

F-8182

Sub. Code

7BCE1C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

First Semester

Computer Science

PROGRAMMING IN C

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What are identifiers in C?
2. What are constants in C? Give the syntax for the same.
3. What is ternary operator?
4. How to read a character in C?
5. Define array.
6. What does strcat (s1, s2) do?
7. Why we need functions in C?
8. Define structure in C?
9. Why we need pointers?
10. How to access a variable through pointers?

Part B

(5 × 5 = 25)

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

11. (a) Discuss various identifiers and keywords in C?

Or

- (b) Describe in detail about relational operators in C?

12. (a) Explain about nested if...else in C with an example.

Or

- (b) Discuss about switch statement in C with appropriate program.

13. (a) Explain about two dimensional array with an example.

Or

- (b) Declare string called “Hello World” and print each character in the string using while loop.

14. (a) Explain about scope, visibility and life time of a variable in function with an example

Or

- (b) What are the elements of user defined function? Explain.

15. (a) How variables is accesses through pointers? Discuss with two examples of different data types.

Or

- (b) Write a C program using pointers to swap two numbers.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain about various data types in C?
 17. Explain about do.. while and while loop in C and their differences with appropriate code for each.
 18. Declare float one dimensional array of size 10 and assign random numbers to the array. Write C program to Sum the even numbers along and display the output.
 19. Write a C program which will have four functions such as add, subtract, multiply and Division get the input of float and integer data types.
 20. Write a C program to read the file contents and print the file content in the console.
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Sub. Code

7BCE2C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Second Semester

Computer Science

OBJECT ORIENTED PROGRAMMING WITH C++

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define tokens.
2. Give any four applications of OOPS.
3. Define constructor.
4. What are the properties of a static data member?
5. What is operator overloading?
6. Define single inheritance.
7. What are input streams?
8. Give any two rules for Virtual Functions.
9. How to open a file? Give Syntax.
10. Give two types of template.

Part B

(5 × 5 = 25)

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

11. (a) List out any five operators types in C++ with its symbol.

Or

- (b) Explain the use of break and continue statements in “switch case” statements.

12. (a) List the difference between constructor and destructor.

Or

- (b) What are the characteristics of member functions?

13. (a) Write short notes on multiple inheritance with a C++ program.

Or

- (b) Write short notes on multilevel inheritance with a C++ program.

14. (a) What are the difference between pointers to constants and constant to pointers?

Or

- (b) Give the syntax for Pure Virtual function and explain with program.

15. (a) Write short note on File pointer.

Or

- (b) List out any three file modes with their usage.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe principles of object oriented programming.
17. Explain Inline functions and the situations where inline expansion may not work and why?
18. Define Rules for operator Overloading. Write a program to overload the subscript operator '['].
19. The keyword 'virtual' can be used for functions as well as classes in C++. Explain the two with different uses. Give an example each.
20. Briefly discuss on Class Template. Write a C++ program to explain the same.

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Sub. Code

7BCE3C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Third Semester

Computer Science

DATA STRUCTURES AND COMPUTER ALGORITHMS

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Data Structure.
2. List the types of Matrix.
3. Define ADT Stack.
4. What is called Queue?
5. Give an example of Binary Tree.
6. What is meant by Tree traversals?
7. Mention any two features of Divide and Conquer method.
8. What is called Merge Sort?
9. State the Knapsack Problem.
10. What is called Dynamic Problem?

Part B

(5 × 5 = 25)

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

11. (a) Distinguish one dimensional and two dimensional array.

Or

- (b) Discuss the Pros and Cons of Linked List.

12. (a) List and explain the operations of Stack ADT.

Or

- (b) Discuss the properties of Queue based Linked List with example.

13. (a) Illustrate the Binary Tree Traversal with an example.

Or

- (b) Discuss the working of Selection algorithm with an example.

14. (a) Define Algorithm. Write a note on its specification.

Or

- (b) Describe the working of Strassen's Matrix Multiplication.

15. (a) What is called Optimal Merge Pattern? Give an example for it.

