S.V.K.P. & Dr. K.S. RAJU ARTS & SCIENCE COLLEGE (Autonomous)

Recognized by UGC as "College with Potential for Excellence"
Accredited by NAAC with "A" Grade
(Affiliated to ADIKAVI NANNAYA UNIVERSITY - Recognised by Govt. of Andhra Pradesh)

PENUGONDA-534 320, West Godavari District., (A.P.)

I B.Sc. (Computer Science) / I B.Com (Computer Applications) I Semester (w.e.f. 2019-20 Admitted Batch)

PAPER - I: COMPUTER FUNDAMENTALS AND PHOTOSHOP **MODEL PAPER**

Time: 3 Hours Max.Marks: 75

PART-I

Note: 1. Answer Any Five Questions by choosing at least two from Section-A and Section-B.

2. Each one carries 10 marks.

 $5 \times 10 = 50M$

SECTION-A

- 1. Explain different types of computers.
- 2. What is an octal number system? Explain the procedure to convert an octal number into its binary.
- 3. Explain different output devices of computer.
- 4. Explain different secondary storage devices.
- 5. How to open a Photoshop? Explain its parts with a neat diagram?

SECTION-B

- 6. Explain how to create, and save and close a document in Photoshop.
- 7. Explain how to change the image size and resolution in Photoshop.
- 8. Explain how to crop and straighten an image in Photoshop.
- 9. Explain how to create, hide and delete layers in Photoshop.
- 10. Explain how to create ads in Photoshop.

PART-II

SECTION-C

Note: 1. Answer any five questions from the following.

2. Each one carries 5 marks

- 11. Explain any five characteristics of computers.
- 12. Explain about Hexa decimal number system.
- 13. Explain about applications of computers.
- 14. Explain the difference between system software and application software.
- 15. Explain how to change background in Photoshop.
- 16. What are the different types of screen display modes in Photoshop?
- 17. Explain briefly about Rulers, Guides and Grid?
- 18. Explain how to cut, copy and paste data in Photoshop.

I B.Sc. (Computer Science) II Semester (w.e.f 2019-20) PAPER – II: PROGRAMMING IN "C" MODEL PAPER

Time: 3 Hours Max.Marks: 75

PART-I

Note: 1. Answer Any Five Questions by choosing at least two from Section-A and Section-B.

2. Each one carries 10 marks.

 $5 \times 10 = 50M$

SECTION-A

- 1. Explain in detail about the generations of the programming languages.
- 2. What is an Operator? Explain various types of operators available in C?
- 3. Explain about various Unconditional branching statements.
- **4.** What is a function? Explain how to declare and define a function with example.
- **5.** What is an Array? Explain different types of Arrays.

SECTION-B

- **6.** What is a String? Explain various character manipulation functions.
- 7. What is Pointer? Explain the difference between pointer and one dimensional array.
- **8.** What is a Structure? Explain about structure within the structure.
- 9. What is File? Explain about File handling functions
- 10. Explain about Error handling during file operations with suitable example.

PART-II

SECTION-C

Note: 1. Answer any Five questions from the following.

2. Each one carries 5 marks

- 11. What is an Algorithm? What are the key features of an Algorithm?
- 12. Explain briefly about typecasting in 'C'?
- 13. What are the differences between break and continue statements.
- **14.** Explain the differences between local and global variables.
- **15.** Explain briefly about the operations that can be performed on arrays.
- **16.** Explain about string handling functions in "C"?
- 17. Explain briefly about Array of Structures.
- **18.** Explain briefly about types of files in C.

B.Sc. Second Year Computer Science III Semester (w.e.f. 2019-20 Admitted Batch)

Paper-3: Object Oriented Programming Using Java

MODEL PAPER

Time: 3 Hours Max.Marks: 75

PART-I

Note: 1. Answer Any <u>FIVE</u> Questions by choosing at least <u>TWO</u> from Section-A and Section-B.

2. Each one carries 10 marks.

 $5 \times 10 = 50M$

SECTION-A

- 1. What is OOP? Explain the Basic Concepts of Object Oriented Programming.
- 2. Explain the Structure of Java program with example.
- 3. Explain Control Structures in java with examples.
- 4. What is Constructor? What are its special properties? Explain different types of constructors in java.
- 5. What is Inheritance? Explain types of Inheritance in java with examples.

SECTION-B

- 6. What is Interface? How do you extend and Implement an Interface? Explain how to implement multiple inheritances in java.
- 7. Explain the Life Cycle of a Thread with a neat Diagram.
- 8. Define Exception and Exception Handling Mechanism. Explain the concept of Exception Handling Mechanism in detail.
- 9. Explain Applet Life Cycle with neat diagram.
- 10. What is a Package? Explain how to Create, Access and Use a Package.

