

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

**B.C.A. Sem-VI : : SUMMER - 2022**

**SUBJECT : DATA WAREHOUSING & DATA MINING**

Day : Monday

Date : 23-05-2022

**S-18798-2022**

Time : 10:00 AM-01:00 PM

Max. Marks : 60

**N.B.:**

- 1) **Q.4 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) Figures to the right indicate **FULL** marks.
- 5) Answers to both the sections should be written in **SAME** answer books.
- 6) Draw a labeled diagram **WHEREVER** necessary.

**SECTION – I**

- Q.1** What is metadata in data warehousing environment? Classify metadata and explain the same. (12)
- Q.2** Answer the following:
- a) OLAP Operations (06)
  - b) OLAP Servers (06)
- Q.3** What is data mining? How data mining systems are classified? Discuss each classification with an example. (12)
- Q.4** Write short notes on (Any 3) (12)
- a) ETL Process
  - b) Data characterization vs Data Discrimination
  - c) Data Cleaning
  - d) Outlier Analysis
  - e) Data Mart

**SECTION – II**

- Q.5** What is Market Basket Analysis? Explain the Apriori algorithm for finding frequent item sets with an example. (12)
- Q.6** What is classification? Explain with an example how to solve a classification problem using decision tree. (12)
- Q.7** What are the different clustering methods? Explain each in detail. (12)

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

**B.C.A. Sem-VI : : SUMMER - 2022**

**SUBJECT : WEB PROGRAMMING**

Day : Wednesday  
Date : 25-05-2022

**S-18799-2022**

Time : 10:00 AM-01:00 PM  
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** Answer the following : (12)

- a) Describe the steps of installation and configuration of Xampp Server on a local computer.
- b) Define function. How to define User Defined Function? Explain in detail.

**Q.2** Answer the following : (12)

- a) What do you mean by String Manipulation? Explain any five Built-in string functions in PHP with examples.
- b) What do you mean by file handling? Explain Built-in file handling functions of PHP.

**Q.3** Answer the following : (12)

- a) Define cookies. What is the need of cookies in website development?
- b) How data can be retrieved in a particular order using MYSQL. Explain the SQL query with example.

**Q.4** Write short notes on **ANY TWO** of the following : (12)

- a) Date () function
- b) Post function
- c) CREATE Statement in MYSQL

**SECTION – II**

**Q.5** Write a PHP code to display any specified date in the following format. (12)  
e.g. Input-13/07/2021 output-Tuesday, 13 July, 2021.

**Q.6** Design a registration page and validate phone number and email address in php. (12)

**Q.7** Write a PHP code to set and access the value of username variable through cookies. (12)

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

**B.C.A. Sem-VI : : SUMMER - 2022**

**SUBJECT : SOFTWARE PROJECT MANAGEMENT**

Day : Friday

Date : 27-05-2022

**S-18800-2022**

Time : 10:00 AM-01:00 PM

Max. Marks : 60

**N.B.:**

- 1) Q. No. 4 from Section –I is **COMPULSORY**.
- 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) Answer to both the sections should be written in **SAME** answer book.

**SECTION-I**

- Q.1** a) Define software project management. Illustrate various phases of software project management. (06)
- b) What is integration management? Explain the process of integration management. (06)
- Q.2** a) What do you mean by Gantt chart? Explain rules and process of developing Gantt chart. (06)
- b) Explain the principles of cost management. (06)
- Q.3** a) What do you mean by software quality? Give the place of software quality in project planning? (06)
- b) Give the different categories of risk. (06)
- Q.4** Write short notes on any **THREE** of the following: (12)
- a) Six Sigma
  - b) Risk mitigation
  - c) Project manager
  - d) CPM

**SECTION-II**

- Q.5** Draw the activity network diagram and find the critical path. (12)

Activity	Predecessor	Duration (Weeks)
A	-	4
B	-	7
C	A	5
D	B	4
E	B	3
F	D, E	7
G	C, F	7
H	D	5

- Q.6** Calculate the total function point value for the following project: (12)
- Number of Programmers – 10  
Number of inputs – 13  
Number of outputs- 11  
Number of internal files – 21  
Number of external files – 07  
Number of enquiries – 13  
Number of programs – 35  
Compute for all the three complexities. (consider  $\sum f_i = 1$ )

- Q.7** Explain the stepwise project planning in detail. (12)

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

**B.C.A. Sem-VI : : SUMMER - 2022**

**SUBJECT : BUSINESS ANALYTICS**

Day : Monday

Date : 30-05-2022

**S-18801-2022**

Time : 10:00 AM-01:00 PM

Max. Marks : 60

**N.B.:**

- 1) **Q.No.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) Answers to both the sections should be written in **SAME** answer book.
- 6) Draw a labelled diagram **WHEREVER** necessary.