Or

- (b) Describe about Prim's Algorithm with an example.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. What is called linked list? Explain it in detail.
 17. Discuss any two applications of Stack with an example.
 18. Differentiate Merge Sort from Quick Sort.
 19. What is called Greedy Methods? Explain its features with an example.
 20. Define Graph. Explain its traversal with an example.
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Sub. Code

7BCE4C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fourth Semester

Computer Science

JAVA PROGRAMMING

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Java is platform independent. Justify.
2. What are the benefits of using constants? Declare an int constant SIZE with value 20.
3. Write a Java syntax to declare “arr” as integer array with size 6.
4. Define abstract class.
5. What is constructors in java?
6. What will happen if we declare a class as final in Java?
7. Why we need packages in Java?
8. How will you create threads in Java?
9. Why we need applets in Java?
10. Give syntax in applet for displaying images?

Part B

(5 × 5 = 25)

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

11. (a) How java program executes? Explain with diagram.

Or

- (b) Describe about various data types in Java. Give syntax for the same.

12. (a) Write a Java program using while loop to find factorial of a number?

Or

- (b) Explain about various condition statements in Java.

13. (a) What is method overloading in Java? Give a Java program for method overloading.

Or

- (b) What is inheritance? Explain about various types of inheritance with diagram.

14. (a) Discuss various operations of threads in detail.

Or

- (b) With proper exception handling write Java coding for dividing two integer numbers.

15. (a) How parameters are passed in applets? Explain.

Or

- (b) How inputs are obtained in Java applet explain it with Java program?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe in detail the features of Java.
 17. Explain in detail the various control structures in Java.
 18. Write a Java program using array which will find the maximum and minimum element in the array.
 19. Explain thread life cycle in detail with diagram.
 20. Discuss applet life cycle in detail with diagram
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Sub. Code

7BCE5C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Computer Science

OPERATING SYSTEM

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What are the functions of Operating Systems?
2. Define process.
3. What is semaphores?
4. Define mutual exclusion.
5. What is deadlock?
6. When we call a scheduling algorithm as pre-emptive?
7. What is virtual memory?
8. Define external fragmentation.
9. Why disk scheduling is necessary?
10. What is data hierarchy in file system?

Part B

(5 × 5 = 25)

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

11. (a) Discuss in detail the operating system architecture.

Or

- (b) Explain in detail the various states of process with diagram.

12. (a) Discuss reader-writer problem in detail.

Or

- (b) Explain concurrent programming in brief.

13. (a) Explain in detail about necessary and sufficient condition for deadlock.

Or

- (b) Discuss banker's algorithm in detail.

14. (a) Explain paging in detail.

Or

- (b) Discuss segmentation in detail.

15. (a) Write a short note on rotational optimization.

Or

- (b) Describe various file access mechanisms.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain about various inter process communication.

17. Elucidate on various software solution to handle mutual exclusion.

18. Find response time, waiting time, turnaround time for the problem given below using Gantt chart.

Process	Burst Time	Arrival Time	Priority
P1	4	0	3
P2	2	1	1
P3	5	2	2

- (a) First come first serve
- (b) Shortest job first both pre-emptive and non-pre-emptive
- (c) Round Robin time quantum = 1.
19. Consider the page references 7,0,1,2,0,3,0,4,2,3,0,3,2, with 3 page frame. Find number of page fault using first in first out, least recently used algorithm and optimal page replacement algorithm.
20. Discuss about various disk scheduling algorithms.

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7BCE5C2

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Computer Science

RELATIONAL DATABASE MANAGEMENT SYSTEMS

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Database Management System.
2. List the different types of database users.
3. What are functional dependencies?
4. Define function closure (F^+).
5. Why we need client-server architecture?
6. Define intraquery parallelism.
7. Define schema.
8. What is data integrity?
9. What is PL/SQL?
10. Give the basic structure of PL/SQL block.

Part B

(5 × 5 = 25)

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

11. (a) Write a short note on object based and semi-structured database.

Or

- (b) Explain in brief about database system applications.

12. (a) Discuss the features of good relational design.

Or

- (b) Write a short note on modelling temporal database.

13. (a) Explain in brief about distributed databases.

Or

- (b) Compare and contrast parallel system and distributed system.

14. (a) What are views and explain its types in brief?

Or

- (b) Explain user privileges and roles in RDBMS.

15. (a) Explain how will you create triggers and its benefits?

Or

- (b) How will you create stored procedures in PL/SQL?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss in detail about components of DBMS with neat diagram.