PART-II SECTION-C

Note: 1. Answer any <u>FIVE</u> questions from the following.

2. Each one carries 5 marks

- 11. Differentiate C, C++ and Java.
- 12. Explain about Data types available in java.
- 13. What are objects? Explain how they are created from class.
- 14. What are the differences between Method Overloading and Method Overriding?
- 15. What is an Array? How do you Declare, Create and Initialize an array? Explain types of Arrays.
- 16. Explain about Wrapper Classes with example.
- 17. Explain Thread Exception and how can you give Priorities in Thread.
- 18. Explain about Java API Packages.

B.Sc. Second Year Computer Science IV Semester (w.e.f. 2019-20 Admitted Batch)

Paper-4: Data Structures MODEL PAPER

Time: 3 Hours Max. Marks: 75

PART-I

Note: 1. Answer any FIVE Questions by choosing at least two from Section-A and Section-B.

2. Each one carries 10 marks.

 $5 \times 10 = 50M$

SECTION-A

- 1. Explain about different primitive and non-primitive Data Structures.
- 2. What is Linked List? Explain different types of Linked Lists with Diagrams.
- **3.** What is stack? Write ADT. Explain various operations of stack.
- 4. What is a Queue? Write an algorithm to queue using linked list.
- 5. What is Tree Traversing? Explain in-order, pre-order and post-order.

SECTION-B

- 6. Explain different applications and properties of binary tree.
- 7. Write about various Graph Travelling techniques.
- 8. What is MST? What are the various ways to find Minimal Spanning Tree? Explain
- 9. What is searching? Explain Binary Search algorithm with example.
- 10. What is sorting? Explain Quick Sorting Technique with example.

PART-II

SECTION-C

Note: 1. Answer any five questions from the following.

2. Each one carries 5 marks

- 11. What are Sparse matrices? Explain them.
- 12. What is Circular Linked List? Explain about it.
- **13.** What are the applications of stacks?
- **14.** What is Priority Queue? Explain about it.
- **15.** Explain about BST.
- **16.** Explain about Threaded Binary Tree.
- 17. What is graph? Explain various representations of Graphs.
- **18.** Explain Bubble sort algorithm with example.

B.Com (Computer Applications) Second Year III Semester (w.e.f. 2019-20 Admitted Batch)

Paper: Office Automation Tools MODEL PAPER

Time: 3 Hours Max.Marks: 75

PART-I

Note: 1. Answer Any <u>FIVE</u> Questions by choosing at least <u>TWO</u> from Section-A and Section-B.

2. Each one carries 10 marks.

 $5 \times 10 = 50M$

SECTION-A

- 1. Explain how to enter and edit formulas in Excel.
- 2. What is a cell reference? Explain different types of cell references in Excel.
- 3. What is a function? What are the advantages of functions? Explain round() and ceiling() functions.
- 4. Explain about financial, logical and text functions in Excel.
- **5.** Define Chart. Explain different types of Charts.

SECTION-B

- 6. Define Macro. Explain how to create and run a macro.
- 7. Explain how to create a simple database tables in MS Access.
- **8.** Define Form? Explain about form wizard.
- 9. Define a query? Explain how to write queries in MS Access.
- 10. Explain different types of relationships between tables with examples.

PART-II

SECTION-C

Note: 1. Answer any **FIVE** questions from the following.

2. Each one carries 5 marks

- 11. Create a work sheet in MS Excel.
- 12. Auto fill in MS Excel.
- 13. Various formatting options in MS Excel.
- 14. Date and Time functions in MS Excel
- **15.** Data sorting and filtering.
- 16. Advantages of Macros.
- 17. Features of MS Access
- 18. MS-Access Reports.

B.Com (Computer Applications) Second Year IV Semester (w.e.f. 2019-20 Admitted Batch)

Paper: PROGRAMMING IN C <u>MODEL PAPER</u>

Time: 3 Hours Max. Marks: 75

PART-I

Note: 1. Answer any FIVE Questions by choosing at least two from Section-A and Section-B.

2. Each one carries 10 marks.

 $5 \times 10 = 50M$

SECTION-A

- 1. Explain the Structure of C Program with example?
- 2. Discuss various categories of Operators in C with examples?
- 3. Explain Decision Making (or) Conditional statements in 'C' with example?
- 4. What is a loop? Explain about different types of looping statements in 'C'?
- 5. Different parameter passing mechanisms of functions?

SECTION-B

- 6. What is Recursion? What are the different types of Recursion techniques?
- 7. Write a C program to find Addition of two matrices?
- 8. Define String. Write about various String Handling Functions?
- 9. What is Pointer? Explain about pointers in detail?
- 10. What is Structure? Explain about Structures in detail?

PART-II

SECTION-C

Note: 1. Answer any five questions from the following.

