F–1640

Sub. Code
7BCA1C1

B.C.A. DEGREE EXAMINATION, APRIL 2019

First Semester

Computer Application

C AND DATA STRUCTURE

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define variable.

2. What are increment and decrement operators?

3. Define one-dimensional arrays.

4. How to compare two strings?

5. What is meant by nesting of function?

6. How to define a structure?

7. How will you declare a pointer variable?

8. What are the uses of getc( ) and putc( ) functions?

9. What are the data structure operations?

10. Define Queue.

Part B $(5 \times 5 = 25)$

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss the different data types in C.

Or

(b) Discuss about operators in C.

12. (a) How will you read strings from terminal? Explain.

Or

(b) Write a program that would sort a list of names in alphabetical order.

13. (a) Discuss about recursion with example.

Or

(b) Explain arrays of structures.

14. (a) Explain the accessing a variable through its pointer.

Or

(b) Write about file opening modes.

15. (a) Explain the classification of data structures.

Or

(b) Write an algorithm for insertion into linked list.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Discuss about looping statements in C.

17. Write a program to find the difference of two matrices.

18. Explain the different categories of functions.

19. Write a program using pointers to compute the sum of all elements stored in an array.

20. Discuss about stack as ADT.

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F–1641

Sub. Code
7BCA2C1

B.C.A. DEGREE EXAMINATION, APRIL 2019

Second Semester

Computer Application

PROGRAMMING IN C++

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is a Token? Give an example.
2. What are the branching statements available in C++?
3. How will define an object? Give an example.
4. What is a dynamic Constructor?
5. What is a virtual base class?
6. What is a stream?
7. How end of file (eof ( )) is detected?
8. How will you close a file?
9. What is a Template?
10. What is an Exception?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the various types of expressions with example.

Or

(b) What is the difference between do — while loop and while loop? Explain.

12. (a) Explain static data member with an example.

Or

(b) Explain Copy constructor with an example.

13. (a) Explain Hierarchical inheritance with an example.

Or

(b) Explain pure virtual function with an example.

14. (a) Explain the various file opening modes.

Or

(b) Explain random access file with an example.

15. (a) Explain the Exceptions handling model with an example.

Or

(b) Explain the rules for handling exceptions successfully.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write a C++ program to reverse the given integer number.

17. Explain array of objects with a program.

18. Explain pointers to object with a program.

19. Write a C++ program to find the biggest of three numbers using command line argument.

20. Explain function template with a C++ program.

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F–1642

Sub. Code
7BCA3C1

B.C.A. DEGREE EXAMINATION, APRIL 2019

Third Semester

Computer Application

DATABASE MANAGEMENT SYSTEMS

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is meant by semi structured databases?
2. Write any two database system applications.
3. What is a Temporal data?
4. What is the condition for First Normal Form?
5. What do you mean by Homogeneous database?
6. What are the advantages of I/O parallelism?
7. How will you insert data into a Table?
8. Define Role.
9. What is a stored procedure?
10. Write any Four DML commands.

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the E-R design issues.

Or

(b) Explain the extended E-R features.

12. (a) Explain the Database design process.

Or

(b) Explain the features of good relational designs.

13. (a) Explain the Distributed systems.

Or

(b) Explain Intraquery parallelism.

14. (a) Explain View creation and deletion with an example.

Or

(b) How will you enforce Data Integrity in a database? Explain with an example.

15. (a) Explain Transaction with an example.

Or

(b) How will you create and delete a Cursor? Explain with an example.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain

(a) Relational Databases

(b) Purpose of Database Systems.

17. Explain decomposition using functional dependencies with example.

18. Explain Distributed transactions.

19. How will you create a Table and maintain a Table? Explain with an example.

20. Write a function to print the multiplication table.

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F–1643

Sub. Code
7BCA4C1

B.C.A. DEGREE EXAMINATION, APRIL 2019

Fourth Semester

Computer Application

JAVA PROGRAMMING

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What are the applications of OOP?
2. What is Java Virtual Machine?
3. What are the bitwise operators available in java?
4. What is a labeled loop?
5. How will create objects in java? Give an example.
6. Define Interface.
7. What are the advantages of Multithreading?
8. Define Exception.
9. How an Applet differ from application?
10. Write the syntax of the method which is used to draw an circles.

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the tokens in java with example.

Or

(b) Explain the basic concepts of OOP.

12. (a) Explain any Five mathematical function in java with example.

Or

(b) Explain switch statement with an example.

13. (a) How will you declare and initialize two dimensional arrays? Give an example.

Or

(b) How will you extend an interface? Explain with an example.

14. (a) How will create and import a package? Explain with an example.

Or

(b) Explain the exception handling in java with an example.

15. (a) Explain the Applet tag with all options with an example.

Or

(b) How will you pass parameters to an Applet? Explain with an example.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain command line argument with a program.