17. Describe various normal forms in detail with example.

18. Describe in detail about distributed data storage.
 19. Explain how tables are created and maintained and also discuss about indexes.
 20. Write a short note on PL/SQL transaction and packages.
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Sub. Code

7BCEE1A

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Computer Science

**ELECTIVE — DATA MINING AND DATA
WAREHOUSING**

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define data format
2. What is Front Room Meta data?
3. What is a process?
4. What are the merits of using data warehousing tools?
5. What is the scope of data mining?
6. Name any two data mining techniques
7. Where is decision trees mainly used?
8. What are the uses of statistics in data mining?
9. Mention any two approaches to mining Multilevel Association Rules.
10. What is called Antecedent?

Part B

(5 × 5 = 25)

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

11. (a) What are the characteristics of data warehouse?
Or
(b) What is the role of “Extract and Load process” in data warehousing?
12. (a) Write a short note on the role of Query Manager.
Or
(b) Differentiate between Fixed Queries and Ad Hoc Queries
13. (a) What are the steps involved in Knowledge Discovery in Database (KDD) process?
Or
(b) List out Data mining metrics.
14. (a) Explain the various OLAP operations.
Or
(b) What is the purpose of defuzzification? Name at least one method used for defuzzification.
15. (a) Make a short note on Association rules based on the levels of abstractions.
Or
(b) Why is data quality so important in a data warehouse environment?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss the components of Data warehouse.
17. What are the difficulties in Data Warehouse Tuning? List the objective measures of performance in Tuning

18. Explain different task involved in building a data mining database.
 19. Briefly discuss on Decision tree with an appropriate example.
 20. Discuss the concepts of frequent itemset, support and confidence
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7BCEE1B

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Computer Science

Elective – WEB DESIGN

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Give the tag you used to delete (strikeout) the text?
2. Why we use anchor tag?
3. What are inline elements?
4. What is CSS box model?
5. Write the java script for the calculation 3 power 4.
6. How will you represent the string “You are Supreme Don’t compare with others” in java script?
7. Write the scope rules of java script?
8. How will you calculate string length in java script?
9. What is mean by XML namespace?
10. How will you find HTML element by Id in DOM?

Part B

(5 × 5 = 25)

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

11. (a) Explain with code the list tag and its types.
Or
(b) Describe the importance of metatag and horizontal rule tag with code.
12. (a) Write a short on CSS padding.
Or
(b) Describe about CSS overflow.
13. (a) Discuss about loops in java script with example.
Or
(b) Write about the logical operators in java script with appropriate code.
14. (a) Write a short note on date object in java script.
Or
(b) Explain in detail about java script window object.
15. (a) Write a html code which on mouse over change the colour of the button.
Or
(b) Explain in detail about XML document type definitions.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write HTML code to draw a table as shown below:

Firstname	Lastname	Age
Priya	Sharma	24
Arun	Singh	32
Sam	Watson	41

17. Explain how will you create CSS file and how will you resolve conflict in it?
 18. Explain about assignment operators, increment and decrement operator and logical operators in java script.
 19. Discuss in detail about Boolean, number and document object in java script.
 20. Discuss in detail the html DOM trees of objects
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Sub. Code

7BCEE2A

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Computer Science

Elective – DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Convert the $(1234)_{10}$ to binary.
2. Convert FFFF into decimal number.
3. Give the truth table of NOR gate.
4. State DeMorgan's theorem.
5. Define half-adder.
6. Find 2's complement of binary number 10001.001.
7. What is opcode?
8. What is the purpose of program counter?
9. Define auxiliary memory.
10. Expand CISC and RISC.

Part B

(5 × 5 = 25)

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

11. (a) Explain in brief about the steps for converting binary into gray code.

Or

- (b) Convert decimal number 23 and decimal number 15.46 to Excess-3 code.

12. (a) State and explain duality and complementary theorem in detail.

Or

- (b) Explain Karnaugh map, pairs, quads and octets in brief.

13. (a) Do the following using 2's complement

(i) Add 125 and -26

(ii) Add -59 and 30

Or

- (b) Explain full adder with truth table.

14. (a) Explain various addressing modes in brief.

Or

- (b) Describe in detail about all computer instruction code format.

15. (a) Discuss in detail the components of Central Processing Unit.

Or

- (b) Describe the characteristic of RISC.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Why NAND and NOR gate are said to be universal gates? Explain.
17. Simplify the following using K-map method. Draw the simplified logic circuit
$$F(A,B,C,D) = \sum_m (1,2,3,4,5,6,7,8,11,12,13,14)$$
18. Explain in detail about binary adder and subtractor.
19. Explain the various phases that CPU performs to execute each instruction.
20. Write a short notes on stack based CPU organization.

