A–10103

Sub. Code
4BCA1C1

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

First Semester

PROGRAMMING IN C

(CBCS – 2014 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define variable.
2. List out the primary data type.
3. What is string?
4. Differentiate between strcpy( ) and strncpy( ).
5. What is recursion function?
6. Give one example for nested structure.
7. Define pointer.
8. How the pointer increment works?
9. Give the syntax for open a file.
10. What is pre-processor?

Part B (5 × 5 = 25)

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

11. (a) Explain the if-else statements with example.

Or

(b) Discuss the switch case statement with suitable example.

12. (a) How the one dimensional array is initialized?

Or

(b) Write a program to copy the content of one string into another string.

13. (a) Discuss the nested function with example.

Or

(b) Write short notes on structure within structure

14. (a) How the pointer initialize and access a variable?

Or

(b) Explain with example for evaluating the pointer expression.

15. (a) Discuss the error handling function during I/O operation.

Or

(b) Explain the concepts of preprocessor.

Part C (3× 10 = 30)

Answer any **three** questions.

16. Explain any two loops with suitable example.

17. List out string handling functions. Discuss any six string handling function with example.

18. Discuss the concept of structure with suitable example.

19. Examine the relationship between pointer and array.

20. A file named DATA contains a series of integer numbers. Write a program to read these numbers and then write all `odd' numbers to a file called ODD all `even' numbers to a file called EVEN.

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A–10104	Sub. Code
	4BCA2C1

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Second Semester

Computer Applications

PROGRAMMING IN C++

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Give any two special features of C++ over C.

2. What is the use of cast operator?

3. Define Object.

4. What is destructor?

5. What is the difference between multiple and multi-level inheritance?

6. What is virtual function?

7. How can you set the various flags in the I/O class?

8. Mention the various file mode options available in C++.

9. Why do we use templates in C++?

10. What is exception handling?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the switch statement with an example.

Or

(b) Describe the bitwise operators available in C++.

12. (a) How classes are declared in C++? Explain.

Or

(b) Can objects appear as function arguments? Illustrate this with an example.

13. (a) Illustrate the use of pointers for object reference with an example program.

Or

(b) Describe the various console I/O operations in C++.

14. (a) Write a program to count the number of words in a file.

Or

(b) Describe any three functions that are used in random file operation.

15. (a) Explain the user defined template with an example.

Or

(b) How constructors are used in exception handling.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe the loop structures available in C++.

17. Create a class MAT of size $m \times n$. Define all possible matrix operations for MAT type objects.

18. Write a program to overload the + operator to provide string addition.

19. Discuss the various classes available for file operations.

20. Read 20 marks and store in an array. Define your own exception when marks are < 0 or marks are > 100.

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A–10105	Sub. Code
	4BCA3C1

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Third Semester

Computer Applications

DATABASE MANAGEMENT SYSTEMS

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write down the applications of Database system.
2. What is schema?
3. What is known as atomic domain?
4. Define Decomposition.
5. What is the usage of parallel systems?
6. What is meant by data transparency?
7. How to join two tables together?
8. What is a sequence?
9. Define Trigger.
10. Write the character set of PL/SQL.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) What a brief note on database languages.

Or

(b) Discuss shortly on database users and Administrators.

12. (a) Explain the various features of good relational designs.

Or

(b) Give a not eon BCNF.

13. (a) Differentiate Homogeneous and Heterogeneous databases.

Or

(b) Explain briefly about Parallel databases.

14. (a) Write a short note on Indexes.

Or

(b) Discuss with syntax and example about select command.

15. (a) Write an example to combine trigger types.

Or

(b) Discuss about the transaction management declaration and control.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Write a detailed note on E-R model.