**SECTION – I**

- Q.1** a) Explain in brief data visualization. [06]
- b) Explain various areas in which Data Analytics is applied. [06]
- Q.2** a) How to deal with missing or incomplete data? [06]
- b) Explain Data Mining process in short. [06]
- Q.3** a) What are data mining techniques? Explain its features. [06]
- b) Write note on web mining. [06]
- Q.4** Write short notes on the following: Attempt **ANY THREE** : [12]
- a) Recovery management
- b) Risk forecasting
- c) Talent Analytics
- d) Loyalty Analytics

**SECTION – II**

- Q.5** a) Write short note on XL-Miner. [06]
- b) What is OLAP? Explain its concept. [06]
- Q.6** a) How Business Analytics is useful in Business forecasting? [06]
- b) Explain how customer segmentation is done. [06]
- Q.7** a) Explain Fraud Detection and Prediction in brief. [06]
- b) Write detail note on Human Resource Retention. [06]

**B.C.A. SEM-VI (CBCS-2018 COURSE) (FOR REGULAR): SUMMER-2022**  
**SUBJECT: ELECTIVE-II: INFORMATION SECURITY ADMINISTRATION**

Date: Wednesday  
Day: 01-06-2022 S-22705-2022

Time: 10:00AM TO 1:00 P.M.  
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 QUESTION** from Q5, 6, 7, in **SECTION II**
- 4) All questions carry equal marks.
- 5) Answers to both the sections to be written in **SAME** answer books
- 6) Draws a labeled diagram wherever necessary

**SECTION -I**

- Q.1** Answer the following: (12)
- a) How to manage and secure a Desktop PC?
  - b) What are various devices which are used to set-up a client –side network?
- Q.2** Answer the following : (12)
- a) What are different devices used in LAN? How IP is assigned to different devices manually?
  - b) Explain different LAN security measures.
- Q.3** Answer the following : (12)
- a) Discuss how to share internet connection with other devices connected to a LAN.
  - b) Explain different security issues in WAN.
- Q.4** Write short notes on the following (any **THREE**) : (12)
- a) Mail server
  - b) DNS server
  - c) Website hosting
  - d) Boot server
  - e) WAN Devices

**SECTION-II**

- Q.5** Answer the following: (12)
- a) Describe NAT and PAT settings.
  - b) What is proxy server? Discuss proxy server setup process.
- Q.6** Answer the following: (12)
- a) Explain steps to share a folder from file server.
  - b) Explain print server security measures.
- Q.7** Answer the following (12)
- a) Discuss importance of mobile device security within an organization, and suggest that how organization can protect its sensitive data.
  - b) Explain web server security measures.

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

**B.C.A. Sem-VI : : SUMMER - 2022**

**SUBJECT : HADOOP**

Day : Wednesday  
Date : 01-06-2022

**S-22706-2022**

Time : 10:00 AM-01:00 PM  
Max. Marks : 60

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**N. B. :**

- 1) Attempt **ANY THREE** questions from section **I** and attempt **ANY TWO** questions from section **II**.
  - 2) Figures to right indicate **FULL** marks.
  - 3) Answers to both the sections should be written in **SAME** answer book.
  - 4) Draw neat and labelled diagrams **WHEREVER** necessary.
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**SECTION – I**

- Q. 1** Big Data technology operational v/s analytical system. (10)
- Q. 2** Explain in brief features of Hadoop and discuss advantages of Hadoop. (10)
- Q. 3** Describe in detail architecture of Hadoop Distributed File System (HDFS) (10)
- Q. 4** Explain MapReduce concept with example. (10)
- Q. 5** Explain the following terms: (10)
- a) Apache Pig
  - b) Apache Hive
- Q. 6** Write notes on **ANY TWO** of the following: (10)
- a) Hadoop Concept
  - b) Apache HBase
  - c) Big Data

**SECTION – II**

- Q. 7** How Hadoop can be useful in Education Management System? Explain. (15)
- Q. 8** What is multimode cluster? Explain Hadoop installation in detail. (15)
- Q. 9** Describe any seven basic Hadoop commands in terminal with example. (15)

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

**B.C.A. Sem-VI : : SUMMER - 2022**

**SUBJECT : KNOWLEDGE MANAGEMENT**

Day : Wednesday  
Date : 01-06-2022

**S-22707-2022**

Time : 10:00 AM-01:00 PM  
Max. Marks : 60

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**N. B.**

- 1) **Q. No. 4** from section – I is compulsory.
  - 2) Answer any **TWO** questions from Q.1, Q.2, Q.3 in section-I.
  - 3) Answer any **TWO** questions from Q.5, Q.6, Q.7 in section-II.
  - 4) All questions carry equal marks.
  - 5) Answer to be written in the same answer sheet.
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**SECTION - I**

- Q. 1** a) Why knowledge management is necessary? Explain. (06)  
b) Explain Knowledge Management framework. (06)
- Q. 2** Explain Total Quality Management in reference with Knowledge Management. (12)
- Q. 3** a) Describe the factors affecting success of Knowledge Management. (06)  
b) Explain Supply Chain of Knowledge Management. (06)
- Q. 4** Write short Notes on any **THREE** of the following (12)  
a) Corporate Transformation  
b) Bench Marking and Knowledge Management  
c) Knowledge Management and E-commerce  
d) Role of Knowledge Management in organizational Restructuring  
e) Technology components associated with Knowledge Management

**SECTION - II**

- Q. 5** A renowned hospital wants to design a Knowledge Management which will assist in customer care and providing online service to patients. Formulate the Knowledge Management strategy for its implementation. (12)
- Q. 6** A well-known company wants to restructure its HR department. Illustrate the challenges in front of the company in this restructuring. (12)
- Q. 7** Explain the role of various technology components in the implementation of Knowledge Management. (12)

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