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7BCEE2B

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Computer Science

**Elective – MICROPROCESSOR AND
MICROCONTROLLER**

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Macros.
2. What is meant by Stacks?
3. How many groups in 8086 signals?
4. What is the Bit rate and Clock rate for the 8086?
5. Expand, (a) LED (b) LCD.
6. Give a note on A/D interface.
7. What are the Registers of 8051?
8. Give the features of 8051.
9. Define ADC.
10. What is meant by Stepper Motor?

Part B

(5 × 5 = 25)

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

11. (a) Describe the Assembly Language Programming in 8086.

Or

- (b) Explain the Addressing modes in 8086.

12. (a) Give a short note on System Bus Timing in 8086.

Or

- (b) What is Multiprogramming in 8086? Explain it.

13. (a) How Traffic Light control Works? Explain in Detail.

Or

- (b) Distinguish between LCD Display and LED Display.

14. (a) Draw and Explain the 8051 Architecture.

Or

- (b) Describe the I/O Pins Ports and Circuits of 8051.

15. (a) Describe the Serial Port Programming.

Or

- (b) Explain the External Memory Interface.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe the Interrupts and Interrupt service routines 8086.

17. Explain the System Design using 8086.

18. Narrate the Serial Communication and Parallel Communication Interfaces.
 19. Describe the SFRs.
 20. Illustrate the Sensor Interfacing.
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Sub. Code

7BCE6C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Sixth Semester

Computer Science

COMPUTER NETWORKS

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. List any two uses of computer networks
2. Name any two software used in networking
3. What are all the functionalities of the physical layer?
4. Differentiate circuit and packet switching.
5. Why we need transport layer?
6. Write short note on Ethernet?
7. Assume that source S and destination D are connected through two intermediate routers labeled R. Determine how many times each packet has to visit the network layer and the data link layer during a transmission from S to D.
8. What are the services provided by the transport layer?
9. What is DNS?
10. Define public key cryptographic algorithm.

Part B

(5 × 5 = 25)

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

11. (a) Write a short note on metropolitan area networks.

Or

- (b) Discuss wireless networks and its type in brief.

12. (a) What are all the three major class of guided media? Explain.

Or

- (b) Explain different types of transmission media used in data communications.

13. (a) Briefly explain the functions of data link layer.

Or

- (b) Elucidate the various error detecting and correcting methods.

14. (a) Differentiate adaptive and non-adaptive routing algorithms.

Or

- (b) Explain the services that are provided by network layer.

15. (a) Describe four general category of attacks.

Or

- (b) Describe DNS in brief.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Draw a neat diagram for OSI reference model and explain it in detail.
17. Discuss in detail about wireless transmission and its types
18. Explain sliding window protocol with neat diagram.
19. Discuss in detail IP protocol.
20. Write a short notes on world wide web architecture.

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Sub. Code

7BCE6C2

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Sixth Semester

Computer Science

COMPUTER GRAPHICS

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is called Geometry?
2. What is meant by Frame Buffer?
3. Write any two Display Devices.
4. What is called Polygon?.
5. Write an importance for Cos Rotation
6. How does we rename a segment?
7. What is meant by Arbitrary Line?
8. Define Clipping.
9. Write any two Graphics related Output Device.
10. What is called Attribute?

Part B

(5 × 5 = 25)

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

11. (a) Brief Vector Generation.

Or

- (b) Discuss the Antialiasing of Lines.

12. (a) Discuss the features of Line Style.

Or

- (b) Discuss Polygon Interfacing Algorithm.

13. (a) Discuss the working of Scaling Transformation.

Or

- (b) Describe about Raster scan displays.

14. (a) Brief about Polygon surfaces.

Or

- (b) Discuss Cohen Sutherland Algorithm.

15. (a) Bring out the importance of Event Handling.

Or

- (b) What is called Echoing? Write its benefits in Computer Graphics.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write a note on scalar, point, vectors with a neat illustration.

17. Describe the representation of Polygon in detail.

18. Explain scaling rotation and translation with example.
 19. Explain in detail about multiple windowing programming problem.
 20. Mention the characteristics of Interactive Techniques with a suitable illustration.
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Sub. Code

7BCE6C3

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Sixth Semester

Computer Science

SOFTWARE ENGINEERING

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define software.
2. What is a solution strategy? How to choose a solution strategy?
3. What are the factors that influence software cost?
4. What are algebraic axioms?
5. Define modularization.
6. How do walkthroughs differ from inspections?
7. What is meant by validation?
8. What is debugging?
9. What is meant by software maintenance?
10. State the need for change control in software.