17. Discuss in detail on database design process.

18. Describe the architecture of database system.

19. Give a detailed note on user privileges and roles.

20. Explain in detail about PL//SQL components.

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A–10106

Sub. Code
4BCA4C1

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Fourth Semester

Computer Applications

JAVA PROGRAMMING

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Polymorphism.
2. What is JDK?
3. Write the usage of conditional operator.
4. How to jump out of a loop?
5. What is meant by method overloading?
6. Define an array.
7. What is synchronization?
8. How to access a package?
9. What are local and Remote Applets?
10. How to use control loops in Applet?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss about the various web browsers.

Or

(b) Write a note on the types of constants.

12. (a) Describe the Arithmetic operators available in Java.

Or

(b) Write an example program in java using the switch statement.

13. (a) Write an example program to illustrate the usage of interfaces.

Or

(b) Give a brief note on string methods and string Buffer class.

14. (a) Discuss about the syntax of exception handling code.

Or

(b) Write a brief note on Thread Exceptions and Priority.

15. (a) How to design a web page? Explain it briefly?

Or

(b) Write a program in Java to draw lines.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the basic concepts of object-oriented programming.

17. Discuss the various forms of if statement with its syntax.

18. Write a program in Java to show the usage of classes.

19. Explain with a suitable example to create and use a package.

20. Describe the life cycle of an Applet.

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A–10107	Sub. Code
	4BCA5C1

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Fifth Semester

Computer Application

VISUAL PROGRAMMING

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all the** questions.

1. List out various data types used in VB.
2. Write a syntax to declare function.
3. How to rearranging items in menu system?
4. Identify any four standard shortcut keys in a program menu.
5. Write short notes on text box control,
6. Distinguish between option button and check box.
7. Why ADODC control is necessary for Database connectivity?
8. Write note on Database programming With Visual Basics.
9. What are the Active X controls?
10. What are OLE controls?

Part B (5 × 5 = 25)

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

11. (a) Explain different Do Loops used in VB with syntax.

Or

(b) Describe with example about if-then, select case, looping statements.

12. (a) Discuss in detail about modifying and deleting menu items.

Or

(b) What is MDI forms? Explain how to handle MDI forms and MDI child menus.

13. (a) What is a Combo box? List its properties and methods.

Or

(b) Depict in detail about frame control.

14. (a) Explain DAO (Data Access Object).

Or

(b) Write a program to update database with the help of VB form. The Form contains the name of Employee, his date of birth, total pay, total deduction and his home address.

15. (a) Write in detail how OLE embedded components and containers are used in windows programming.

Or

(b) How to handle multiple OLE objects using OLE control arrays?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. (a) Explain while-wend, Nested Control Statements. (5)

    (b) Explain any five string operations in VB. (5)

17. Explain the steps involved in creation of menus and controls in a VB project.

18. Write program to change back color of a shape using timer control.

19. Implement the VB program to maintain the employee information using MS ACCESS and ADODC control (empno, enalne, dept-no, salary, HRA, TA, DA and net salary).

20. Describe in detail about inserting and deleting an OLE object into an OLE control at runtime.

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A–10108	Sub. Code
	4BCA5C2

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Fifth Semester

COMPUTER SYSTEM ARCHITECTURE AND DESIGN

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all the** questions.

1. Convert the binary numbers to decimal: 101110,1110101.
2. What is instruction cycle?
3. What is an interrupt?
4. What is compiler in program loops?
5. Mention the major components of CPU.
6. What are the most common fields found in instruction formats?
7. What is the difference between isolated I/O and memory-mapped I/O?
8. Data may be fixed-point and floating-point form. What is it means?
9. Define hit ratio in cache memory.
10. What is multiprocessors and its advantages?

Part B (5 × 5 = 25)

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

11. (a) Explain about three-state bus buffers.

Or

(b) Briefly describe the functions of computer registers.

12. (a) Draw a flowchart for interrupt cycle.

Or

(b) Write a short notes on subroutines.

13. (a) Explain one, two and three address instructions in instruction formats with example.

Or

(b) Discuss the major characteristics of RISC.

14. (a) Illustrate daisy-chaining priority interrupt.

