by sed?

2. a) Explain about 'here' document with an example? [7+8]
   b) Explain about different conditional expressions available in shell programming ?

3. a) Write short notes on formatted I/O functions? [7+8]
   b) Write about hard and symbolic links. Give an example for each?

4. a) Explain about abort(),sleep(), alarm() and pause() functions? [8+7]
   b) Write in detail about Orphan Process?

5. a) What are the named pipes? Explained in detail? [7+8]
   b) What are message queues? Explain the concept of Kernel support for messages?

6. a) Explain about the file locking with semaphores? [8+7]
   b) Explain about the kernel support for shared memory?

7. a) what is multithreading? Explain the benefits of multithreaded programming? [7+8]
   b) Explain about the thread synchronization with mutexes?

8. Write the socket system calls for connection oriented protocol? [15]