

F-1150

Sub. Code

7BCE1C1

B.Sc. DEGREE EXAMINATION, APRIL 2024

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 is under flow of data in C?
2. How will you declare variables as constants? Give syntax.
3. What is the difference between while loop and do-while loop in C?
4. What is the structure of switch statement?
5. What are the advantages of using array?
6. Give the syntax of two-dimensional float array in C?
7. Define Unions?
8. What is multi-functions in C?
9. How will you initialize pointer variables?
10. Give the syntax of how will you open file in C?

Part B

(5 × 5 = 25)

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

11. (a) Explain in brief about how expressions are evaluated in C.

Or

- (b) Elucidate in detail about various data types in C?

12. (a) Write a short note on formatted input and output?

Or

- (b) Write a C Program using for loop to calculate sum of numbers from 1 to 10.

13. (a) Explain any three-string handling functions in detail.

Or

- (b) Write a C program to get ten float numbers as input in array and calculate the product of these ten float numbers?

14. (a) What is recursion function? Explain recursion in C using factorial program.

Or

- (b) How will you pass array to a function? Explain.

15. (a) Describe about pointer increment and scale factors?

Or

- (b) Explain various error handling operation in File IO?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write a C Program which takes two floating number as inputs and do all the arithmetic operations on the input numbers? All the arithmetic operations should be in the form of functions.
17. Write a C program using both while and do-while loop to print series 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.
18. Explain in detail about dynamic arrays including its initialization.
19. Explain structures within structures in detail with appropriate C program?
20. Write a C program to create a file, read content in the file and to write content to a file.

F-1151

Sub. Code

7BCE2C1

B.Sc. DEGREE EXAMINATION, APRIL 2024.

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. Give any two example of derived data types in C++
2. Define inline functions
3. Why we need destructors in C++?
4. Define copy constructors.
5. Define operating overloading
6. Define virtual base class.
7. What is stream class?
8. List the manipulators defined by the IOstream library.
9. Give the significance of put and get functions in file handling?
10. How end of file is detected?

Part B

(5 × 5 = 25)

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

11. (a) Explain the structure of C++ program In detail.

Or

- (b) Discuss about various operators in C++

12. (a) How objects are passed as arguments to a function? Discuss.

Or

- (b) Explain the significance of having multiple constructors in a class.

13. (a) How the constructors and destructors behave in inheritance? Discuss.

Or

- (b) Write a short note on nesting of classes.

14. (a) Discuss in detail about C++ stream class.

Or

- (b) Describe about unformatted I/O operations.

15. (a) Discuss in brief about sequential input and output operations.

Or

- (b) Explain the classes of file stream operation in brief.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss the features of Object-Oriented Programming with its applications.
 17. Write a short note on the following with a program:
 - (a) Static member function
 - (b) Dynamic initialization of objects
 18. Explain in detail about the overloading of binary operators using friend function with a program.
 19. Discuss in detail about pure virtual function with suitable code.
 20. Explain in detail with code about file pointers and its manipulations.
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Sub. Code

7BCE3C1

B.Sc. DEGREE EXAMINATION, APRIL 2024.

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. Why we need data structures?
2. List the limitations of using array as data structures.
3. What is overflow in a stack?
4. Define ADT stack.
5. Define binary tree.
6. What is expression tree?
7. Define algorithm.
8. If the numbers are already in ascending order, which sorting algorithms will be efficient for sorting?
9. Define dynamic problem.
10. What is the solution for optimal storage on tapes?

Part B

(5 × 5 = 25)

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

11. (a) How will you traverse a linked list? Give algorithm for the same.

Or

- (b) Write a short note on special type of matrices.

12. (a) Discuss in detail about operations of stack with suitable algorithms.

Or

- (b) How stack can be implemented in linked list? Explain.

13. (a) Explain in detail about threaded trees.

Or

- (b) What are the various traversal methods available in free? Explain.

14. (a) Write a short note on algorithm specification.

Or

- (b) Explain the selection sort algorithm in detail.

15. (a) Explain in detail about Knapsack problem.