2. Each one carries 5 marks

- 11. Define flowchart. Explain about various flowchart symbols of flowchart?
- **12.** What are the Data Types available in C? Explain?
- **13.** Differentiate Break and Continue with example?
- 14. Write a C program to find whether a given number is Armstrong or Not?
- **15.** Describe about Storage Classes in C?
- **16.** Write a C program to find Factorial of a given number?
- 17. What is Array? How to declare and initialize arrays? Give examples?
- **18.** Briefly explain about enumerated data types?

III B.Sc. Computer Science (19CS5A)

FIFTH SEMESTER

Database Management System

(W.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section.

Each question carries 10 marks. **5x10=50 Marks**

SECTION-A

- 1. Define file-based system? What are the drawbacks of file processing system?
- 2. Explain in detail about database architecture?
- 3. What is EERM, Explain in detail?
- 4. Explain about the attribute classification?
- 5. Write about CODD rules?

SECTION-B

- 6. Explain about relational algebra operators?
- 7. Explain various types of commands available in SQL?
- 8. Explain aggregate functions and set operators in SQL?
- 9. Explain about PL/SQL Language Elements?
- 10. What is cursor? Explain about different types of Cursors?

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. What are the objectives of DBMS?
- 12. What are the building blocks of an E-R diagram?
- 13. What is a key? Explain the different types of keys?
- 14. Explain about data types in SQL?
- 15. Explain Exception handling mechanism of PL/SQL?
- 16. What are the advantages of relational algebra?
- 17. Explain Structure of PL/SQL?
- 18. Write about entity cluster?

III B.Sc. Computer Science (19CS5B)

FIFTH SEMESTER

SOFTWARE ENGINEERING

(W.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section. Each question carries 10 marks.

5x10=50 Marks

SECTION-A

- 1. Explain about Waterfall Process Model?
- 2. What is Risk analysis? What are its types and explain risk analysis process.
- 3. Explain about Requirement Analysis?
- 4. Explain about Analysis Process.
- 5. Explain About Software Architecture.

SECTION-B

- 6. What is Cohesion and Coupling? Explain.
- 7. What are the steps used in user interface analysis and design.
- 8. Explain about Human Computer Interaction
- 9. Explain about Case Tools.
- 10. Explain in details Control Structures Testing?

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. Explain about process metrics?
- 12. Discuss about requirement Analysis?
- 13. Explain about Modularity?
- 14. Explain about Human Factors in HCI?
- 15. What is Black box testing and White box testing?
- 16. What is Project Management?
- 17. What is Feasibility Study?
- 18. Write about Abstraction?

III B.Com (Computer Applications) (19BCV56)

FIFTH SEMESTER

Database Management System

(W.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section. Each question carries 10 marks.

5x10=50 Marks

SECTION-A

- 1. Explain about Classifications of DBMS?
- 2. Explain about evolution of DBMS?
- 3. Explain about drawbacks of File Based Systems?
- 4. What are the Components of DBMS? Explain?
- 5. What is Attributing? What are the classifications of Attribute?

SECTION-B

- 6. Explain about CODD rules?
- 7. Explain about DDL Commands with example?
- 8. Explain about aggregate functions?
- 9. Explain about PL/SQL Language Elements?
- 10. Explain about Control Structures in PL/SQL?

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. Explain about objectives of DBMS?
- 12. What is File Based System?
- 13. Write about Relationship Classifications?
- 14. What are the data types in SQL?
- 15. Explain the structure of PL/SQL?
- 16. What is Data Dictionary?
- 17. Write about DBMS approach?
- 18. What are the basic building blocks of Entity Relationship Model?

III B.Com (Computer Applications) (19BCV57)

FIFTH SEMESTER

Web Technology (w.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section. Each question carries 10 marks. **5x10=50 Marks**

SECTION-A

- 1. Explain various network Topologies with neat sketch?
- 2. What are lists? Explain different types of lists in HTML with example program?
- 3. Explain properties and values in Cascading Style Sheets?
- 4. Explain how to format block of information?
- 5. Write about various String manipulation and mathematical functions in java script?

SECTION-B

- 6. List out various operators available in java script?
- 7. What is an Exception? How to handle exceptions in java script?
- 8. Explain Regular Expression in java script?
- 9. Explain Messages and Confirmation in java script.
- 10. What are form validations in java script?

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. Write about key features of LAN and WAN?
- 12. What are hyperlinks? Explain?
- 13. What are Cascading Style Sheets? How to define your own styles?
- 14. What is a Layer? Explain?
- 15. Describe various data types used in java Script?
- 16. Write about benefits and problems of java script?
- 17. List any three methods in Date and Window object?
- 18. How to open a new window?

