14/6/11

T-E (MPN VI (Rev) Data Warehousing & Mining

3: 1st Half-Exam.-11 mina-(d).

Con. 3602-11. (REVISED COURSE) RK-2637

(3 Hours) [Total Marks : 100

N. B. : (1) Question No. 1 is **compulsory**.
(2) Attempt any **four** out of remaining **six** questions.
(3) **Figure** to the **right** indicate **full** marks.

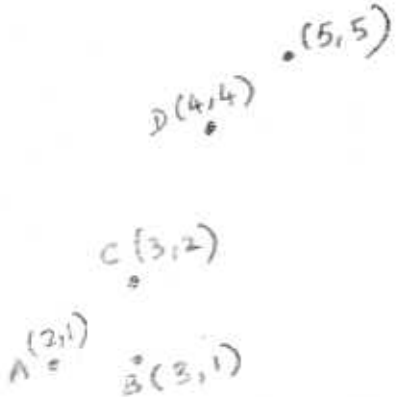
1. (a) Describe the steps in the KDD process with a suitable block diagram. 5
(b) Compare between OLTP and OLAP. 5
(c) What will be the effect of performing attribute oriented Induction (AOI) on the initial working relation **student** with attributes such as name, gender, birth-date, birth place, address, phone-no, and gpa. 10

2. (a) Using the table given below, create a classification model using decision true technique. Indicate how to utilize the model to estimate the risk category of the customer with (**Credit-History** – bad, **Debt** – high, **Collateral** – none, **Income** – (15-35k)). 10

Sr. No.	Debt	Collateral	Income	Credit - History	Risk
1	high	none	0-15 k	bad	high risk
2	high	none	15-35 k	unknown	high risk
3	low	none	15-35 k	unknown	Moderate risk
4	low	none	0-15 k	unknown	high risk
5	low	none	over 35 k	unknown	low risk
6	low	adequate	over 35 k	unknown	low risk
7	low	none	0-15 k	bad	high risk
8	low	adequate	over 35 k	bad	Moderate risk
9	low	none	over 35 k	good	low risk
10	high	adequate	over 35 k	good	low risk
11	high	none	0-15 k	good	high risk
12	high	none	15-35 k	good	Moderate risk.

(b) Define a data warehouse. Explain the architecture of data warehouse with suitable block diagram. 10

3. (a) Consider the data set given. Create the adjacency matrix. Use single link agglomerative technique to cluster the given data. Draw the dendogram. 4+4+2



(b) What are the different ways of finding the distance between two clusters ? 5

(c) Define Factless Fact tables with a suitable example. 5

[TURN OVER

T.E COMP VI (Rev)
Advance Computer Network

Con. 3485-11. (REVISED COURSE) RK-2632

(3 Hours) [Total Marks : 100

N.B. : (1) Question No. 1 is **compulsory**.
(2) Attempt any **four** questions from the **remaining**.
(3) Draw **neat diagrams** wherever **required**.

1. (a) Explain TCP/IP Protocol suite. (10)

   (b) Explain different traffic descriptors used in ATM. (05)

   (c) Explain the naming scheme used in SNMP. (05)

2. (a) Explain the SONET frame structure. (10)

   (b) Explain the functions of ATM adaptation layer. Explain in detail AAL1 and AAL2 layers. (10)

3. (a) Compare unicast routing Protocols OSPF and RIP. Explain RIP in detail. (10)

   (b) What is RTP? Explain RTP format in detail. (10)

4. (a) What is SNMP? Explain SNMP PDU format and messages. (10)

   (b) What are different Multicast routing protocols? Explain DVMRP in detail. (10)

5. (a) Describe different delay components in communications network. (10)

(b)Explain different QOS parameters in case of ATM. (10)

6. (a) Explain Network Address Translation. Discuss SNAT and DNAT. (10)

(b) Explain the working of networking components such as Repeaters, hubs, bridges, switches, routers and gateways. (10)

7. Write short notes on: (any two) (20)

(a) IP over ATM.

(b) Multi Protocol Label Switching.(MPLS)

(c) X.25.

(d) MIB.

4/6/2012

T.E comp VI (Rev)
System Programming & Compiler construction.

AGJ 1st half (q) 14

Con. 3635-11. **(REVISED COURSE)** **RK-2634**

(3 Hours) **[Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**. Attempt any **four** questions from the remaining **six** questions.
(2) Assumptions made should be **clearly** stated.
(3) **Figures** to the **right** indicate **full** marks.