Or

- (b) Discuss about Prims algorithm in detail.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain in detail about insert, delete and traversing a doubly linked list with suitable algorithms for each?
 17. Discuss in detail about linked list as queue.
 18. Discuss the recursive procedures for tree traversal.
 19. Explain in detail how quick sort algorithm works? Sort the following numbers 45,21,20,43,65,72,6 52,49 using quick sort.
 20. Explain in brief about the dynamic problem of all pairs of shortest path and single source shortest path.
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F-1153

Sub. Code

7BCE4C1

B.Sc. DEGREE EXAMINATION, APRIL 2024

Fourth Semester

Computer Science

JAVA PROGRAMMING

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define tokens in Java.
2. What is type casting in Java?
3. What is ternary operator?
4. Give the operator precedence in java.
5. What is the purpose of final variables?
6. Define abstract methods in Java.
7. Why we need priority in threads?
8. Give the syntax of the thread exception handling code.
9. Give the steps involved in developing and testing the applet?
10. What method is called to clear the screen and calls the paint() method?

Part B

(5 × 5 = 25)

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

11. (a) Discuss the structure of Java program.

Or

- (b) Elaborate on various features of Java.

12. (a) Discuss on switch case in Java with a program?

Or

- (b) Write a Java program using do-while loop to find factorial of a number.

13. (a) Write a short note on abstract class in Java?

Or

- (b) How interface helps in multiple inheritance? Explain.

14. (a) How a class is added to the package? Discuss.

Or

- (b) How errors and exceptions are handled in Java? Discuss.

15. (a) How in applet the inputs are obtained from users? Explain.

Or

- (b) Write a Java program to draw circle using Graphics class.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe the following:
 - (a) Java and Internet with its features.
 - (b) Why Java is called as platform independent language? Discuss
17. Explain various control structures in Java with appropriate code?
18. Write a short note on wrapper class and how multiple inheritance is carried out using interfaces.
19. How own exceptions are thrown in Java? Explain. Write a short note on 'Runnable' Interfaces.
20. Write a Java program with Graphics class for drawing bar charts.

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Sub. Code

7BCE5C1

B.Sc. DEGREE EXAMINATION, APRIL 2024

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 is an Operating System?
2. Define Interrupt?
3. Define mutual exclusion.
4. What is semaphore?
5. What is deadlock?
6. Why we need process scheduling algorithms?
7. Why we need memory management in operating system?
8. Define paging.
9. List the strategies of disk scheduling?
10. Define file access control.

Part B

(5 × 5 = 25)

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

11. (a) Describe in detail the components of operating system.

Or

- (b) With diagram explain different state of process.

12. (a) Describe in detail the hardware solution to the mutual exclusion problem.

Or

- (b) Discuss in brief about monitors in concurrent programming.

13. (a) Describe four necessary conditions for deadlock.

Or

- (b) Explain round-robin scheduling algorithm along with its merits and demerits.

14. (a) Describe Contiguous memory management schemes in detail along with pros and cons.

Or

- (b) Explain the concept of virtual memory.

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

Or

- (b) Discuss the characteristics of Moving Head Disk Storage.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain in detail about various Interprocess communications.
 17. Discuss how mutual exclusion can be solved with software solutions.
 18. Explain how deadlock can be avoided using Dijkstra's Bankers algorithm.
 19. Explain the paging in detail with diagram. Discuss its merits and demerits.
 20. Discuss various disk scheduling algorithms in detail.
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F-1155

Sub. Code

7BCE5C2

B.Sc. DEGREE EXAMINATION, APRIL 2024

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. List any six applications of RDBMS.
2. Define Tuple, Attribute and Domain.
3. What is a Relational Model? Give Suitable example.
4. Explain 3NF with suitable examples.
5. What are all the types of Parallel Databases?
6. Define distributed query processing.
7. What is data integrity?
8. What are views in RDBMS?
9. Explain triggers with suitable examples.
10. What is a transaction in RDBMS?

Part B

(5 × 5 = 25)

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

11. (a) Explain in detail about the data storage and querying.

Or

- (b) Write a note on database users and architecture.

12. (a) Explain the concept of decomposition using functional dependencies.

Or

- (b) What is modeling temporal data? Illustrate with examples.

13. (a) Explain in detail about centralized and client-server architecture.

Or

- (b) What is a distributed database? Explain its types in detail.

14. (a) Write a detailed note on creating and maintaining tables.

Or

- (b) Write a detailed note on indexes, sequences and views.

15. (a) Explain in detail about PL/SQL, with an example.

Or

- (b) Explain the concept of packages and cursors with an example.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. What is an E-R Model? Explain in detail about the E-R model and its design.
 17. Explain in detail about database design process and relative NF's.
 18. Write a detailed note on Server system architecture and its types.
 19. Write a note on users privileges and roles.
 20. Explain the concept of stored procedures and functions in RDBMS.
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Sub. Code

7BCEE1A

B.Sc. DEGREE EXAMINATION, APRIL 2024

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. List any FIVE applications of data warehouse.
2. Define warehouse manager.
3. Name the two types of queries in a data warehouse.
4. List the three types of process managers.
5. Define data mining.
6. What is KDD?
7. What is a dimensional modelling?
8. What is a decision tree?
9. What is the basic idea of Apriori algorithm?
10. What is a hash tree?