17. Write a Java program to count and to print the prime numbers between 100 and 200.

18. Explain method overriding with a java program.

19. Write a java program to demonstrate the Thread by extending Thread class. Explain.

20. Write a Java program to draw a Polygon with Five sides.

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F–1735

Sub. Code
7BCAA1

U.G. DEGREE EXAMINATION, APRIL 2019

Computer Application

Allied — OFFICE AUTOMATION

(Offered by the Department of B.C.A)

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is MS WORD?
2. Define Footer.
3. How will you open a Word document?
4. What is a Template?
5. What are the features of Excel?
6. What is a Workbook?
7. How will you save a presentation?
8. Write down the views in Power Point.
9. Define Database.
10. What is the use of Form in Access?

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Explain the features of Word.

Or

(b) Write down the steps to copy and move a folder.

12. (a) Explain the text editing features available in Word.

Or

(b) Explain the steps to create a table in Word.

13. (a) Explain the steps to enter and edit formula in Excel.

Or

(b) Explain any Ten functions on Excel with example.

14. (a) Write down the steps to copy and delete a slide from a presentation.

Or

(b) Explain the steps to add sound effect to a presentation.

15. (a) Explain the parts of a access window.

Or

(b) Write down the steps to create a table using Table wizard.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Write down the steps to perform Mail Merge in Word.

17. Explain the step-by-step procedure for Mail merge feature in Word.

18. Write down the steps to create a chart.

19. Explain the steps to create an animated slide presentation.

20. Explain the steps to create a Report.

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F–1736

Sub. Code
7BCAA2

UG DEGREE EXAMINATION, APRIL 2019

Computer Application

Allied: PROGRAMMING IN C

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is an identifier? Give an example.

2. What are the types of programming languages?

3. How many elements (maximum) can be stored in the declaration? float xyz[3][4];

4. How will you write strings to screen?

5. What do you mean by scope of a variable?

6. What is the main difference between a Structure and array?

7. How will you declare pointers? Give example.

8. Write the scaling factors for int and float type data.

9. What is a random access file?

10. Define Macro.

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the fundamental data types in C with example.

Or

(b) Explain the nested-if statement with example.

12. (a) Write a C program to reverse the given string.

Or

(b) Write a C program to find the sum of even numbers in the given array.

13. (a) Write a C program to find the sum of first ten natural numbers using recursion.

Or

(b) Explain union with an example.

14. (a) Write a C program to find the sum of two numbers using pointers.

Or

(b) Explain Pointers and arrays with an example.

15. (a) Explain the error handling during I/O operations with example.

Or

(b) Explain any five compiler control directives in C.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain the operators in C with example.

17. Write a C program to multiply two matrices. Check the compatibility.

18. Write a C program to calculate the net pay of an employee using structures. (Assume your own data)

19. Explain Pointers and function with a program.

20. Write a C program to copy content of one file into another file.

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F–1737

Sub. Code
7BCAA3

U.G. DEGREE EXAMINATION, APRIL 2019

Computer Application

Allied — FUNDAMENTALS OF COMPUTERS AND INFORMATION TECHNOLOGY

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Convert the following.

   $(10101010)_2$ into octal number.

2. What are the types of printers?

3. What are the internal blocks of a database management system?

4. What is meant by primary key in a database table?

5. What is meant by intranet?

6. What are the types of computer networks?

7. Define hyper media.

8. What is GIS?

9. Write any four applications of information technology in Banking.

10. Write any four applications of information in Training.

Part B $(5 \times 5 = 25)$

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the anatomy of a digital computer.

Or

(b) Describe about the types of memories in a digital computer.

12. (a) Explain about the operating systems.

Or

(b) Explain about data processing in detail.

13. (a) Explain about virtual reality.

Or

(b) Explain the local area networks.

14. (a) Explain about data mart.

Or

(b) Explain the applications of E-Commerce.

15. (a) Describe the applications of information technology in industry.

Or

(b) Describe the application of information technology in business.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain about the types of input devices.

17. Explain about the general features and trend of computer software.

18. Describe the applications of internet.

19. Explain about OLAP.

20. Describe the applications of information technology in Science.

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F–1738

Sub. Code
7BCAA4

U.G. DEGREE EXAMINATION, APRIL 2019

Computer Application

Allied – DATA MINING AND WAREHOUSING

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Data mining.

2. What is need for OLAP?

3. Define Data normalization.

4. What is concept hierarchy?

5. Define support and confidence.

6. Define prediction.

7. What is density based clustering?

8. Define BIRCH.

9. What is trend analysis?

10. What is web mining?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the classification of Data mining systems.

Or

(b) Discuss about Data warehouse implementation.

12. (a) Explain the steps involved in data preprocessing.

Or

(b) Explain the concept of Data Integration.

13. (a) What are the issues regarding classification and prediction?

Or

(b) Explain classification by Association rules.

14. (a) Describe the working of PAM algorithm.

Or

(b) Explain grid-based clustering method.

15. (a) Discuss the application of Data mining for the Retail Industry.

Or

(b) Describe the Trends in Data mining.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain the architecture of data warehouse with a neat sketch.

17. Discuss about Data mining primitives.

18. Describe Apriori algorithm with a suitable example.

19. Explain Hierarchical methods in clustering.

20. Explain the mining of World Wide Web.

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