UG–370 **BSCS–07**

B.Sc. DEGREE EXAMINATION – DECEMBER, 2019.

Second Year

Computer Science

APPLIED OPERATIONS RESEARCH

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write about the Dynamic Programming

2. Discuss about the linear programming.

3. Explain about the Simplex Method.

4. Explain about the Mathematical Models.

5. Explain about the N jobs on two machines.

6. Discuss about the Replacement Models.

7. Write detail about the Individual Replacement policy.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Discuss about the Integer programming.

9. Briefly discuss about the two phase simplex method.

10. Elaborate the Goal programming.

11. Explain about the N jobs on Three Machines.

12. Illustrate the N jobs on M machines.

13. Explain about the Replacement of Machines.

14. Describe about the Goal Replacement Policy.

———————

UG–371 **BSCS–08**

B.Sc. DEGREE EXAMINATION – DECEMBER, 2019.

Second Year

Computer Science

DESIGN AND ANALYSIS OF ALGORITHMS

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain briefly about top down structured programming.

2. Write brief note on algorithms.

3. Discuss briefly on summations.

4. What is recursion? Write an algorithm for finding the factorial of n = 200.

5. Explain briefly about Ackermann's function.

6. Write an algorithm for bubble sort. Explain with example.

7. Compare linear search Vs binary search.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Write a brief note on program correctness. Discuss about the knight's tour problem.

9. Explain the basic steps in the development of an algorithm.

10. Discuss the following

    (a) Asymptotic Notations

    (b) Recurrences.

11. Explain elaborately backtracking with bicycle lock problem.

12. Explain the following

    (a) Jeep problem

    (b) Branch and bound technique.

13. Give discussion on heap sort and selection sort with example each.

14. Write a detail note on searching methods.

———————

UG–372 **BSCS–09**

B.Sc. DEGREE EXAMINATION — DECEMBER, 2019.

Second Year

Computer Science

OBJECT ORIENTED PROGRAMMING WITH C++

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What are the advantages of OOP?

2. Describe the structure of C++ program.

3. Write a C++ program to find the largest of three numbers.

4. Difference between Call by value and Call by reference in C++.

5. Write short notes on member operator.

6. Explain about Operator overloading.

7. Explain about Random access file in C++.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain the concepts of Object oriented programming in detail.

9. Explain the data types in C++.

10. Write a C++ program to multiply two matrices.

11. Explain the Recursive function with an example.

12. What does inheritance means in C++? Explain the different forms of inheritance with an example.

13. Explain about Access specifier in detail.

14. What is exception handling? Explain the types of exception handling with an example

———————

UG-373 **BSCS–10**

B.Sc. DEGREE EXAMINATION — DECEMBER, 2019.

Second Year

Computer Science

INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain three views of data.

2. Write on the facilities in DBMS.

3. Write about file organisation with an example.

4. Give an example for Database design.

5. List the Anamolies is a database.

6. Diagramatically explain with the label on the topic distributed database design.

7. Illustrate on structure of Distributed database.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Discuss Advantages and disadvantages of DBMS.

9. Discuss the basics of database.

10. Describe Administration of DBMS.

11. Illustrate on the topic Multi key file organisation.

12. Why Normalisation? Explain the three normal forms.

13. Explain on the types of SQL Commands.

14. What is meant by Distributed database? Explain it.

———————

UG–374 **BSCS–11**

B.Sc. DEGREE EXAMINATION — DECEMBER, 2019.

Second Year

Computer Science

ACCOUNTING AND FINANCIAL MANAGEMENT

Time : 3 hours Maximum marks : 75

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Define Accounting and write about its functions?

2. What are the rules to be followed while Journalising?

3. Pen down the Tools of Analysis?

4. List out the Limitations of ratio in short?

5. Engrave the Applications of Marginal costing?

6. Portray the importance of Budgeting?

7. How can the errors be rectified in Accounting?

SECTION B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Describe the Double Entry Book Keeping System?

9. What is Ledger? Give a detailed note on Ledger?

10. Discuss about the various Types of Analysis?

11. Describe the steps involved in the Cash flow analysis?

12. Illustrate the Budgeting factors?

13. Elucidate the Marginal costing in detail?

14. Explain about the Financial Statements and its nature?

———————

UG–375 **BSCS–12**

B.Sc DEGREE EXAMINATION — DECEMBER, 2019.

Second Year

Computer Science

MANAGEMENT INFORMATION SYSTEM

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Discuss the objectives of MIS.

2. Write short notes on Decision tree.

3. Discuss the advantage and disadvantage of MIS.

4. List down the functions of manager.

5. Discuss about DFD.

6. List the approaches to management.

7. Discuss the types of DSS.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. What do you mean by feasibility study. Explain different types of feasibility.

9. Explain the stages of System Development Life Cycle in detail.

10. What is Decision making? Explain the process involved.

11. Explain the activities in Human Resource Information System.

12. Explain about the Accounting information system.

13. What is system design? Explain its types in detail.

14. Explain the following

    (a) TPS

    (b) ES

———————

UG–376 **BSCS–13**

B.Sc. DEGREE EXAMINATION — DECEMBER, 2019.

Second Year

Computer Science

PRINCIPLES OF MANAGEMENT

Time : 3 hours Maximum marks : 75

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write the Definition of Management in different perspectives?

2. Differentiate the term "Is Management an Art or Science"?

3. Potray hit importance of Planning?

4. Explore the brief note on Management by Objectives?

5. State the Importance of Organization in simple terms?

6. Directing – Explicate?

7. What is Controlling? Write briefly?

SECTION B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain the Evolution of Management Thoughts?

9. List and Explain each Steps in Planning in detail?

10. Illustrate the functions of Line and Staff relationship with necessary points?

11. Describe the Communication Process?

12. Define Budgeting? Pen down measures in the Budgeting Control?

13. Write in detail about the essentials of the effective use of committee?

14. What is Delegation? Explain the Nature and Features of Delegation?

———————

UG – 377 **BSCS–14**

B.Sc. DEGREE EXAMINATION — DECEMBER, 2019.

Second Year

Computer Science

Elective – MANAGING INFORMATION TECHNOLOGY

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions

1. Explain roles of Information technology.
2. Summarize the product supply innovation by IT.
3. Enumerate important IT techniques and trends.
4. Role of c10 – Explain.
5. Explain Frame work for IT Management.
6. Summarize on overview of computer security.
7. Explain security policy.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain roles of chief knowledge officer (CKO).

9. Explain Management Innovation by IT.

10. Explain promotion of Enterprise Innovation by IT.

11. Enumerate Innovation strategies for IT organisation.

12. Discriminate system cost Management.

13. Explain IT process Management.

14. Explain Management Information systems.

———————