Part B

(5 × 5 = 25)

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

11. (a) Give a brief account on metadata repository.

Or

- (b) Explain the functions of query management process.

12. (a) Explain the architecture and functions of warehouse manager.

Or

- (b) Explain briefly the approaches of turning data load.

13. (a) List and explain the visualization techniques.

Or

- (b) Explain any FIVE implementation issues with data mining.

14. (a) Explain the structure of neural networks with a diagram.

Or

- (b) Give a brief account on information retrieval.

15. (a) Write a brief note on large itemsets.

Or

- (b) Explain the generalised association rules with examples.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the stages in the delivery process with a diagram.
 17. Explain the **THREE** basic levels of testing performed on data warehouse.
 18. Explain briefly the various data mining functions with examples.
 19. Explain the specialized schemas used for multidimensional data.
 20. Explain the steps in data parallelism algorithm in detail.
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Sub. Code

7BCEE1B

B.Sc. DEGREE EXAMINATION, APRIL 2024.

Fifth Semester

Computer Science

Elective – WEB DESIGN

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. What is HTML? Explain its applications.
2. Define frames in markup language.
3. What is CSS? Explain its applications.
4. Explain the media types in CSS.
5. Explain the “IF” structure in java script.
6. Explain the difference between break and continue statements.
7. What is known as programmer defined functions?
8. Define math objects in java script with examples.
9. What is DOM? Explain the concept of modeling a document.
10. Define structuring data in XML.

Part B

(5 × 5 = 25)

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

11. (a) Explain in detail about the horizontal rules and line breaks in HTML.

Or

- (b) Write a note on lists and its types in HTML.

12. (a) Explain the process of positioning elements and linking external style sheets in CSS.

Or

- (b) Define Box model and text flow in CSS with example.

13. (a) Explain in detail about assignment operators in java script.

Or

- (b) Define switch structure and do/while structure with example.

14. (a) Write a detailed note on scope rules and recursion in java script functions.

Or

- (b) Write a detailed note on declaring and allocating arrays.

15. (a) Explain in detail about traversing and modifying a DOM tree.

Or

- (b) Define event bubbling and other events in DOM.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write a detailed note on below HTML concepts,
 - (a) Text styling
 - (b) Linking and images
 - (c) Formatting text
 - (d) Special Characters
 - (e) Forms in HTML.
17. Define conflicting style and element dimension in CSS with an example.
18. Explain in detail about control structures and logical operators with examples.
19. Write a detailed note on below Javascript arrays and objects,
 - (a) Passing arrays to functions
 - (b) Multiple-subscripted arrays
 - (c) String and date object
 - (d) Boolean and number object
 - (e) Window and document object.
20. Write a detailed note on below DOM and XML concepts,
 - (a) DOM collections and dynamic styles
 - (b) Form processing with onsubmit and onrest
 - (c) XML name spaces and vocabularies
 - (d) Registering event handlers
 - (e) Document type in XML.

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Sub. Code

7BCEE2A

B.Sc. DEGREE EXAMINATION, APRIL 2024

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. Here is an excess-3 number: 0110 1001 1100 0111 what is the decimal equivalent?
2. Write De Morgan's first theorem?
3. Give SOP form of $Y = F(A, B, C, D) = \pi M(O, 3, 4, 5, 6, 7, 11, 15)$.
4. Design a 32-to-1 multiplexer using two 16-to-1 multiplexers and one 2-to-1 multiplexer.
5. Show how to add 150_{10} and 85_{10} with unsigned 8-bit numbers.
6. Write the four rules for binary addition.
7. Define Instruction cycle.
8. What is meant by dynamic micro programming?

9. What is meant by stack pointer?
10. What is meant by locality of reference?

Part B (5 × 5 = 25)

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

11. (a) Convert decimal 65,535 to its hexadecimal and binary equivalents.

Or

- (b) Explain Universal logic gates?

12. (a) Explain duality theorem with example.

Or

- (b) Show how two 1-to-16 demultiplexers can be connected to get a 1-to-32 demultiplexer.

13. (a) Explain the sign magnitude with example.

Or

- (b) Draw and explain a binary half adder. Find out its sum and carry bit outputs.

14. (a) Explain the timing and control units of computer with neat diagram.

Or

- (b) Describe binary micro program.