Q. 1)

A) Explain local code optimization in brief. 5

B) Define Macro. Explain macro calls within macro giving example. 5

C) Define Loader. Explain the functions of a loader in brief. 5

D) Explain the dangling references in run time storage allocation with example. 5

Q. 2)

A) Explain the working of a single pass macro assembler with the help of a neat flowchart. 10

B) Explain the LR parser. Write an algorithm for it. Show the working of this algorithm with an example. 10

Q. 3)

A) Explain the working of a direct linking loader with a proper example. Clearly show the entries in the different databases built by the direct linking loader. 10

B) Explain the different types of intermediate code representation. 10

Q. 4)

A) Explain the databases used by each pass of the 2-pass assembler. Explain how these databases are used by the 2-pass assembler when it processes the source program with an example. Clearly show all the entries in the databases built by the 2-pass assembler. 10

B) What is ambiguity? Explain the techniques to eliminate the ambiguity with an Example. 10

[TURN OVER

Q. 5)

A) What is binding? Explain the static and dynamic binding. 10

B) Explain the working of linkage editor in the system programming. 10

Q. 6)

A) Define cross compiler. Explain in brief what activities are performed in various phases of the compiler. 10

B) What is Relocation? Explain in brief various types of loaders with their Advantages and disadvantages. 10

Q. 7) Write a short a note on the following: 20

A) Syntax directed translation.

B) Lexical analysis

C) Heap allocation

D) YACC

31/5/2011

T.E. Comp VT (Rev)
Advanced Microprocessor

Con. 3411-11. (REVISED COURSE) RK-2628

(3 Hours) [Total Marks : 100

N.B. : (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** questions out of remaining **six** questions.

1.	A)	Enlist the instruction pairing rules of 'U' and 'V' pipeline in Pentium.	[05]
	B)	Write short note on: V-86 mode of operation.	[05]
	C)	State the features of Intel Itanium processor.	[05]
	D)	Explain the data types supported by SPARC architecture.	[05]
2.	A)	Explain with diagram arithmetic pipeline design for 8 bit multiplication.	[10]
	B)	What are the types of instruction hazards? Explain in detail.	[10]
3.	A)	Draw protected mode address translation mechanism in 80386DX with neat flow diagram. Explain segment translation in detail.	[10]
	B)	State the use of following X86 flags: RF, TF, VM, NT, IOPL	[05]
	C)	What is segment descriptor? Draw & explain the structure.	[05]
4.	A)	Explain how the flushing of pipeline problem is minimized in Pentium architecture.	[10]
	B)	Write short note on following: Branch prediction logic.	[05]
	C)	Explain different stages of floating point pipeline of Pentium Processor.	[05]
5.	A)	List the important features of Pentium-II processor. Differentiate between Pentium-II & Pentium-III.	[10]
	B)	Write short note on Intel's Net burst micro architecture.	[05]
	C)	Write the features of Pentium-IV.	[05]
6.	A)	Explain the architecture of Super SPARC microprocessor with the help of neat block diagram.	[10]
	B)	Draw and explain various instruction formats of SPARC processor.	[10]
7.		Write short note on the following.	[20]

A) USB B) SCSI C) ISA D) EISA

TE Computer VI (R)
Object-oriented Software Engg

Con. 3777-11. **(REVISED COURSE)** **RK-2640**

(3 Hours) **[Total Marks : 100**

N.B. (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** out of remaining **six**.
(3) Assume **suitable** data wherever **required**.

1. (a) Construct class diagram and sequence diagram for Engineering College. **10**
   (b) Construct use Case diagram and Activity diagram for online airline reservation system. **10**

2. (a) Explain software configuration management and change control management in detail. **10**
   (b) Explain the open source software life cycle model. **10**

3. (a) Why is FTR necessary ? How FTR is conducted ? **10**
   (b) Differentiate between static modelling and dynamic modelling in detail. **10**

4. (a) What is Requirement ? Explain different types of requirements. **10**
   (b) State different types of coupling and cohesion. Explain any 4 types of coupling and cohesion. **10**

5. (a) Explain how project scheduling and tracking is done for a software development project. **10**
   (b) Explain Re-engineering in detail. **10**

6. (a) Compare waterfall model and spiral model of software development. **10**
   (b) Explain the COCOMO model used for software estimation. **10**

7. Write short notes on (any **two**) :— **20**
   (a) Software Architectural Style
   (b) Software Testing Strategies
   (c) Types of Maintenance.
