Roll No.....................

BCA-604(N)

B.C.A. (Semester-VI) Examination-2014
(New Course)
Paper: Fourth
Knowledge Management

Time: Three Hours]   [Maximum Marks: **75**

Note: Section A is compulsory. Attempt any seven questions from Section B and any one question from Section C.

Section-A

1. (i)   Define support and confidence in context to frequent pattern mining.   **(3)**

   (ii) What are advanced databases?   **(2)**

   (iii) What are different distance measures used in finding the distance between two objects in clustering?   **(2)**

2. Match the following: **(6)**

   1. Information Crisis   A. OLTP Application
   2. Strategic information   B. Data cleaned and transformed
   3. Operational system   C. Used for decision making
   4. Data staging area   D. Despite lots of data
   5. Data warehouse   E. Environment, not product
   6. Order processing   F. For day today operation

2

3. Create dissimilarity matrix for following: **(5)**

Object identifier	Test-Result
A	Excellent
B	Fair
C	Good
D	Excellent

Section-B

4. What is groupware? What technologies are used for groupware?   **(6)**

5. Explain clearly the difference between supervised and un-supervised learning.   **(6)**

6. i)   Define complete linkage.   **(2)**
   ii) How tacit knowledge and explicit knowledge complement each other?   **(4)**

7. What are decision support systems? Discuss the characteristics of decision support system?   **(6)**

8. Discuss various elements of knowledge management system in detail.   **(6)**

9. How are the data warehouse projects different from OLTP systems projects? Discuss 4 such differences.   **(6)**

10. What do you understand by intellectual capitals? What are its major components? **(6)**

11. How are the top-down and bottom-up approaches for building the data warehouse is different? Discuss the merits and disadvantages for each approach. **(6)**

12. Differentiate between operational system and informational system. **(6)**

13. What are various steps of knowledge discovery? Discuss the role of datamining in knowledge discovery. **(6)**

Section-C

14. (i) Describe both the steps of Apriori algorithm for frequent pattern mining. **(6)**

(ii) Find 3-item sets for following data, using Apriori Algorithm **(9)**

Transaction id	List of items in transaction
T_1	I_1, I_2, I_5
T_2	I_2, I_4
T_3	I_2, I_3
T_4	I_1, I_2, I_4
T_5	I_1, I_3
T_6	I_2, I_3
T_7	I_1, I_3
T_8	I_1, I_2, I_3, I_5
T_9	I_1, I_2, I_3

Minimum support is given as 2.

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15. (i) Define the steps in constructing decision support system and explain its role in business. **(6)**

(ii) What do you understand by expert system? How expert systems could be beneficial for the business? **(5)**

(iii) Discuss the importance of people as a factor in knowledge management. **(4)**

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