Or

(b) Discuss the CPU-lOP communication in detail.

15. (a) Explain memory hierarchy with the help of block diagram.

Or

(b) Explain the relation between address and memory space in a virtual memory system.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Describe about one stage of arithmetic logic shift unit with neat diagram.

17. Explain first pass of assembler with neat flow diagram.

18. State different addressing modes with examples.

19. Discuss Booth multiplication algorithm.

20. Explain the working of cache memory.

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A–10109

Sub. Code
4BCAE1A

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Fifth Semester

Computer Applications

Elective – WEB DESIGN TECHNOLOGY

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is known as Internal Linking?
2. What are DTD elements?
3. Give any four keywords of Java Script.
4. Define Array.
5. Write the purpose of while statement.
6. What is the purpose of ( ) operator in function?
7. Write an example for function expression.
8. How to use an object Literal?
9. What are the concatenation operators used in VB script?
10. How to declare variables in VB script?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss in brief about the HTML page structure.

Or

(b) Write a HTML document to illustrate the usage of Paragraphs and Text formatting.

12. (a) Write a short note on multiscripted array.

Or

(b) How to enable Javascript in Internet Explorer? Explain in brief.

13. (a) Write a program in Javascript to illustrate the usage of Switch statement.

Or

(b) How the functions are used as variable values?

14. (a) How to define and declare a function? Explain with an example.

Or

(b) Give a short note on Javascript primitives.

15. (a) Discuss the usage of MsgBox functions with examples.

Or

(b) Write the syntax of the following string functions :

(i) Lcase

(ii) Ucase

(iii) Len

(iv) Str Reverse.

Part C

$(3 \times 10 = 30)$

Answer any **three** questions.

16. Explain with suitable example about embedding images and its attributes in HTML.

17. Write a detailed note on the elements of Javascript.

18. Write a program in Javascript to find the factorial of given number.

19. Discuss the various Math objects used in Javascript with its syntax.

20. Describe the various datatypes used in VB Script.

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A–10110	Sub. Code
	4BCAE1B

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Fifth Semester

Computer Application

Elective — MOBILE COMMUNICATIONS

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is meant by diversity combining?

2. What is free space loss?

3. What is frequency reuse?

4. Identify the main advantage of spread spectrum.

5. List out the disadvantages of WLANs.

6. Draw the protocol architecture of Wireless ATM.

7. What is the role of Foreign Agent(FA)?

8. Find the advantages of M-TCP.

9. Why mobile system uses weak consistency model for file system?

10. What are modes used in Mio-NFS?

Part B (5 × 5 = 25)

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

11. (a) Explain in detail about multipath propagation.

Or

(b) Classify advantage and disadvantages of cellular systems with small cells.

12. (a) Summarize in detail about carrier sense multiple access.

Or

(b) Identify the numbers needed to locate an MS and to address the MS.

13. (a) Categorizes the wireless ATM service in detail.

Or

(b) Illustrate about Bluetooth security components and protocols with neat diagram.

14. (a) Discuss in detail about registration of a mobile node via Foreign Agent or directly with the Home Agent.

Or

(b) Explain transmission/time-out freezing in detail.

15. (a) Describe the basic features of WML.

Or

(b) Categorizes the improvements offered by HTTP version 1.1.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss in detail about frequency hopping spread spectrum with neat diagram of FHSS transmitter and receiver.

17. Depict in details about mobile services with necessary diagrams.

18. Explain in detail IEEE 802.11 MAC layer structure.

19. Illustrate in detail about the basic architecture of HAWAII with neat diagram.

20. With neat diagram describe in detail about WAP architecture.

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A–10111	Sub. Code
	4BCAE2A

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Fifth Semester

Computer Applications

Elective — COMPUTER GRAPHICS

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all the** questions.

