

2 RS 16071

THREE YEAR B.Sc. (Computer Science and Information Technology) (CBCS) DEGREE
EXAMINATION, APRIL/MAY 2022

FIRST SEMESTER

PROBLEM SOLVING IN C

(w.e.f. 2020-2021 Admitted batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE of the following questions.

Each question carries 5 marks.

ఏవేని ఐదు ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 5 మార్కులు.

1. What are the limitations of Computers?
కంప్యూటర్ల పరిమితులు ఏమిటి?
2. Explain the Key features of Algorithms.
అల్గారిథమ్స్ యొక్క ముఖ్య లక్షణాలను వివరించండి.
3. Write a note on Using Comments in C.
C లో కామెంట్స్‌లను ఉపయోగించడం పై గమనికను వ్రాయండి.
4. How Storing Values in Array.
అర్రేలో విలువలను ఎలా నిల్వ చేయడం.
5. Write about Return Statement.
రిటర్న్ స్టేట్‌మెంట్ గురించి వ్రాయండి.
6. Discuss Enumerated data types.
ఎnumరాటెడ్ డేటా టైప్స్‌ను చర్చించండి.
7. Explain about Null Pointers.
నల్ పాయింట్ల గురించి వివరించండి.
8. What is Detecting the End-of-File?
ఎండ్-ఆఫ్-ఫైల్ ను గుర్తించడం అంటే ఏమిటి?

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

Each question carries 10 marks.

అన్ని ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 10 మార్కులు.

9. (a) Discuss in detail about Computer Generations.

కంప్యూటర్ జనరేషన్స్ గురించి వివరంగా చర్చించండి.

Or

- (b) Explain the Design and implementation of Correct, Efficient and Maintainable Programs.

సరైన, సమర్థవంతమైన మరియు నిర్వహించదగిన ప్రోగ్రామ్ల రూపకల్పన మరియు అమలును వివరించండి.

10. (a) What is an Operator? Explain different types of operators in C language.

ఆపరేటర్ అంటే ఏమిటి? సి భాషలో వివిధ రకాల ఆపరేటర్లను వివరించండి.

Or

- (b) Briefly explain about Nested Loops with examples.

ఉదాహరణలతో నెస్టెడ్ లూప్స్ గురించి క్లుప్తంగా వివరించండి.

11. (a) Describe the Operations on Arrays.

అర్రేల పై ఆపరేషన్లను వివరించండి.

Or

- (b) Write a program for multiplication of two $N \times N$ matrices.

రెండు $N \times N$ మాత్రికల గుణకారం కోసం ప్రోగ్రామ్ను వ్రాయండి.

12. (a) Write a program to calculate factorial of given integer value using recursive functions.

రికర్సివ్ ఫంక్షన్లను ఉపయోగించి, ఇచ్చిన పూర్ణాంక విలువ యొక్క కారకాన్ని లెక్కించడానికి ప్రోగ్రామ్ను వ్రాయండి.

Or

- (b) What is the difference between Structures and Union?

స్ట్రక్చర్స్ మరియు యూనియన్ మధ్య తేడాలు ఏమిటి?

13. (a) Write about Passing Arguments to Functions using Pointer.

పాయింటర్ని ఉపయోగించి ఫంక్షన్లను ఆర్గ్యుమెంట్లను పంపడం గురించి వ్రాయండి.

Or

- (b) Discuss Error Handling during File Operations.

ఫైల్ ఆపరేషన్స్ సమయంలో ఎర్రర్ హ్యాండిల్లింగ్ గురించి చర్చించండి.

RS 16071

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, APRIL/MAY 2022.

FIRST SEMESTER

Computer Science

Paper-I COMPUTER FUNDAMENTALS AND PHOTOSHOP

(w.e.f. 2016-17 Admitted Batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What are the characteristics of a computer?
2. What is a number system?
3. What is system software?
4. What is a cache memory?
5. What is the use of status bar?
6. What are palettes?
7. What are the uses of Rulers?
8. What is the use of cropping?
9. What is a filter?
10. What is a pixel?

PART B.— (5 × 10 = 50 marks)

Answer ALL questions.

