END TERM EXAMINATION

SIXTH SEMESTER [BCA] MAY 2019

Paper Code: BCA-302	Subject: Data Warehouse and Data Mining
Time: 3 Hours	Maximum Marks: 75

**Note: Attempt any five questions including Q.no.1 which is compulsory.
Select one question from each unit.**

Q1 Answer the following questions in brief **(Any Ten):**   (2.5x10=25)

(a) Explain the steps involved in data mining when viewed as a process of knowledge discovery.
(b) What is Data Ware housing and why is it important for decision support?
(c) Write the names of the data bases and information repositories on which data mining can be performed.
(d) What do you mean by association rule mining?
(e) Explain back propagation.
(f) How to evaluate the accuracy of a classifier?
(g) What can we do to secure the privacy of individuals while collecting and mining data?
(h) Define support and confidence.
(i) Define Lazy Learners
(j) Explain Star schema and compare it with snow-flakes schema
(k) Differentiate between supervised and unsupervised learning

UNIT-I

Q2 (a) Explain in detail the three data models used in Data Warehouse.   (6)
(b) Discuss Data integration and Data transformation in detail.   (6.5)

Q3 (a) What is the difference between three main types of Data Warehouse usage: information processing, analytical processing and data mining?   (6)
(b) Discuss the issues and benefits of data mining.   (6.5)

UNIT-II

Q4 (a) Explain the 2-tier and 3-tier data warehouse architectures in detail with suitable examples.   (6)
(b) What is the difference between OLAP and OLTP?   (6.5)

Q5 (a) Explain single-dimensional and multi-dimensional association rules through confidence-support framework using a suitable example.   (6)
(b) Explain Apriori algorithm of association rule mining.   (6.5)

UNIT-III

Q6 (a) What is the difference between classification and clustering? Explain the major ideas of naïve Bayesian classification.   (6)
(b) Explain the co-relation analysis with suitable example.   (6.5)

Q7 (a) What is classification by back propagation? Discuss the steps of back propagation algorithm.   (6)
(b) What are requirements of clustering? List major clustering methods with example. (6.5)

UNIT-IV

Q8 Discuss the applications of data mining in the following: (5x2.5=12.5)
(a) Retail industry
(b) Telecommunication Industry
(c) Biological Data Analysis
(d) Social Network analysis
(e) Information package

Q9 (a) Write the steps to mine spatial and multimedia databases.   (6)
(b) Explain difference between Temporal Databases and Sequential databases. (6.5)

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END TERM EXAMINATION

SIXTH SEMESTER [BCA] APRIL - MAY 2019

Paper Code: BCA-304   **Subject: Mobile Computing**

Time: 3 Hours   **Maximum Marks: 75**

Note: Attempt five questions in all including Q no. 1 which is compulsory. Select one question from each unit.

Q1 Answer the following:-   (2.5x10=25)
- (a) Explain Radio Transmission.
- (b) Explain Signal and Multipath Propagation.
- (c) What is Cellular System?
- (d) What is Spread Spectrum?
- (e) Explain near and far terminals.
- (f) What is GSM & CDMA?
- (g) How is Data Routing done in GPRS? Explain.
- (h) Difference between WAP & WML.
- (i) Difference between meta pragma and access pragma.

UNIT-I

Q2 What is Multiplexing? Explain various types of Multiplexing technique used in Mobile Computing.   **(12.5)**

Q3 What is modulation? Explain various types of Modulation and Shifting Keying which is used in Modulation.   **(12.5)**

UNIT-II

Q4 (a) What is Aloha? Explain various types of Aloha with suitable diagram.   **(6)**
    (b) What is GSM? Explain GSM architecture with suitable diagram.   **(6.5)**

Q5 (a) What is Satellite Communication? Explain satellite orbits.   **(6)**
    (b) Explain ISMA, PRMA and FDMA.   **(6.5)**

UNIT-III

Q6 (a) Explain WML task and its types with suitable example.   **(6)**
    (b) Write a program to set image and hyperlink using WML script.   **(6.5)**

Q7 (a) What is Deck and Card? How to use card explain with suitable example? **(6.5)**
    (b) Create a page using WML Script: **(6)**

Input Fields

Enter Following Information:

Name:

Age :

Sex :

UNIT-IV

Q8 How many types of operator used in WML Script? Explain all with suitable example.   **(12.5)**

Q9 (a) Write a program for addition of two number using function in WML Script. **(6.5)**
    (b) What are the challenges and pitfalls in making the internet mobile?   **(6)**

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END TERM EXAMINATION

SIXTH SEMESTER [BCA] APRIL-MAY 2019

Paper Code: BCA-306   Subject: Linux Environment

Time: 3 Hours   Maximum Marks :75

Note: Attempt five questions in all including question no.1 which is compulsory.

