Code No: 07A81201 **R07** **Set No. 2**

IV B.Tech II Semester Examinations,APRIL 2011
MULTIMEDIA DATABASES
Information Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Explain three important categories of relationships.
   (b) Discuss the shortcomings of ER Model. [8+8]
2. (a) Discuss standard database query languages.
   (b) Discuss select & project operations with examples. [8+8]
3. (a) Compare R-Tree and Point Quad tree data structures.
   (b) Compare K-d tree and R-Tree Data structures. [8+8]
4. What are the valid SQL statements of SMDS-SQL. [16]
5. (a) What do you mean by Precision and Recall? Explain.
   (b) What is text database? Give example. [8+8]
6. Explain how Relational Approach is used for representing image DBs. [16]
7. (a) How do indexing Audio Data.
   (b) Audio data plays an important role in many applications.Give example. [8+8]
8. What is virtual object? Explain with set of triples. [16]

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Code No: 07A81201 **R07** **Set No. 4**

IV B.Tech II Semester Examinations,APRIL 2011
MULTIMEDIA DATABASES
Information Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
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1. Write the algorithm for Nearest Neighbor retrievals in TV - trees. [16]
2. Explain different types of similarity - based retrieval approaches. [16]
3. (a) Explain the terms pseudoschedule and schedule of difference constraints.
   (b) Explain the efficient solution of temporal presentation contraints? [8+8]
4. Explain the steps involved in the deletion of node in R- Tree with the help of a diagram. [16]
5. Write SMDS-SQL queries for the following:
   (a) Find all images containing Jane Shady and a person who appears in a video with Dennis Dopeman.
   (b) Find all images containing Jane Shady and a person wearing a purple suit who also appears in a video with Dennis Dopeman. [8+8]
6. (a) What are the various operations that can be performed on a Frame Segment Tree?
   (b) Write about Indexing of video content? [8+8]
7. Express the following queries in SQL.
   Country(Name: varchar(35),Cont: varchar(35), Pop: integer,GDP: integer, Life-Exp: integer,Shape: char(13))
   City(Name: varchar(35),Country: varchar(35), Pop: integer,Capital: char(1),Shape: char(9))
   River(Name: varchar(35),Origin: varchar(35), Length: integer, Shape: char(13))

Country	Name	Cont	Pop (milliond)	CDP (billions)	Life-Exp	Shape
	Canada	NAM	30.5	658	77.08	Polygonid-1
	Mexico	NAM	107.5	694.3	69.36	Polygonid-2
	Brazil	SAM	183.3	1004	65.6	Polygonid-3
	Cuba	NAM	11.7	16.9	75.95	Polygonid-4
	USA	NAM	270	8003.4	75.75	Polygonid-5
	Argentina	SAM	36.3	348.2	70.75	Polygonid-6

City	Name	Country	Pop (milliond)	Capital	Shape
	Havana	Cuba	2.1	Y	Pointid-1
	Washington, D.C.	USA	3.2	Y	Pointid-2
	Monterrey	Mexico	2	N	Pointid-3
	Toronto	Canada	3.4	N	Pointid-4
	Brasilia	Brazil	1.5	Y	Pointid-5
	Rosario	Argentina	1.1	N	Pointid-6
	Ottawa	Canada	0.8	Y	Pointid-7
	Mexico City	Mexico	14.1	Y	Pointid-8
	Buwnos Aires	Argentina	10.75	Y	Pointid-9

RIVER	Name	Origin	Length (kilometers)	Shape
	Rio Parana	Brazil	2600	LineStringid-1
	St. Lawrence	USA	1200	LineStringid-2
	Rio Grande	USA	3000	LineStringid-3
	Mississippi	USA	6000	LineStringid-4

(a) List all countries that are in North America or whose capital cities have a population of less than 5 million.

(b) Find the country with the second highest GDP. [8+8]

8. A Lake is sometimes modeled as an object. Can you give an example in which it might be useful to model a lake as a field? Are Lake boundaries are well defined. [16]

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Code No: 07A81201 **R07** **Set No. 1**

IV B.Tech II Semester Examinations,APRIL 2011
MULTIMEDIA DATABASES
Information Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Define user defined data types for geometry aggregation data types in OGIS using SQL3. [16]
2. Explain the various Compressed Image representations. [16]
3. Explain the steps involved in the deletion of node in Point Quad Tree with example. [16]
4. (a) What is meant by Technique Frequency Tables? Explain.
   (b) How a Region is associated with a Node N? Explain. [8+8]
5. What are the steps involved in interaction between presentation and retrieval schedules? [16]
6. Explain with a neat sketch the architecture of multimedia database under the principle of uniformity? [16]
7. Discuss operations on Spatial Objects. [16]
8. (a) Give a sample audio data segments.
   (b) Explain how using Metadata to represent Audio Content. [8+8]

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Code No: 07A81201 **R07** **Set No. 3**

IV B.Tech II Semester Examinations,APRIL 2011
MULTIMEDIA DATABASES
Information Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Explain Object-Relational SQL?
   (b) Explain Object-Relational Schema with example? [8+8]
2. Write about Signal Based Audio content? [16]
3. Write the algorithm for initialization and refinement of weighted graph for difference constraints in computing shortest path. [16]
4. (a) Explain about DFT.
   (b) Explain about DCT. [8+8]
5. What is TV - tree? Explain the organization of a TV - tree. [16]
6. How is Video Data viewed as a Media Abstraction? Explain. [16]
7. Spatial data is sometimes considered a special case of multi dimensional data, that is data Embedded in multidimensional space. Compare and contrast spatial data embedded in Euclidean space with other multidimensional data. [16]
8. Describe the algorithms for Insertion and Search in case of 2-d trees. [16]

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