11. Explain the various computer generations and their features.

Or

12. Elaborate of various number systems and conversions.
13. Explain various I/O devices and their uses.

Or

14. Explain any ten features of windows OS.

15. Explain any five tools in tool box.

Or

16. Write about any ten features of Photoshop software.

17. How do you work with image backgrounds?

Or

18. Explain retouching and its importance.

19. Write about any five filters and their uses.

Or

20. Explain light effects and the purposes.

54029

2 RS 26072

THREE YEAR B.Sc (CBCS) DEGREE EXAMINATION, SEPTEMBER 2022.

SECOND SEMESTER

Computer Science

Paper II — DATA STRUCTURES USING C

(W.e.f. 2020-21 Admitted Batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE of the following questions.

- 1, Define Data Structure. Explain different types of Data Structures.
- 2, Define Array. Explain declaration and accessing array elements.
- 3, Explain the applications of Stack.
- 4, Explain the properties of binary tree.
5. Explain linear search.
6. Explain different types of trees.
- 7, Explain primitive data types.
8. Explain the difference between array and linked list.

PART B — (5 × 10 = 50 marks)

Answer FIVE questions.

9. (a) Define Data Structure. Explain the difference between Data Type and Data Structure.

Or

- (b) Explain Abstract data types with example.

10. (a) Define Array. Explain two dimensional array with example.

Or

- (b) Define Linked list. Explain the basic linked list operations.

11. (a) Explain stack as an abstract data type and its operations.

Or

(b) Define Circle queue. Explain the operations on Circle queue and its applications.

12. (a) Explain various Binary tree traversal with example.

Or

(b) Explain the properties of all types of Binary tree and binary tree representation.

13. (a) Explain Binary search with an example.

Or

(b) Define Graph. Explain the sequential and linked representation of a Graph.

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, APRIL/MAY 2022.

THIRD SEMESTER

Computer Science

Paper III – DATABASE MANAGEMENT SYSTEMS

(w.e.f. 2020 – 21 Admitted Batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE of the following questions.

1. What are various Data models? Briefly explain it.
2. Define Relationship Degree.
3. Write about Limitations of Relational Algebra.
4. Write about Subquery.
5. Define operators precedence.
6. What is Normal form? What are various Normal forms?
7. Define Join operations.
8. Discuss about Database Triggers.

PART B— (5 × 10 = 50 marks)

Answer ALL questions.

9. (a) What are the Drawbacks of File-Based system.

Or

- (b) Explain components of Database Management system.

10. (a) Explain about classification of entity sets.

Or

- (b) Write short notes on Specialization.

11. (a) Explain about various Relational Algebra Operations.

Or

- (b) Explain about First Normal Form with an example.

12. (a) What is SQL? Explain Advantages and Disadvantages of SQL?

Or

(b) Explain about various set operations in SQL.

13. (a) Explain about Control Structures in PL/SQL.

Or

(b) Explain steps to create PL/SQL program.

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE of the following questions.

1. Explain the importance of 'C' language.
2. What is the role of preprocessor directives?
3. Differentiate between while and Do....while.
4. Define Array. How can you initialize it?
5. Define recursion with an example.
6. What do you mean by string? How can you initialize string?
7. Define Friend Function.
8. Briefly explain multilevel inheritance.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

9. (a) Explain basic structure of 'C' with an example.
Or
(b) Explain about decision making statements in 'C'.
10. (a) What is an Array? Explain different types of Arrays?
Or
(b) Differentiate between Break and Continue statements.
11. (a) What is Function? Explain how the functions are defined and accessed.
Or
(b) What is string? Explain any five string functions with examples.

12. (a) Explain about various basic concepts of object oriented programming.

Or

(b) Explain about constructors and its types.

13. (a) Define polymorphism. Explain different types of polymorphism.

Or

(b) Write a short notes on

(i) Public

(ii) Private

(iii) Protected with examples.

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, APRIL/MAY 2022.

THIRD SEMESTER

Computer Science

Paper III — OBJECT ORIENTED PROGRAMMING USING JAVA

(2015–16 to 2019–20 Admitted Batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What is encapsulation?
2. What is JVM?
3. What are Bitwise Operators?
4. What is Branching?
5. What is a Class?
6. What is a Final Class?
7. What is an Interface?
8. What is a Package?
9. What is an Exception?
10. What is an Applet?