15. (a) Write short notes of three address instruction.

Or

- (b) Write short notes on Input/output interface.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe the ASCII code and excess-3 code with example.
 17. Explain parity generator and checker.
 18. Explain the 2's complement arithmetic.
 19. Explain the symbolic microinstruction and micro program.
 20. What is meant by main memory? Explain about the concept of memory address map with diagram.
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Sub. Code

7BCEE2B

B.Sc. DEGREE EXAMINATION, APRIL 2024.

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. What is Microprocessor?
2. Define addressing modes.
3. What is meant by multiprogramming?
4. What is IO instruction?
5. Write a brief note on I/O interfacing.
6. What is parallel communication interface?
7. Draw 8051 microcontroller block diagram.
8. Expand SFR.
9. Write a brief note on timers of 8051.
10. What is meant by stepper motor?

Part B

(5 × 5 = 25)

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

11. (a) Explain Modular Programming.
Or
(b) Describe relocation.
12. (a) Write short note on closely coupled configuration.
Or
(b) Explain the basic configurations of 8086.
13. (a) Discuss on keyboard/display controller.
Or
(b) Explain Timer.
14. (a) Describe instruction set in 8051.
Or
(b) Give a short account on addressing mode.
15. (a) Explain ADC and DAC.
Or
(b) Discuss on External memory interfacing in 8051.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe the linking and relocation.
17. Explain the D/A and A/D interface.
18. Narrate the DMA Controller.
19. Describe the Assembly Language Program.
20. Illustrate the Interrupts Programming.

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Sub. Code

7BCE6C1

B.Sc. DEGREE EXAMINATION, APRIL 2024.

Sixth Semester

Computer Science

COMPUTER NETWORKS

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Router.
2. What is meant by TCP/IP?
3. Define Communication in wireless networks.
4. What is PSTN?
5. What is meant by error detection and correction mechanism?
6. Define channel.
7. What is meant by transport services?
8. Define routing.
9. What is DNS?
10. What is meant by encryption and decryption?

Part B

(5 × 5 = 25)

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

11. (a) Write a short note on :

- (i) Routers
- (ii) Repeaters
- (iii) Switches
- (iv) Bridges

Or

(b) Explain about Internet.

12. (a) How does Public Switched Telephone Network works? Explain.

Or

(b) Discuss about mobile telephone system.

13. (a) Briefly explain data link layer.

Or

(b) Write a note on medium access control layer.

14. (a) What are the design issues occurred in network layer protocol? Explain.

Or

(b) Briefly explain elements of transport layer protocol.

15. (a) Explain AES algorithm.

Or

(b) Discuss DSA algorithm with an example.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss in detail about OSI reference model.
 17. Explain in detail about Wireless Transmission and its types with neat diagram.
 18. Describe in detail about multiple access control protocol.
 19. Explain routing algorithms and its types in detail.
 20. Describe symmetric key algorithms and its functionalities with suitable example.
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Sub. Code

7BCE6C2

B.Sc. DEGREE EXAMINATION, APRIL 2024.

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 bitmap and what is pixmap?
2. Define Line and Circle.
3. Define Aspect Ratio.
4. Distinguish between convex and concave polygons.
5. What is fixed point scaling?
6. Define B-Spline curve.
7. How will you clip a point?
8. Define Arbitrary Line.
9. What is interactive computer Graphics?
10. Define Event Handler.

Part B

(5 × 5 = 25)

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

11. (a) Enlist the applications of computer graphics and explain.

Or

- (b) Explain Mid Point Algorithm with an example.

12. (a) Define Display Processor. Explain.

Or

- (b) What are the polygon classifications? How to identify a convex polygon? Illustrate how to split a concave polygon.

13. (a) What is 3D Transformation in Computer Graphics? Explain.

Or

- (b) Write a short note on Creation, Closing, Renaming and Deleting a segments with suitable example.

14. (a) Explain the process of region code / out code generation in Cohen-Sutherland line clipping algorithm.

Or

- (b) Write a Short note on viewing transformation with example.

15. (a) What is computer graphics? Explain Interactive and Non-interactive in computer graphics.

Or

- (b) Write a short note on
- (i) Input Devices
 - (ii) Physical Devices
 - (iii) Logical Devices.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss in detail about Line Drawing algorithm with suitable example.
17. Describe and explain different polygon formats.
18. Given a triangle with coordinate points $A (3, 4)$, $B (6, 4)$, $C (5, 6)$. Apply the reflection on the X axis and obtain the new coordinates of the object.
19. Discuss in detail about Computer Graphics Window.
20. Explain in detail about Interactive Techniques and its types with suitable example.