1. Mention any four of Graphics system software.

2. Write the two drawbacks of DDA algorithm.

3. What is composite transformation?

4. Write the Matrix representation of 2D Rotation in clockwise and anticlockwise.

5. What is Aspect Ratio?

6. Write the types of clipping?

7. Define: Parallel Projection

8. What is 3D scaling?

9. Write the necessity of user interface.

10. List different interaction styles.

Part B (5 × 5 = 25)

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

11. (a) Write algorithm for line using DDA method.

Or

(b) Differentiate between raster scan and random scan display.

12. (a) Explain 2D scaling about a pivot point.

Or

(b) Discuss 2D rotation about a pivot point.

13. (a) Write short note on window to viewport transformation.

Or

(b) Discuss convex polygon clipping with example.

14. (a) Differentiate between Parallel and Perspective Projection.

Or

(b) Give matrix for 3D translation and explain.

15. (a) Discuss in detail about various user interface components.

Or

(b) Write short note on command language.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain any two input devices.

17. Explain homogenous transformation for 2D?

18. How Cohen Sutherland algorithm works?

19. Explain the following:
    (a) 3D Rotation
    (b) 3D Minor Reflection

20. Brief about user interface model with neat sketch.

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A–10112	Sub. Code
	4BCAE2B

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

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Fifth Semester

Elective — OPERATING SYSTEM

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all the** questions.

1. What is the function of an operating system?

2. What are the memory management functions?

3. Define cache memory.

4. What is meant by deadlock?

5. Define parallel processing.

6. List out the types of system devices.

7. Mention the four responsibilities of the file manager.

8. What is Access Control Matrix?

9. What is the role of UNIX kernel?

10. What is reentrant code?

Part B (5 × 5 = 25)

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

11. (a) Explain a brief history of operating systems.

Or

(b) Describe in detail about First fit and Best fit memory allocation.

12. (a) Explain about Process Scheduling Policies.

Or

(b) Illustrate about Interrupts.

13. (a) Discuss about Typical Multiprocessing Configurations.

Or

(b) Explain about Components of IO Subsystem.

14. (a) Discuss about Interacting with the File Manager.

Or

(b) Compare network operating system (NOS) vs distributed operating system (DO/S).

15. (a) Write short notes on device management in UNIX operating system.

Or

(b) Describe the three types files in UNIX file management.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain in detail about Demand Paged Memory Allocation?

17. What are the common strategies for handling deadlocks?

18. Discuss in detail about communication among devices?

19. Explain about File Organization?

20. Describe the process management strategies for UNIX operating system

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A–9705	Sub. Code
	4BCA6C1

B.C.A DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement /Arrear Examinations

Sixth Semester

Computer Applications

DATA MINING AND DATA WAREHOUSING

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

1. Define data mining.
2. What is outliers?
3. What do you mean by numerical attributes and categorical attributes?
4. What is meant by leave –one-out method?
5. What is cluster analysis.
6. List the methods for computing distances between clusters.
7. Expand URL, HTTP?
8. What is crawler?
9. Define datawarehouse.
10. Compare OCTP with OCAP systems.

Part B (5 × 5 = 25)

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

11. (a) Give a note on datamining applications

Or

(b) How will you improve the efficiency of the apriori algorithm

12. (a) Write short notes on decision tree with suitable example .

Or

(b) Discuss some of the classification software.

13. (a) Briefly discuss the cluster analysis method

Or

(b) Briefly explain the density- based method.

14. (a) Write short notes on web content mining.

Or

(b) Explain the characteristics of search engines.

15. (a) Compare operational data sources and datawarehouse.

Or

(b) Narrate the guidelines for OCAP implementation.

Part C

$(3 \times 10 = 30)$

Answer any **three** questions.