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

11. What are various benefits of OOP?

Or

12. Explain Types Casting with examples.
13. Elicit various operators in Java.

Or

14. Explain switch statement with example.

15. What are Constructors? Write examples.

Or

16. Explain Wrapper Classes.

17. How do you extend interfaces? Give examples.

Or

18. Write about any two API Packages in Java.

19. Explain Exception handling with examples.

Or

20. Write a java program implementing Applets.

RS 35009 A

THREE YEAR B.Com. (CBCS) DEGREE EXAMINATION, APRIL/MAY 2022.

THIRD SEMESTER

Computer applications

PROGRAMMING IN C

(w.e.f. from 2016-17 Admitted Batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What is an algorithm?
2. What are variables?
3. What is branching?
4. What is looping?
5. What is an array?
6. What is a string?
7. What is a function?
8. What is scope of variables?
9. What is a pointer?
10. What is a union?

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

11. Explain various flow chart components and their use.

Or

12. Write about various data types in C.
13. Explain switch statement with example.

Or

14. Write about any one looping statement with examples.

15. Write a program implementing array concept.

• Or

16. Write a program implementing strings concept.

17. Explain user defined functions.

Or

18. Write about various storage classes.

19. Explain working of pointers with examples.

Or

20. Write about structures with examples.

THREE YEAR B.Com (CBCS) DEGREE EXAMINATION, SEPTEMBER 2022.

FOURTH SEMESTER

Computer Applications

OBJECT ORIENTED PROGRAMMING WITH JAVA

(w.e.f. 2020 — 21 AB)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE of the following questions.

1. What are the basic concepts of oops?
2. Define for ...LOOP.
3. What is Inheritance?
4. What is Java API package?
5. What is thread?
6. What is meant by Final variable?
7. What is meant by command line Argument?
8. Define operator overloading.

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

9. (a) Explain the features of Java.

Or

- (b) Explain different types of Data types.

10. (a) What is an Array? Explain various types of Arrays in Java?

Or

- (b) Explain Break and continue statements with syntax and examples.

11. (a) Explain about overloading and overriding methods.

Or

(b) Explain different types of Access specifiers.

12. (a) Explain about Java system packages.

Or

(b) Discuss about input stream classes.

13. (a) Briefly explain life cycle of Thread.

Or

(b) What is exception? Explain Exception Handling in Java.

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE of the following questions.

1. Define Information.
2. What are the advantages of DBMS?
3. Define entity and its types.
4. What is meant by Table Truncation?
5. What are the data types available in PL/SQL.
6. What is constraint?
7. What is the use of views?
8. What is meant by Exception?

SECTION B — (5 × 10 = 50 marks)

Answer FIVE questions.

9. (a) Explain the components of DBMS.

Or

- (b) Explain the advantages and disadvantages of DBMS.

10. (a) Explain different categories of Data models.

Or

- (b) Explain three level Architecture.

11. (a) Briefly explain about CODD's rules.

Or

- (b) Explain different components of an E-R model.

12. (a) Explain various Data types available in SQL.

Or

(b) Explain various set operations in SQL.

13. (a) Explain steps to create PL/SQL program.

Or

(b) Briefly explain structure of PL/SQL.

2 RS 46074

THREE YEAR B.Sc.(CBCS)DEGREE EXAMINATION, SEPTEMBER 2022.

FOURTH SEMESTER

Computer Science and Information Technology

Paper IV – OBJECT ORIENTED PROGRAMMING USING JAVA

(w.e.f. 2020 –21 AB)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE following questions.

1. Define Java virtual machine.
2. What do you mean by immutability of strings.
3. Define Inheritance.
4. What is an Interface? Give an example.
5. What are the uses of Applets?
6. What is type casting?
7. What do you mean by exception?
8. What are the applications of threads?

SECTION B — (5 × 10 = 50 marks)

Answer FIVE questions.

9. (a) What are the various data types in Java? Explain it.

Or

- (b) Describe the structure of a Java program.

10. (a) What is in Array? Explain types of Arrays?

Or

- (b) Explain the features of object oriented programming system.

11. (a) Define interface. Explain structure of an interface in Java.

Or

(b) Explain different types of packages in Java.

12. (a) Explain Zipping and unzipping files in Java.

Or

(b) Explain File input stream methods in Java.

13. (a) What is thread? How to create a thread?

Or

(b) Explain the Applet Life Cycle.

2 RS 46075

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, SEPTEMBER 2022.