(2.5X10=25)

Q1   Answer the following (any ten):-
(a)   Difference between info and man command.
(b)   Difference between whoami, w and who command in Linux.
(c)   Explain vi editor with mode.
(d)   Difference between mount & umount
(e)   How to use environment variable in Linux?
(f)   What is run level?
(g)   Explain concept of/etc/passwd.
(h)   Which command is used to remove duplicate sentence in Linux
(i)   Difference between Hard Link and Soft Link.
(j)   What is the difference between pipes and filters? Give two examples of each.
(k)   Show the "grep" command and its working using example.
(l)   There is one command in unix which is named after T splitter used in plumbing. Name that command and discuss its utility. Is there any similarity in function with plumbing?

UNIT-I

Q2   (a)   Difference between ext2, ext3 and ext4 file systems.   (6.5)
       (b)   Explain Linux Directory Structure with suitable diagram.   (6)

Q3   Explain in details the Linux file systems architecture with suitable diagram.   (12.5)

UNIT-II

Q4   (a)   Explain files security. How to change the permission of file & directory?   (6)
       (b)   What is archive? How to compress any file of directory using archives command?   (6.5)

Q5   (a)   How to set default permissions in Linux? It is possible to change permission of super user in Linux.   (6)
       (b)   What is Inode? Explain with suitable diagram.   (6.5)

UNIT-III

Q6   How to use special permission in Linux? Explain its types with suitable example.   (12.5)

Q7   Explain the following Commands: (12.5)
       (a)   tail (b)tr (c) wc (d) diff (e) Sort (f) aspell (g) uniq (h) sed (i) sut (j) awk

UNIT-IV

Q8   (a)   What is System call? Explain any five system calls which are used in Linux. (6.5)
       (b)   What is process state? Explain its types.   (6)

Q9   (a)   How to show current process list in Linux? Suppose if you want to change the priority of any process, how to change it.   (6.5)
       (b)   Explain Linux Kernel & Debugger.   (6)

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END TERM EXAMINATION

SIXTH SEMESTER [BCA] APRIL-MAY 2019

Paper Code: BCA-308	Subject: Multimedia and its Applications

Time: 3 Hours

Maximum Marks :75

Note: Attempt five questions in all including question no. 1 which is compulsory.

Q1　　Answer **any five** the following:-　　　　　　　　　　　　　(5x5=25)
- (a)　Explain how multimedia is different from graphics.
- (b)　Give various application of multimedia.
- (c)　Differentiate between temporal and non temporal.
- (d)　Explain the concept of Virtual Reality.
- (e)　Differentiate between HTNL and XML
- (f)　What do you understand by the term data compression?

Q2　(a)　What are the various multimedia components that are to be standardized? Give a detail description about introduction to multimedia.　**(6.5)**

　　(b)　What is Multimedia Authoring? Enlist some useful editing and authoring tools.　**(6)**

Q3　(a)　Discuss in detail about the basic multimedia skills with appropriate examples. Describe in detail multimedia output devices.　**(6.5)**

　　(b)　Explain the building blocks of multimedia.　**(6)**

Q4　(a)　Describe in detail any five multimedia input devices. Explain various devices in multimedia Hardware.　**(6)**

　　(b)　Explain any two data compression techniques in detail. Differentiate between Lossless Compression Algorithm and Lossy Compression Algorithms.　**(6.5)**

Q5　(a)　Distinguish between interactive and non interactive multimedia. How to make instant multimedia. Differentiate between Linear Presentation and Non-Liner Interactive types of multimedia presentation.　**(6)**

　　(b)　Discuss the steps required for assembling and delivering a multimedia project. **(6.5)**

Q6　(a)　Discuss in detail, different stages of a multimedia project and explain the requirement to make good multimedia.　**(6.5)**

　　(b)　Describe the evolution of multimedia and storage devices.　**(6)**

Q7　(a)　Explain how digital communication is helping in advancement of multimedia. **(6.5)**
　　(b)　What are the advantages of multimedia conferencing?　**(6)**

Q8　(a)　Differentiate between Multimedia, Hypertext and Hypermedia.　**(6.5)**
　　(b)　Differentiate between Internal link and External link. What is Sprite animation?**(6)**

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