

**BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)**

**B.C.A. Sem-VI : WINTER : 2023**

**SUBJECT : DATA WAREHOUSING & DATA MINING**

Day : Friday

Time : 02:00 PM-05:00 PM

Date : 1/12/2023

**W-18798-2023**

Max. Marks : 60

---

**N.B.:**

- 1) Question **no. 4** is **COMPULSORY**.
  - 2) Attempt **ANY TWO** questions from **Q. no.1 to Q. no. 3** in **Section – I**.
  - 3) Attempt **ANY TWO** questions from **Q. no.5 to Q. no. 7** in **Section – II**.
  - 4) Figures to the right indicate **FULL** marks.
- 

**SECTION – I**

- Q.1** What is Data Mining? Discuss applications of Data Mining in the Education domain. (12)
- Q.2** Explain various types of Schemas of Data Warehouse with an appropriate examples. (12)
- Q.3** What is Data Cube? Discuss OLAP operations with an example. (12)
- Q.4** Write short notes on **ANY THREE** of the following: (12)
- a) Compare OLTP v/s OLAP
  - b) Data Reduction
  - c) Classification and Prediction
  - d) Concept Hierarchy
  - e) KDD

**SECTION – II**

- Q.5** Why Data preprocessing is important? Discuss Data Cleaning and Data Integration in detail. (12)
- Q.6** What is Market Basket Analysis? Explain Apriori algorithm in detail. (12)
- Q.7** Why Cluster Analysis is important? Discuss various Clustering methods in detail. (12)

\* \* \* \* \*

.....  
**BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)**

**B.C.A. Sem-VI : WINTER : 2023**

**SUBJECT : WEB PROGRAMMING**

Day : Monday

Time : 02:00 PM-05:00 PM

Date : 04-12-2023

**W-18799-2023**

Max. Marks : 60

---

**N.B.**

- 1) Attempt any **THREE** questions from Section – **I** and any **TWO** questions from Section – **II**. **Q. No. 4** is **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Answers to both sections should be written in **SAME** answer book.
- 

**SECTION – I**

- Q.1 a)** What do you mean by operators? Describe any two PHP arithmetic operators with example. (06)
- b)** Define function. How a function is defined and called in PHP? Explain with examples. (06)
- Q.2 a)** What is associative array? Explain with example. (06)
- b)** Explain Time function in PHP with example. (06)
- Q.3 a)** Explain the steps to create a form using PHP. (06)
- b)** What is file Handling? Explain various built – in functions in PHP for file Handling. (06)
- Q.4** Write short notes on any **TWO** of the following: (12)
- a)** GET Vs POST method
  - b)** DDL commands in MySQL
  - c)** Cookies in PHP

**SECTION - II**

- Q.5** Write PHP code to design a login form. (12)
- Q.6** Write PHP code to find H.C.F. of two numbers using user defined function. (12)
- Q.7** Write a PHP code to declare two arrays and store into third array after merging. (12)

\*

\*

\*

**BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)**

**B.C.A. Sem-VI : WINTER : 2023**

**SUBJECT : SOFTWARE PROJECT MANAGEMENT**

Day : Wednesday

Time : 02:00 PM-05:00 PM

Date : 6/12/2023

**W-18800-2023**

Max. Marks : 60

**N.B.:**

- 1) **Q. No.4** from Section-I is **COMPLULSORY**.
- 2) Solve **ANY TWO** questions from **Q. No.1** to **Q. No.3** in Section-I.
- 3) Solve **ANY TWO** questions from **Q. No.5** to **Q. No.7** in Section-II.
- 4) Figures to the right indicate **FULL** marks.
- 5) Answers to both the sections should be written in **SAME** answer book.

**SECTION-I**

- Q.1**    a) Explain importance of software project management. (06)
- b) How software projects differ from other projects? (06)
- Q.2**    a) Explain various stages of software quality management. (06)
- b) Explain project management framework. (06)
- Q.3**    What is project scheduling? How sequencing and scheduling of various project activities are done in SPM? (12)
- Q.4**    Write short notes on **ANY THREE** of the following: (12)
- a) Risk in IT project
- b) Features of Microsoft Project
- c) Work Breakdown Structure
- d) Project cost management

**SECTION-II**

- Q.5**    Describe various phases of Software project management life cycle with neat diagram. (12)
- Q.6**    What is project planning? Explain in brief stepwise project planning of software project. (12)
- Q.7**    Explain function point analysis method of cost estimation with suitable example. (12)

\* \* \* \* \*

Day : Friday

Time : 02:00 PM-05:00 PM

Date : 8/12/2023

W-18801-2023

Max. Marks : 60

**N.B.:**

1. Attempt **Any Three** questions from Section-I and Attempt **Any Two** questions from Section-II
2. Answers to both sections should be written in the **SAME** answer book.
3. Figures to the right indicates FULL marks.

**Section - I**

- Q1. What is Business Analytics? Explain various areas where BA is applied. 10
- Q2. Explain Real time Business Intelligence Automated Decision support system with suitable example 10
- Q3. What is Data Mining? What are different applications of data mining 10
- Q.4. What are different types of data also explain Sources of Data for the organization 10
- Q.5. Discuss different techniques used for cleaning data. 10
- Q.6. Write Short Notes On (Any two) 10
1. Geographical Information System
  2. Web Mining
  3. XL Miner
  4. Reports and queries

**Section - II**

- Q.7. Elaborate how Business Analytics is used in the field of Market share estimation and Sensitivity Analysis with suitable example 15
- Q.8. Explain OLAP and its role in business analytics. 15
- Q. 9. How do analytics help retailers improve their sales performance goals? 15

**BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)**  
**B.C.A. Sem-VI : WINTER : 2023**  
**SUBJECT : INFORMATION SECURITY ADMINISTRATION**

Day : Monday

Time : 02:00 PM-05:00 PM

Date : 11/12/2023

**W-22705-2023**

Max. Marks : 60

**N.B.**

- 1) **Q. 4 From SECTION – I is COMPULSORY.**
- 2) Answer any **TWO** questions from Q. 1, 2, 3 in **SECTION - I**
- 3) Answer any **TWO** questions from Q. 5, 6, 7 in **SECTION – II**
- 4) **All Questions carry equal marks.**
- 5) Answer to both sections should be written in **SAME** answer book.
- 6) Draw a labeled diagram wherever necessary.

