18248

J & K BOARD OF TECHNICAL EDUCATION

RND225SCE

Semester: 5th

Subject: Advance Data Base Management System

Time : 3 Hrs

Session: ND22

Branch: Computer Engineering

Scheme: New

M.M. : 100

Note:- Attempt any five Questions. All Questions carry equal marks.

Q1. What do you understand by DATA Independence? Briefly explain the concept of Normalization?

(20)

Q2. What do you understand by Data Models? Explain?

(20)

Q3. What do you understand by Distributed databases? What are the various types of distributed database systems?

(20)

Q4. Explain:

a) Data definition language b) Scalar functions with respect to DDL

c) Null values w.r.t DDL d) Aggregate functions w.r.t DDL (20)

Q5. What do you understand by Data Manipulation language? Explain the working of a join operator with the help of an example?

(20)

Q6. Explain the concept of Triggers?

(20)

Q7. What do you understand by Indexes? What are the advantages and disadvantages of views?

(20)

Q8. Explain the terms given below with the help of examples:

a) Try and Catch Statements b) If Statement & While Statement (20)

Q9. Explain:

a) Object Definition Language. b) Object Query language

c) Object Relational Systems d) SQL3

(20)

Q10. What do you understand by backup & recovery with respect of installation of SQL server? Also explain steps to install SQL Server?

(20)

18248

RND225SCE/IT

J & K BOARD OF TECHNICAL EDUCATION

Semester: 5th
Subject: Java Programming
Time : 3 Hrs   Session: ND22

Branch: Computer Engineering/IT
Scheme: New
M.M.: 100

Note:- Attempt any five Questions. All Questions carry equal marks

Q1.   a) Briefly explain the features of Java.   [10]

       b) What is JVM and JIT? Explain.   [10]

Q2.   Explain the concept of control flow statements with the help of an example in
       Java?   [20]

Q3.   Briefly explain the concept of Memory Management in Java?   [20]

Q4.   Explain:

       a) Inheritance   b) Encapsulation

       c) Polymorphism   d) Constructors   [20]

Q5.   Briefly explain the concept of Java Packages?   [20]

Q6.   Briefly explain the concept of Multi-Threading in Java?   [20]

Q7.   What do you understand by Synchronization? Briefly explain the life cycle of a
       thread?   [20]

Q8.   What are exceptions? Briefly explain the concept of exception handling in
       Java?   [20]

Q9.   a) Draw a comparison between C and C++.   [10]

       b) What do you understand by command line arguments.   [10]

Q10.   Explain the concept of JDBC (Java Data Base Connectivity)?   [20]

18248

J & K BOARD OF TECHNICAL EDUCATION

Semester: 5th

Branch: Computer Engineering

Scheme: New

Subject: Computer Peripheral and Interfacing

Time : 3 Hrs   **Session: ND22**   **M.M.: 100**

Note:- Attempt any five Questions. All Questions carry equal marks.

Q1.   Briefly explain the working of CRT?   **(20)**

Q2.   Point out the main differences between raster scan and vector graphics? Mention few advantages of raster scan and vector graphics?   **(20)**

Q3.   What do you understand by pipelining? What do you understand by RISC & CISC? Briefly explain?   **(20)**

Q4.   What do you understand by impact and non impact pointers? Briefly explain the principle and working of inkjet printer?   **(20)**

Q5.   What do you understand by SMPS? Briefly explain?   **(20)**

Q6.   What is BIOS? Explain various functions of BIOS?   **(20)**

Q7.   Explain:

   a) Digital Camera   **b)** Web Camera   **(20)**

Q8.   What do you understand by Memory Hierarchy? Briefly explain?   **(20)**

Q9.   Explain:

   a) EIDE   **b)** SATA

   c) SCSI   **d)** SAS   **(20)**

Q10.   Explain:

   a) Cache Memory   **b)** Virtual Memory   **(20)**

18248

RND225SCE

J & K BOARD OF TECHNICAL EDUCATION

Semester: 5th
Subject: Wireless Communication (Elective-I)
Time : 3 Hrs   **Session: ND22**

Branch: Computer Engineering
Scheme: New
M.M.: 100

Note:- Attempt any five Questions. All Questions carry equal marks

Q1.   Explain:

    a) Paging Systems   **b)** EDGE Technology   **(20)**

Q2.   Explain:

    a) Frequency Reuse   **b)** Handoff Strategies   **(20)**

Q3.   Explain:

    a) FDMA   **b)** TDMA   **(20)**

Q4.   What do you understand by Amplitude modulation, angle modulation, digital modulation? Explain?   **(20)**

Q5.   Briefly explain the fundamentals of Channel Coding?   **(20)**

Q6.   Briefly explain the differences between wireless and fixed telephone networks?   **(20)**

Q7.   Briefly explain ISDN in Wireless Networking?   **(20)**

Q8.   Briefly explain GSM architecture?   **(20)**

Q9.   Briefly explain the concept of CDMA digital cellular standard in wireless systems?   **(20)**

Q10. Explain:

    a) Bluetooth   **b)** UMTS   **(20)**

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J & K BOARD OF TECHNICAL EDUCATION

RND225SCE/IT

Semester: 5th
Subject: Internet and Web Technologies
Time : 3 Hrs

Branch: Computer Engineering/IT

Scheme: New

Session: ND22

M.M.: 100

Note:- *Attempt any five Questions. All Questions carry equal marks*

Q1. Explain:

a). E-mail   b) FTP

Q2. Explain: **(20)**

a) ISDN   b) RF Link

Q3. Explain: **(20)**

a) Proxy Servers   b) Search Engines

c) URL   d) Hyper Links

Q4. Explain SSL in detail?   **(20)**

Q5. What do you understand by firewall? What are the types of firewall? Explain?   **(20)**

Q6. Explain: **(20)**

a) Image map   b) Image files

c) Style sheet   d) Frames

Q7. What do you understand by Server-Side Scripting? Explain briefly?   **(20)**

Q8. What do you understand by dream weaver? Explain its basic features?   **(20)**

Q9. What do you understand by Document Object Model (DOM)? Explain?   **(20)**

Q10. Explain with the help of a suitable diagram the process of encryptions and decryption?   **(20)**