FOURTH SEMESTER

Computer Science and Information Technology

Paper V – OPERATING SYSTEMS

(w.e.f. 2020 – 21 admitted batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE of the following questions.

1. What is operating system?
2. Write about process.
3. Define Kernel.
4. What is virtual memory?
5. What is workstation?
6. Define thread.
7. What is deadlock?
8. What is security?

PART B — (5 × 10 = 50 marks)

Answer FIVE questions.

9. (a) What are the Features of operating system?

Or

- (b) Explain different types of operating system.

10. (a) Briefly explain about system cells.

Or

- (b) Explain process scheduling.

11. (a) Explain Deadlock characterization.

Or

- (b) Write short notes on semaphores.

12. (a) Explain about contiguous memory allocation.

Or

(b) Briefly explain physical address.

13. (a) What is directory Structure? Explain its types.

Or

(b) Discuss about file Allocation methods.

RS 45012

THREE YEAR B.Com (CBCS) DEGREE EXAMINATION, SEPTEMBER 2022.

FOURTH SEMESTER

Computer Applications

OBJECT ORIENTED PROGRAMMING WITH C++

(With effect from 2016-2017 Admitted Batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Compare C with C++
2. Write about keywords.
3. Define variable.
4. Write basic structure of C++ program.
5. Define Array.
6. What are binary Operations?
7. What is a friend class?
8. Write about Inline functions?
9. What are virtual functions?
10. What do you mean by destructor?

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions

11. Explain benefits and applications of OOPs.

Or

12. Explain the differences between procedural oriented and object oriented programming?
13. Explain various datatypes in C++

Or

14. Explain how to create and initialize a two dimensional array in C++

15. Explain classes and objects in C++ with example.

Or

16. Explain about the concept of Arrays.

17. Explain about functions in C++

Or

18. Explain Friend functions and Friend classes in C++.

19. Write about constructor in detail?

Or

20. Explain Operator Overloading in C++ with suitable example.

RS 46074

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, SEPTEMBER 2022.

FOURTH SEMESTER

Computer Science

Paper — IV : DATA STRUCTURES

(w.e.f. 2016-2017 Admitted Batch)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write about Storage Structures.
2. List the applications of Circular Linked List.
3. What are the applications of Stack?
4. Write about Priority Queues.
5. Construct a BST with 16, 8, 26, 4, 10, 32, 18
6. What are Threaded Binary Trees.
7. Illustrate Connected Components.
8. Write about Minimal Spanning Trees.
9. Differentiate Sequential Search and Binary Search.
10. Illustrate the working of Selection Sort.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

11. Write a short note on Primitive and Non-Primitive Data Structures.

Or

12. Illustrate the operations of Double Linked List.
13. Write a program to implement Stack using Array.

Or

14. Define Queue ADT. Demonstrate the operations on a Queue.

15. Write a short note on Array and Linked representation of Trees.

Or

16. Illustrate BST operations and traversals.

17. Define Graph. How is it different from a Tree ? Explain Graph Representations.

Or

18. Write a short note Graph Traversals.

19. Take a 1-D array and explain how Merge Sort works?

Or

20. Illustrate Binary Search with an example.

RS 56075

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, FEBRUARY 2022.

FIFTH SEMESTER

Computer Science

Paper – V DATABASE MANAGEMENT SYSTEM

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

Each question carries 5 marks.

1. What is a (a) Data (b) Information (c) Database
2. What is the use of DBMS?
3. What is the concept of KEY?
4. What is a Data Model?
5. What is the use of ERM?
6. What is EERM?
7. What is the use of SQL?
8. What is a Sub Query?
9. What is the use of PL/SQL?
10. What is an exception?

PART B — ($5 \times 10 = 50$ marks)

Answer ALL questions.

Each question carries 10 marks.

11. Elicit the advantages of DBMS.

Or

12. Write the draw backs of file-based system.

13. Write all the CODD's Rules.

Or

14. Explain relational algebra operations.

15. Write about the building blocks of ERD.

Or

16. Explain Generalization and Specialization with examples.

17. Write about DDL in SQL.

Or

18. Explain Join operations in SQL.

19. Explain PL/SQL structure.

Or

20. Write about Cursors with examples.

RS 56076

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, FEBRUARY 2022.

