F 7033

Reg. No...............................

Name.................................

B.TECH. DEGREE EXAMINATION, NOVEMBER 2017

Fifth Semester

Branch : Computer Science and Engineering/Information Technology

CS 010 503/IT 010 506—DATABASE MANAGEMENT SYSTEMS [CS, IT]

(New Scheme—2010 Admission onwards)

[Improvement/Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

1. State the basic concepts of database systems.

2. State the referential integrity.

3. State the merits of Oracle tools in DBMS.

4. Define Foreign key.

5. What are the ACID properties of a transaction ?

(5 × 3 = 15 marks)

Part B

Answer all questions.

Each question carries 5 marks.

6. Explain the purpose of database systems.

7. Explain the relational algebra and its merits.

8. State the storage organization in Oracle.

9. State the limitations associated with DBMS design.

10. State the distributed databases.

(5 × 5 = 25 marks)

Turn over

Part C

Answer all questions.

Each question carries 12 marks.

11. Explain in detail about the data modeling.

Or

12. Write in detail about the database systems and its limitations.

13. Explain in detail about the tuple relational calculus.

Or

14. Explain in detail about the SQL and its operations.

15. Explain the basic structure of Oracle systems.

Or

16. Explain in detail about the dynamic hashing.

17. Explain in detail about the design guidelines of database system.

Or

18. Write in detail about the Boyce codd normal form.

19. Explain the query processing and optimization.

Or

20. Explain the functions DDBMS.

(5 × 12 = 60 marks)

B.TECH. DEGREE EXAMINATION, NOVEMBER 2017

Fifth Semester

Branch : Computer Science and Engineering/Information Technology

CS 010 505/IT 010 504—OPERATING SYSTEMS (CS, IT)

(New Scheme—2010 Admission onwards)

[Improvement/Supplementary]

Time : Three Hours   Maximum : 100 Marks

Part A

Answer all questions

Each question carries 3 marks.

1. What is operating system ?

2. What is process scheduling ?

3. Distinguish between dead lock and starvation.

4. What is the importance of memory management ?

5. What is file concept ?

(5 × 3 = 15 marks)

Part B

Answer all questions

Each question carries 5 marks.

6. State the factors influencing the OS design.

7. Write the interprocess communication.

8. Describe the different methods of recovery from deadlock.

9. Explain the page replacement algorithms.

10. What are the typical operations on a byte-stream file with respect to low-level files?

(5 × 5 = 25 marks)

Turn over

Part C

Answer all questions

Each full question carries 12 marks.

11. Explain in detail about the time sharing and real time systems.

Or

12. Explain clearly the operating system services and system programs.

13. Explain in detail about the process management.

Or

14. Explain the multiprogramming system in detail.

15. Write the Peterson's solution and synchronization hardware in detail.

Or

16. Explain the need for interprocess synchronization.

17. Explain in detail about the multi level paging.

Or

18. Write in detail about the page replacement algorithm.

19. Explain the directory structure in detail.

Or

20. Write the linked list file allocation strategy in detail.

(5 × 12 = 60 marks)

B.TECH. DEGREE EXAMINATION, NOVEMBER 2017

Fifth Semester

Branch : Computer Science Engineering

CS 010 506—ADVANCED MICROPROCESSORS AND PERIPHERALS (CS)

(New Scheme—2010 Admission onwards)

[Improvement/Supplementary]

Time : Three Hours   Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

1. Define : Instruction set.

2. What is called a flat memory model ?

3. What is ATA ?

4. What are the I/O ports ?

5. Describe the data retrieval from pen drive.

(5 × 3 = 15 marks)

Part B

Answer all questions.

Each question carries 5 marks.

6. State the string instrutions in 8086.

7. Write the additional features 80286.

8. State the functions of add-on-cards.

9. Write the features of the Blu-ray disc.

10. Explain about the expanded memory.

(5 × 5 = 25 marks)

Part C

Answer all questions.
Each full question carries 12 marks.

11. Explain in detail about the 8086 microprocessor architecture with neat sketch.

Or

12. Write the addressing modes of 8086 and its types.

13. Explain in detail about the additional features of 80286.

Or

14. Write in detail about the latest processors of Intel and AMD.

15. Explain the different types of ports, slots and connectors in detail.

Or

16. Explain the hard disc interfacing technology and state the limitations.

17. Explain in detail about the optical storage technology and its features.

Or

18. Write in detail about the data addressing in storage devices.

19. Explain the advanced memory technologies in detail.

Or

20. Explain the different kinds of memory used in a modern PC and state the organization of it.

(5 × 12 = 60 marks)