16. Discuss some of the datamining techniques.

17. How will you estimate the predictive accuracy of classification methods. Discuss.

18. Explain K-means clustering method with suitable examples.

19. Analyse the web structure mining using the HITS algorithm.

20. Discuss various operations applied to database.

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A–9706

Sub. Code
4BCA6C2

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Sixth Semester

Computer Applications

COMPUTER NETWORKS

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is Ethernet?
2. Network standardization: Define.
3. What is flow control?
4. Expand:
   (a) HDLC (b) SDLC
5. Write any two network layer services.
6. Define Routing.
7. Give any four socket primitives for TCP.
8. What is transport entity?
9. How do you define DNS?
10. What is Pop3?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Compare connection oriented and connection less services.

Or

(b) Write short note on communication satellites.

12. (a) Discuss in detail 'A simplex stop-and-wait' protocol.

Or

(b) Explain Finite state machine models.

13. (a) Describe store-and-forward packet switching.

Or

(b) What is Internet multicasting? Explain.

14. (a) How crash recovery works in transport layer? Explain.

Or

(b) Compare TCP and UDP.

15. (a) Why do we need network security? Explain.

Or

(b) Explain Data Compression.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain public switched telephone network.

17. Elucidate sliding window protocols.

18. Elaborate congestion control algorithms.

19. Discuss Internet Transport Protocols with TCP.

20. Explain Audio and Video standards.

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A–9707

Sub. Code
4BCA6C3

B.C.A. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Sixth Semester

Computer Applications

SOFTWARE ENGINEERING

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define software engineering.
2. How to identify a problem.
3. What is software maintenance?
4. Give any two formal specification techniques.
5. What are the characteristics of a software design.
6. What do you meant by software standards?
7. Define: Unit testing.
8. What is software maintenance enhancement.
9. Write any two quality issues of a software.
10. List any out software quality standards.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Define project and its size categories.

Or

(b) Explain some other planning activities like configuration management, verification and tools.

12. (a) Write notes on products complexity in software cost estimation.

Or

(b) Discuss in detail about estimating software maintenance costs.

13. (a) Elaborate coupling and cohesion.

Or

(b) Explain milestones, walk throughs and inspections in software design.

14. (a) Write short notes on strategic issues in software testing.

Or

(b) Discuss in detail software maintenance tools.

15. (a) Discuss SQA activities.

Or

(b) Describe cost impact of software defects.

Part C

$(3 \times 10 = 30)$

Answer any **three** questions.

16. Explain planning the development process in software engineering.

17. What are the formats of a software requirements specification? Explain.

18. Explain Jackson structure programming.

19. Write short notes on

    (i) Unit testing

    (ii) Integration testing.

20. Discuss in detail about ISO 9000 quality standards.

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A–10183	Sub. Code
	4BCAA1

U.G. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Allied — OFFICE AUTOMATION

(Offered by the Department of BCA)

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all the** questions.

1. How to create a folder?

2. Give the steps to open calculator.

3. What happen when you press ctrl+x and ctrl+v?

4. Give the shortcut key for spell check and grammar.

5. How many sheets are active by default while open a worksheet?

6. Give the shortcut key to edit an cell in Ms-Excel.

7. Differentiate between F5 and shift+F5.

8. What action is performed when you press ctrl+m in Ms-Power Point?

9. Define database.

10. State the number of ways to create a database.

Part B (5 × 5 = 25)

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

11. (a) Give the steps to searching files and folder.

Or

(b) State any five features of windows.

12. (a) State the steps involved to numbering a text.

Or

(b) What is use of header and footer in Ms-Word? Explain with example.

13. (a) Give the steps involved for aligning the text in a cell.

Or

(b) Discuss any five functions in Ms-Excel

14. (a) How to add audio and video in Ms-Power Point?

Or

(b) What is the use of slide master in Ms-Power Point?

15. (a) Explain the procedure to open a new file in MS-Access.

Or

(b) Discuss the concepts of reports in Ms-Access.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Enumerate the procedure to installation of software and hardware.

17. Discuss the various steps for Mail merge.

18. Explain the procedure to create a chart in Ms-Excel.

19. Narrate the options to print the presentation slides.

20. How to create a table using design view in Ms-Access? Explain in detail.

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A–10184

Sub. Code
4BCAA2

U.G. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Computer Applications

Allied- PROGRAMMING IN C

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Give the rules for creating a identifier.