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Sub. Code

7BCE6C3

B.Sc. DEGREE EXAMINATION, APRIL 2024.

Sixth Semester

Computer Science

SOFTWARE ENGINEERING

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Describe the phases of SDLC.
2. List the characteristics of a software.
3. What is meant by system requirements?
4. List the principles of a software design.
5. How do you estimate time required for a software development project?
6. List out various software metrics available for coding.
7. What is meant by good quality software?
8. List out Software Quality Assurance activities.
9. State the importance of scheduling activity in Project management.
10. Define maintenance. What are the types of software maintenance?

Part B

(5 × 5 = 25)

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

11. (a) Explain about evaluation of software engineering methodologies.

Or

- (b) Discuss the Waterfall model with a suitable diagram. Give its merits and demerits.

12. (a) Write a short note on Structured analysis.

Or

- (b) Explain briefly about requirements validation.

13. (a) Write the steps to calculate Cyclometric complexity and illustrate with an example.

Or

- (b) Explain the principles of testing software systems.

14. (a) Discuss about the COCOMO model for software estimation.

Or

- (b) Discuss about the software metrics for small organizations.

15. (a) List and explain the various software quality factors.

Or

- (b) What is software maintenance? Explain in detail.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Elaborate on the evolution of software. Give the comparison of software and software system product.
 17. Explain the software requirement analysis and modeling in detail.
 18. Write a short on structured design methodology with examples.
 19. Discuss how the testing models may be used together to test a program schedule.
 20. What are the objectives of software Maintenance? Explain in detail maintenance metrics.
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F-1163

Sub. Code

7BCEE3A

B.Sc. DEGREE EXAMINATION, APRIL 2024

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 .NET?
2. What are special and bitwise operator?
3. What is the purpose of VB.NET Rich text box?
4. State the need of List View control.
5. What is a Dataset Object?
6. Define polymorphism.
7. What do you mean by Rich Controls? Give one example each.
8. What is a HTML Form?
9. Write the query for SQL select statement with example.
10. What is meant by value data binding?

Part B

(5 × 5 = 25)

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

11. (a) Discuss various data types in VB.Net.

Or

- (b) Explain Scope with suitable levels.

12. (a) Describe the importance of checked List box with examples.

Or

- (b) Write about the status and Progressive bars with suitable examples.

13. (a) Explain the Graphics class with example.

Or

- (b) Discuss the File mode enumeration.

14. (a) Discuss at least three request objects in ASP.NET.

Or

- (b) Discuss the Repeater with example.

15. (a) Illustrate the design of ADO.Net object model.

Or

- (b) Explain SQL Insert, Delete and Update statement.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Illustrate the difference between structure and unstructured Exception Classes in VB.Net.
 17. Explain the menus in VB.NET.
 18. What is meant by Inheritance and explain its types?
 19. Write a program in ASP.NET to demonstrate use of Buttons in a Webform.
 20. Elaborate the data management of ADO.Net.
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Sub. Code

7BCEE3B

B.Sc. DEGREE EXAMINATION, APRIL 2024

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. Distinguish between static and dynamic websites.
2. Define 'NULL' in PHP.
3. List the two types of functions available in PHP.
4. What does 'strpos' function does in PHP?
5. What PHP function is used to determine a file's last access time?
6. In PHP how will you check whether cookie is enabled?
7. Give the steps of appending a file in PHP.
8. What does the fopen function does?
9. What do you mean by % and _ in the LIKE statement?
10. What is the difference between the LIKE and REGEXP operators?

Part B

(5 × 5 = 25)

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

11. (a) Explain on the statement “PHP is loosely typed language”.

Or

- (b) Describe in detail about for-each loop in PHP.

12. (a) Write a short note on date and time function in PHP.

Or

- (b) How will you test the existence of function in PHP?

13. (a) How sessions are handled in PHP? Give a code snippet.

Or

- (b) How PHP send emails on form submission? Explain.

14. (a) Write a short note on Image creation process in PHP.

Or

- (b) How Pie charts can be created by PHP? Explain.

15. (a) Explain about Date and Time functions in MySQL?

Or

- (b) Describe in detail about any five MySQL functions.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain about various operators and expressions in PHP with appropriate code.
 17. Describe in detail about various aspects of function in PHP with suitable code.
 18. Elaborate on accessing form input with user defined arrays with suitable codes.
 19. How will you draw pie charts in PHP? Explain with code.
 20. Discuss in detail about various MySQL data types with suitable examples.
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