FIFTH SEMESTER

Computer Science

Paper VI - SOFTWARE ENGINEERING

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

1. What is the need for software Engineering?
2. What is a Risk?
3. What is a Requirement?
4. What is Analysis?
5. What is a Design?
6. What is an Architecture?
7. What is user Interface?
8. What are RTSs?
9. What is Quality?
10. What is the use of Testing?

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

Each question carries 10 marks.

11. Explain the importance of Metrics.
12. Write about any Empirical Estimation Model.
13. Explain Feasibility study.

Or

14. What are the Analysis concepts and principles?

Or

15. Explain Modularity and its importance.

Or

16. Write about Data flow oriented design.

17. Write the need for UI design.

Or

18. Explain various Interface Standards.

19. Write about Path testing.

Or

20. Explain System Testing.

THREE YEAR B.A. (CBCS) DEGREE EXAMINATION, JULY 2022.

SIXTH SEMESTER

Computer Applications

Paper VIII – B2 — CLOUD COMPUTING

(Common To B.A & B.Sc)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

1. Explain characteristics of Cloud Computing.
2. What is Scalability and Elasticity in Cloud Computing.
3. Explain Database Services in Cloud Computing.
4. Explain Application Services in Cloud.
5. Explain how to Cloud Application Design?
6. Explain how to use Data storage Approaches in Cloud?
7. Explain types of data types of Python.
8. Explain classes in Python.
9. Explain python for Cloud.
10. Explain python for windows Azure.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

Each question carries 10 marks.

11. (a) What is Cloud? Explain its features, services and development models?
Or
(b) What is Virtualization? What are benefits and mechanisms uses for Virtualization?
12. (a) Explain Identity and Access Management Services.
Or
(b) What is cloud Services and plat forms?

13. (a) Explain the design Objectives for Cloud Computing.
Or
(b) Explain Reference Architecture for Cloud Computing.
14. (a) Explain types of control flow statements in Python.
Or
(b) Explain Packages in Python.
15. (a) Draw the Architecture of Google file System and also explain the data mutation scheme in Google file system.
Or
(b) Explain Python for Amazon Web Services.
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RS 66077

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, JULY 2022.

SIXTH SEMESTER

Computer Science

Paper VII – WEB TECHNOLOGIES

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

ఏవేని ఐదు ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 5 మార్కులు.

1. Explain about Forms towards interactive.
Forms towards interactive గురించి వివరించండి.
2. Write short notes on HTML document heading detail.
HTML document heading detail గురించి వ్రాయండి.
3. Describe about formatting blocks of information.
Formatting blocks of information గురించి వివరించండి.
4. What is Layer? Explain about it.
Layer అనగానేమి? దాని గురించి వివరించండి.
5. Discuss about Mathematical functions in JavaScript.
JavaScript లో Mathematical functions గురించి చర్చించండి.
6. Write about exception handling.
Exception handling గురించి వ్రాయండి.
7. What is Data validation? Explain.
Data validation అనగానేమి? వివరించండి.
8. Write short notes on rollover buttons.
Rollover buttons గురించి వ్రాయండి.
9. Explain about Basic XML.
Basic XML గురించి వివరించండి.
10. Describe about Document type definition.
Document type definition గురించి వివరించండి.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

Each question carries 10 marks.

అన్ని ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 10 మార్కులు.

11. Write the importance of hyperlinks in HTML.

HTML లో hyperlinks ప్రాముఖ్యతను వ్రాయండి.

Or

12. Describe about Multimedia objects.

Multimedia objects గురించి వివరించండి.

13. How do you create your own styles?

మీరు మీ స్వంత శైలులను ఎలా సృష్టిస్తారు?

Or

14. Define CSS. Explain properties and values in styles.

CSS ను నిర్వచించుము. Properties మరియు values ను styles లో వివరించండి.

15. Explain about operators in JavaScript with suitable examples.

JavaScript నందు operators ను సరియైన ఉదాహరణలతో వివరింపుము.

Or

16. Discuss in detail about data and objects in JavaScript.

JavaScript లో data మరియు object ల గురించి వివరంగా చర్చించండి.

17. Write about opening a new window in DHTML with JavaScript.

JavaScript తో DHTML లో కొత్త విండో ఎలా opening గురించి వ్రాయండి.

Or

18. Explain a detailed note on messages and confirmations.

Messages మరియు confirmations గురించి వివరంగా వివరించండి.

19. Discuss about defining data for web applications in XML.

XML లో వెబ్ అనువర్తనాల కోసం డేటాను నిర్వచించడం గురించి చర్చించండి.