2. Draw the flowchart for nest it else statement.

3. What do you mean by static array and dynamic array?

4. Write the limitations of using getchar.

5. What are the characteristics of using modular programming.

6. In what a structure differ from an array?

7. What is pointer?

8. What do you mean by call by reference

9. State the different modes of files?

10. What is # pragma directive?

Part B (5 × 5 = 25)

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

11. (a) Write a C program to convert a give number of days into months and days.

Or

(b) Explain switch statement with C code.

12. (a) How will you initialize one –dimensional array (both compile time and runtitive)

Or

(b) Write a note on (i) strncpy (ii) Strncmp (iii) strneat (iv) strstr

13. (a) Briefly discuss the scope, visibly and lifetime of variables.

Or

(b) Write short notes an arrays of structures.

14. (a) What is a pointer? How will you declare the pointer variables.

Or

(b) Explain briefly an pointer expression and give suitable example.

15. (a) Write short notes on command-line arguments

Or

(b) Briefly give a note on file inclusion.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain cooping statements with necessary code.

17. Develop a C program using two –dimensional array.

18. Discuss various categories of functions.

19. Using pointer parameters, Write a function that compares, two integer arrays to see whether they are identical. The function returns 1 if they identical, O otherwise.

20. Explain how the files are accessed randomly.

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A–10185	Sub. Code
	4BCAA3

U.G. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Computer Application

INTRODUCTION TO INFORMATION TECHNOLOGY

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is computer?

2. Expand ROM and RAM.

3. What is user interface?

4. Define Operating system.

5. What is word processing?

6. Define database.

7. Expand LAN.

8. What is multimedia?

9. Define program.

10. How programs are developed?

Part B (5 × 5 = 25)

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

11. (a) Write short notes on Information Technology.

Or

(b) Explain the concepts of memory buses.

12. (a) Explain any three input devices.

Or

(b) Explain any four output devices.

13. (a) How to formatting the document?

Or

(b) Explain the concepts of data storage.

14. (a) Write short notes on Wide Area Networks.

Or

(b) Explain the concepts of person to person communications.

15. (a) State any four feature of procedural language.

Or

(b) Write short notes on system analysis.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Discuss the types of computers.

17. Explain the different types of printers.

18. Explain the charts and graphs.

19. Discuss the group communications.

20. Explain concepts of branching and looping.

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A–10186	Sub. Code
	4BCAA4

U.G. DEGREE EXAMINATION, APRIL 2021 &

Supplementary/Improvement/Arrear Examinations

Computer Applications

Allied — DATA MINING AND WAREHOUSING

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all the** questions.

1. What is data mining?

2. Define data warehouse.

3. What is data smoothing?

4. What is histogram? List out the various types of histogram.

5. Mention the methods used for data normalization.

6. Define support and confident for an association rule.

7. What do you mean by clustering?

8. What is Medoid?

9. What is a similarity search?

10. What is web usage mining?

Part B (5 × 5 = 25)

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

11. (a) Define KDD. Identity and describe the phases in KDD process.

Or

(b) Describe a three-tier data warehousing architecture with neat diagram.

12. (a) What is data reduction? Discuss about the techniques used for data reduction.

Or

(b) Explain the various methods for the generation of concept hierarchies.

13. (a) Compare classification and prediction.

Or

(b) Explain Bayesian classification.

14. (a) List out the requirements for cluster analysis.

Or

(b) Explain the K-Means algorithm with example.

15. (a) Illustrate the trends in data mining.

Or

(b) Briefly describe the theoretical foundations of data mining.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the major issues in data mining in detail.

17. Discuss how to handle the missing values in data cleaning as a process.

18. Describe the back propagation algorithm in classification.

19. Explain agglomerative algorithm.

20. Describe the social impacts of data mining.

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