Reg. No. :

Question Paper Code: 47802

B.E/B.TECH DEGREE END SEMESTER EXAMINATIONS –NOV 2019

Seventh Semester

Information Technology

14UIT702 ADVANCED DATABASE SYSTEMS

(Regulation 2014)

Duration: 3 Hours   Maximum: 100 Marks

PART -- A   (10 X 1 = 10 Marks)

(Answer all Questions)

1.   The _____database is designed for the utilization of whole organization
      (a) enterprise application   (b) two-tier   (c) multi-tier   (d) single-tier

2.   ------------ scheme is ideally suited for applications that wish to read the entire
      relation sequentially for each query
      (a) Hash partitioning   (b) Range partitioning   (c) Round-robin   (d) None of these

3.   In object-oriented model, one object can access data of another object by passing
      (a) Instance variable   (b) Messaging   (c) Variable   (d)None of these

4.   Object based data model are used in describing the abstraction of the following
      (a) Only physical   (b) Conceptual and view
      (c) Physical and conceptual   (d) Logical

5.   -----------HTTP request is used to upload the resources to the servers
      (a) GET   (b) POST   (c) UPLOAD   (d) PUT

6.   There are --------- primary methods available for passing information from the
      browser to a CGI script
      (a) Four   (b) Two   (c) Five   (d) Six

7.   The model that has been used for specifying active database rules is referred to as
      the ------
      (a) Execution – Condition – Auto   (b) Execution – Condition – Active
      (c) Evaluation – Condition – Active   (d) Event – Condition – Active

8.   Deductive databases are ---------
      (a) Keep track of objects in a multi-dimension space
      (b) Declarative language to specify rules
      (c) Manage different types of data
      (d) Operations are automatically

1

47802

9. ------ process derives elevation data for points at which no samples have been taken
   (a) Interpretation   (b) Interpolation
   (c) Proximity analysis   (d) Analysis of networks
10. Key components of spatial data quality include
   (a) Positional accuracy   (b) Temporal accuracy
   (c) Logical accuracy   (d) All the above

PART - B   (5 X 2= 10 Marks)

11. Define parallel database system.

12. State types of constructor .

13. List out advantages of XML.

14. What is trigger? Give an example .

15. Define temporal database .

PART - C (5 X 16 = 80 Marks)

16. (a) Explain in detail about distributed systems with relevant example. (16)

Or

(b) (i) Express about parallel database with inter and intra query parallelism. (8)
    (ii) Describe inter and intra operation parallelism. (8)

17. (a) (i) Analyze the different concepts of object database. (16)

Or

(b) Analyze the components of ODMG model. (16)

18. (a) Summarize the native XML databases (16)

Or

(b) Design a web page using scripting languages (16)

19. (a) Illustrate the active database concepts and triggers (16)

Or

(b) Develop a Temporal database for online shopping and describe it. (16)

20. (a) Explain the concepts of data warehousing and its architecture (16)

Or

(b) Explain the importance of spatial data management. Discuss the various indexing techniques of spatial data management and evaluate the performance. (16)

47802