Or

20. Define Web services. Explain in detail.

Web services ను నిర్వచించుము. దానిని వివరంగా వివరించండి.

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

ఏవేని ఐదు ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 5 మార్కులు.

1. What is Distributed Computing System? Explain.
Distributed Computing System అనగానేమి? వివరించండి.
2. Write about system models.
System models గురించి వ్రాయండి.
3. Define RPC and its models.
RPC ను నిర్వచించుము మరియు దాని నమూనాలు.
4. Discuss about Server Management.
Server Management గురించి చర్చించండి.
5. Explain the advantages of DSM.
DSM యొక్క ప్రయోజనాలు వివరించండి.
6. Write short notes on Deadlock.
Deadlock గురించి గమనికలు వ్రాయండి.
7. Discuss about Task Assignment Approach.
Task Assignment Approach గురించి చర్చించండి.
8. Write and explain about Threads.
Threads గురించి వ్రాసి మరియు వివరించండి.
9. Describe about File Models.
File Models గురించి వివరించండి.
10. Explain the Access Control.
Access Control గురించి వివరించండి.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

Each question carries 10 marks.

అన్ని ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 10 మార్కులు.

11. Discuss in detail on Issues in designing a distributed operating system.
Issues in designing a distributed operating system గురించి వివరంగా చర్చించండి.

Or

12. Briefly explain the examples of distributed systems.
Distributed systems ను ఉదాహరణలతో క్లుప్తంగా వివరించండి.

13. Describe the synchronization and buffering.
Synchronization మరియు buffering వివరించండి.

Or

14. Write a detailed note on Stub Generation and RPC messages.
Stub Generation మరియు RPC messages గురించి వివరంగా వ్రాయండి.

15. Briefly explain the design and implementation of DSM system.
Design మరియు implementation of DSM system క్లుప్తంగా వివరించండి.

Or

16. Discuss (a) Granularity and consistency model. (b) Clock Synchronization.
(a) Granularity and consistency model. (b) Clock Synchronization లను చర్చించండి.

17. Explain a detailed note on Load Balancing Approach.
Load Balancing Approach వివరంగా వివరించండి.

Or

18. What is Process Migration? Explain in detail.
Process Migration అనగానేమి? వివరంగా వివరించండి.

19. Write and explain the File Accessing Models.
File Accessing Models ను వ్రాసి వివరించండి.

Or

20. Briefly explain about File Replication and Atomic Transactions.
File Replication మరియు Atomic Transactions గురించి క్లుప్తంగా వివరించండి.

RS 66078-B3

THREE YEAR B.Sc. (CBCS) DEGREE EXAMINATION, JULY 2022.

SIXTH SEMESTER

Computer Science

Paper – VIII – B3 : CRYPTOGRAPHY AND NETWORK SECURITY

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

ఏవేని ఐదు ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 5 మార్కులు.

1. Write a short note on security attacks.
Security attacks గురించి వ్రాయండి.
2. What is steganography? Explain.
Steganography అనగానేమి? వివరించండి.
3. How do you generate a random number?
మీరు random number ను ఎలా ఉత్పత్తి చేస్తారు?
4. What is the use of RSA algorithm?
RSA algorithm వల్ల ఉపయోగం ఏమిటి?
5. Write about Hash functions.
Hash functions గురించి వ్రాయండి.
6. Define Message Authentication. Explain its requirements.
Message Authentication ను నిర్వచించుము. దాని అవసరాన్ని వివరించండి.
7. Explain about MD file.
MD file గురించి వివరించండి.
8. Describe the authentication protocols.
Authentication protocols ను వివరించండి.
9. What is Kerberos and how it works?
Kerberos అనగానేమి మరియు ఎలా పని చేస్తుంది?
10. Discuss about Electronic mail security.
Electronic mail security గురించి చర్చించండి.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

Each question carries 10 marks.

అన్ని ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 10 మార్కులు.

11. Discuss in detail for classical encryption techniques.
Classical encryption techniques గురించి వివరంగా చర్చించండి.

Or

12. Write about differential and linear crypt analysis.
Differential మరియు Linear crypt analysis గురించి వ్రాయండి.

13. Explain the principles of Public Key cryptography.
Public Key cryptography కి principles ను వివరించండి.

Or

14. Develop a C/C++ program for Diffie-Hellmen key exchange.
Diffie-Hellmen key exchange కోసం C/C++ program ను అభివృద్ధి చేయండి.