Part B

(5 × 5 = 25)

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

11. (a) Explain the nature of medium size projects and give examples for medium size projects.

Or

- (b) Discuss the factors to be considered in project planning.

12. (a) Describe the elements of a software requirements specification.

Or

- (b) Explain the techniques for estimating software maintenance costs.

13. (a) Explain the features of Jackson Structured Programming.

Or

- (b) Describe the guidelines for software design.

14. (a) Discuss the coding style to be adopted in software development.

Or

- (b) Explain the software quality assurance activities.

15. (a) Explain the approach to enhance maintainability.

Or

- (b) Describe the source code metrics in software projects.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe the milestones, documents and reviews in phased life cycle model.
 17. Explain the software cost estimation techniques.
 18. Discuss the concepts and notations used in software design.
 19. Describe the methods for unit testing.
 20. Explain the activities in configuration management.
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Sub. Code

7BCEE3A

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Sixth Semester

Computer Science

Elective – VB.NET AND ASP.NET PROGRAMMING

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is CLR?
2. What is an exception? Give an example for structured exception handling.
3. State the difference between check boxes and radio buttons.
4. What are toolbars and tool tips?
5. Define polymorphism.
6. What is the purpose of Pen class?
7. What is the role of rich controls in ASP.NET applications?
8. What are namespaces?
9. What is meant by data binding?
10. What the general syntax of SQL select statement?

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the conditional statements in VB.NET with syntax and examples.

Or

- (b) Describe the features of VB.NET.

12. (a) Explain the role and properties of Treeview and Listview controls.

Or

- (b) Explain the properties, events for text boxes and list boxes.

13. (a) Describe the functionality and use of Brush class.

Or

- (b) Explain the concept of inheritance with examples.

14. (a) Discuss the file types in ASP.NET.

Or

- (b) Explain the HTML controls in ASP.NET.

15. (a) Explain the features of ADO.NET object model.

Or

- (b) Explain single value data binding with example.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe procedures and functions with syntax and examples.
 17. Explain the steps to create Menus and add menu items with examples.
 18. Explain the file stream class and describe how it can be used to write contents in a file.
 19. Describe the steps in creating list controls and rich controls.
 20. Explain database programming with suitable SQL statements and ADO.NET.
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Sub. Code

7BCEE3B

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Sixth Semester

Computer Science

**ELECTIVE — PROGRAMMING WITH LINUX, APACHE,
MYSQL AND PHP (LAMP)**

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define constant
2. What is a browser?
3. What is the use of strpos() function?
4. What is the purpose of \$_PHP_SELF?
5. Expand HTML and give the extension for an HTML file
6. Give the syntax for generating Text box control in HTML
7. Why open() function is used?
8. What is a directory?
9. Write the necessity of “order by” clause in MySQL.
10. How can we get hour of the current time using date function?

Part B

(5 × 5 = 25)

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

11. (a) What is the difference between “echo” and “print” in PHP?

Or

- (b) Consider the following variables :

```
$var1 = 'Welcome to';
```

```
$var2 = 'Tamil nadu';
```

Which of the following two sample codes to combine those variable will execute faster? Explain it,

Code sample 1:

```
$var3 = $var1.$var2;
```

Code sample 2:

```
$var3 = "$var1$var2";
```

12. (a) What is the difference between the functions unlink and unset?

Or

- (b) What type of inheritance that PHP supports?

13. (a) In `` what is the meaning of #00ff00?

Or

- (b) What is a session? Write a PHP program to demonstrate the session.

14. (a) Write short notes on include() function with an example.

Or

- (b) Write short notes on require() function with an example.

15. (a) List out the benefits of using PHP and MySQL.

Or

(b) Give the syntax to create a database in MySQL using PHP. Give example.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the Following

(a) State Apache

(b) Linux and Windows

(c) PHP

17. Summarize in brief about arrays in PHP with suitable examples

18. What is a cookie? Briefly discuss on the two types of cookies with appropriate examples

19. Write a PHP program to read a text file line by line and display it on screen.

20. Write short notes on the following with respect to MySQL and explain with PHP program.

(a) “Insert”,

(b) “Update”

(c) “Modify”