**SECTION – I**

- Q. 1** Answer the following : (6 Marks x 2= 12 Marks) (12)
- a) Explain the steps to host Online Job Portal in trusted network.
  - b) What is Mail Server? Explain the functionality of the Mail Server .
- Q. 2** Answer the following: (6 Marks x 2= 12 Marks) (12)
- a) Describe steps to create the LAN Setup of four computers to share internet connections.
  - b) Discuss various security issues in LAN.
- Q. 3** Answer the following: (6 Marks x 2= 12 Marks) (12)
- a) What is DNS Server? Explain the advantages of DNS Server.
  - b) Explain the need for mobile device security with an example.
- Q. 4** Write a short note on **ANY THREE** of the following: (4 Marks x 3= 12 Marks) (12)
- a) NAT.
  - b) Web Hosting
  - c) Static Website and Dynamic website
  - d) WAN Devices.
  - e) Proxy Server.

**SECTION - II**

- Q. 5** Answer the following: (6 Marks x 2= 12 Marks) (12)
- a) How to secure any device within an organization , and recommend what kind of policy should be applied to secure important data.
  - b) Explain the process of sharing any folder using file server.
- Q. 6** Answer the following: (6 Marks x 2= 12 Marks) (12)
- a) Explain the role of Network Administrator in terms of Information Security.
  - b) Define the Domain name. Describe the process of registering a domain name.
- Q. 7** Answer the following: (6 Marks x 2= 12 Marks) (12)
- a) What is Network? How to maintain WAN Security.
  - b) What is the Print Server? Explain Print Server security parameters.

\*\*\*\*\*

BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)  
B.C.A. Sem-VI : WINTER : 2023  
SUBJECT : HADOOP

Day : Monday

Time : 02:00 PM-05:00 PM

Date : 11/12/2023

**W-22706-2023**

Max. Marks : 60

**N.B.**

- 1) **Q. No. 4 is COMPULSORY.**
- 2) Attempt any **TWO** questions from **Q. No. 1 to Q. No. 3** in Section – I.
- 3) Attempt any **TWO** questions from **Q. No. 5 to Q. No. 7** in Section – II.
- 4) Figures to the right indicate **FULL** marks.

**SECTION – I**

- Q.1** What is Big Data? Explain its features and advantages. (12)
- Q.2** Differentiate between HDFS and HBase. (12)
- Q.3** What is HADOOP? Explain an Architecture of HADOOP in brief. (12)
- Q.4** Write short notes on any **THREE** of the following: (12)
- a) Apache Pig Vs. SQL
  - b) HBase
  - c) Multi – Node Cluster
  - d) Apache Hive
  - e) NameNode

**SECTION - II**

- Q.5** Define MapReduce. Explain the Algorithm for MapReduce with suitable diagram. (12)
- Q.6** Write the steps involved in HDFS for (12)
- i) Inserting Data into HDFS
  - ii) Retrieving Data from HDFS
  - iii) Shutting Down the HDFS
- Q.7** Define HDFS. Explain its Architecture with diagram also gives features of HDFS. (12)

\* \* \*

BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)  
B.C.A. Sem-VI : WINTER : 2023  
SUBJECT : KNOWLEDGE MANAGEMENT

Day : Monday

Time : 02:00 PM-05:00 PM

Date : 11/12/2023

**W-22707-2023**

Max. Marks : 60

**N.B.**

- 1) **Q. No. 4** from Section-I is **COMPULSORY**.
- 2) Attempt **ANY TWO** questions from Q.No. 1 to Q. No. 3 in Section – I.
- 3) Attempt **ANY TWO** questions from Q.No. 5 to Q. No. 7 in Section – II.
- 4) Figures to the **RIGHT** indicate **FULL** marks.
- 5) Answers to both the sections should be written in **SAME** answer book.

**SECTION – I**

- Q.1** Illustrate the meaning and various techniques of Knowledge Management. (12)
- Q.2** List and explain various critical success factors in Knowledge Management. (12)
- Q.3** Which are the technology components of Knowledge Management? Discuss each component with its importance. (12)
- Q.4** Write short notes on **ANY THREE** of the following : (12)
- a) Pillars of Knowledge Management
  - b) Benchmarking and Knowledge Management
  - c) Learning and change-Innovation
  - d) E-commerce and Knowledge Management

**SECTION – II**

- Q.5** Suman Hospital with Head Quarter at Delhi having 20 chain of hospitals in India. The top management at Delhi decided to setup Knowledge Management system for the day to day communication. As IT solution provider, suggest your solution including Software, Hardware, Infrastructure and Security aspects with the help of suitable block diagram. (12)
- Q.6** You work in HR department of a big bank with head office in USA and currently bank is working in 20 countries. Suggest Knowledge Management system as a solution with suitable block diagram and explain it. (12)
- Q.7** DIGIHOME IT solutions is using Knowledge Management system for Human Resource Management Operations. As a solution provider, suggest your solution with block diagram and explain its working. (12)

\*\*\*\*\*