15. Briefly explain security of hash functions and Macs.
Security of hash functions మరియు Macs క్లుప్తంగా వివరించండి.

Or

16. Develop a C/C++ language programs for message authenticators with different techniques.
విభిన్న పద్ధతులతో message authenticators కోసం C/C++ language program ను అభివృద్ధి చేయండి.

17. Describe message digest and secure hash algorithm.
Message digest మరియు secure hash algorithm ను వివరించండి.

Or

18. Define digital signature. Explain about digital signature standards.
Digital signature ను నిర్వచించుము. Digital signature standards గురించి వివరించండి.

19. Write a brief note on X.509 directory authentication service.
X.509 directory authentication service ను సంక్షిప్త గమనిక రాయండి.

Or

20. Explain about S/MIME.
S/MIME గురించి వివరించండి.

Time : Three hours**Maximum : 75 marks****(No additional sheet will be supplied)****SECTION A — (5 × 5 = 25 marks)****Answer any FIVE questions.****Each question carries 5 marks.****ఏవేని ఐదు ప్రశ్నలకు సమాధానములు వ్రాయుము.****ప్రతి ప్రశ్నకు 5 మార్కులు.**

1. What are the different data types in PHP?

PHP లోని వివిధ data types గురించి వివరించుము.

2. Write about returning the values from user- defined functions.

User- defined functions నుండి returning the values గురించి వ్రాయండి.

3. What is an object? How to create an object in PHP?

Object అనగానేమి? PHP లో ఒక object ను ఎలా సృష్టించాలి?

4. Explain investigating strings with PHP.

PHP లో investigating strings ను వివరించండి.

5. Explain briefly about using Hidden fields to save state.

Using Hidden fields to save state క్లుప్తంగా వివరించండి.

6. Discuss the process of sending mail on form submission.

Sending mail on form submission యొక్క ప్రక్రియ చర్చించండి.

7. Write short notes on Running commands with System () or passthru ()

System () or passthru () తో Running commands గురించి వ్రాయండి.

8. Describe the necessary modifications to PHP.

PHP కి అవసరమైన మార్పులను వివరించండి.

9. Explain about MySQL with examples.

ఉదాహరణలతో MySQL గురించి వివరించండి.

10. Write about working with MySQL data.

MySQL data తో పని చేయడం గురించి వ్రాయండి.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

Each question carries 10 marks.

అన్ని ప్రశ్నలకు సమాధానములు వ్రాయుము.

ప్రతి ప్రశ్నకు 10 మార్కులు.

11. Define constant. Explain in detail about constants in PHP.

Constant ను నిర్వచించుము. PHP లో constants గురించి వివరంగా వివరించండి.

Or

12. Discuss how to define and calling a function in PHP with an example.

ఒక ఉదాహరణతో PHP లో ఒక ఫంక్షన్‌ను ఎలా నిర్వచించాలో మరియు calling చేయాలో చర్చించండి.

13. What is an Array? Illustrate array-related functions with an example.

Array అనగానేమి? Array-related functions ను ఉదాహరణతో వర్ణించండి.

Or

14. Explain

(a) Formatting strings with PHP

(b) Date and Time functions in PHP ను వివరించండి.

15. Write a PHP script to access from input with user-defined Arrays.

User-defined Arrays ద్వారా form input పొందుటకు ఒక PHP script ను వ్రాయండి.

Or

16. Write about how to combine HTML and PHP code on a single page.

ఒకే పేజీలో HTML మరియు PHP కోడ్‌ను ఎలా కలపాలి అనే దాని గురించి వ్రాయండి.

17. Describe about how to include files with include () function in PHP.

PHP లో include () ఫంక్షన్ తో ఫైల్‌లను ఎలా చేర్చాలో వివరించండి.

Or

18. Explain in detail.

(a) Drawing a new image and

(b) Modifying existing images ను వివరంగా వివరించండి.

19. Describe about MySQL versus MySQLi functions.

MySQL versus MySQLi functions గురించి వివరించండి.

Or

20. Write a detail note on connecting to MySQL with PHP.

PHP తో MySQL కి కనెక్టింగ్‌ను వివరంగా వ్రాయండి.