III B.Sc. Computer Science (19CS7) SIXTH SEMESTER Web Technologies

(W.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section. Each question carries 10 marks. **5x10=50 Marks**

SECTION-A

- 1. Explain about the tables in HTML with example?
- 2. Explain how to create frames with example?
- 3. Explain the concept of layers in CSS. How to create them?
- 4. Explain the properties and values in CSS?
- 5. Explain about Mathematical functions in JavaScript?

SECTION-B

- 6. What is regular expression? Explain the creation of Regular Expressions?
- 7. Explain about data validation concept in detail?
- 8. Explain briefly about Moving Objects?
- 9. Explain about XML elements?
- 10. Explain DOM in XML?

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. What is HTML? Explain the features of HTML?
- 12. What is Style? Explain the class selector?
- 13. What is an object?
- 14. What is Dynamic HTML?
- 15. Explain the structure of XML?
- 16. Explain image tag in HTML with example?
- 17. How can you import style sheets into our web page?
- 18. Explain about opening a new window?

III B.Sc. Computer Science (19CS8)

SIXTH SEMESTER

DISTRIBUTED SYSTEMS (W.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section. Each question carries 10 marks. **5x10=50 Marks**

SECTION-A

- 1. Explain about Tightly and Loosely coupled systems?
- 2. Explain design issues in distributed operating system?
- 3. Briefly explain about implementation of RPC mechanism?
- 4. Explain about call semantics?
- 5. What is a granularity? Explain criteria for choosing granularity parameter?

SECTION-B

- 6. Explain about Design and implementation of DSM system?
- 7. Explain Load Balancing Approach in Distributed System?
- 8. Threads in Distributed Systems?
- 9. Explain File Caching Schemes in Distributed System?
- 10. Explain Cryptography in Distributed System?

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. Write the advantages of Distributed System?
- 12. Define Distributed System. What are the goals of Distributed System?
- 13. Explain inter-process communication on message passing system?
- 14. Briefly explain about synchronization and buffering?
- 15. Briefly explain Design implementation issues of DSM?
- 16. How computer clocks are implemented?
- 17. Explain about the stub generation?
- 18. Write about Authentication. Write about approaches to Authentication?

III B.Sc. Computer Science (19CS9)

SIXTH SEMESTER

CLOUD COMPUTING

(W.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section. Each question carries 10 marks.

5x10=50 Marks

SECTION-A

- 1. What is Cloud Computing? What are the characteristics of Cloud Computing?
- 2. What are the Components of Cloud Computing? Explain?
- 3. Explain about Cloud Scenarios?
- 4. What are the benefits of Cloud Computing? Explain?
- 5. Explain about cloud delivery models?

SECTION-B

- 6. What is Software as a Service (SaaS)? Explain?
- 7. Explain about Cloud Deployment Models?
- 8. Explain about IaaS Providers.?
- 9. What is Virtualization? What is the Need of Virtualization?
- 10. Explain about Different types of Virtualizations?

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. What are the origins of Cloud Computing?
- 12. What are the Limitations of Cloud Computing?
- 13. Explain about vendors of SaaS
- 14. What are the benefits of IaaS.
- 15. What are the limitations of Virtualization?
- 16. Explain about vendors of Cloud Computing.
- 17. Explain about Regularity issues
- 18. Explain about vendors of PaaS.

III B.com (Computer Application) (20EC7)

SIXTH SEMESTER

E-Commerce (W.e.f. 2019-20 Admitted Batch)

Time: 3 Hours MODEL QUESTION PAPER Max. Marks: 75

PART - 1

Answer any **FIVE** questions choosing at least two from each section. Each question carries 10 marks.

5x10=50 Marks

SECTION-A

- 1. What is E-Commerce? State its need and Rationality.
- 2. Describe EDI. Also state its essence.
- 3. What is B2B? Also explain the features of B2B E-Commerce.
- 4. Describe the concept of Electronic marketing. Also state the role of E-marking in B2B.
- 5. What is Internet and Extranet? Also write a brief note on architecture of the internet.

SECTION-B

- 6. What is electronic payment system? Identify different issues and challenges in Electronic payment system.
- 7. How to protect consumer and seller in Electronic commerce?
- 8. What is encryption? Also write a note on encryption policies.
- 9. Write about various measures for internet security in E-Commerce.
- 10. Describe the concept of web based clients. How it is operated.

PART - 2

Answer any **FIVE** questions. Each question carries 5 marks.

- 11. Scope of E-commerce.
- 12. Explain the role of E-Commerce in Trade cycle...
- 13. Write about Electronic Data Interchange.
- 14. JIT delivery.
- 15. Internet based Auctions.
- 16. Applications of Intranet.
- 17. Discuss about privacy issues in E-Commerce.
- 18. Write about internet protocols.