SHRIMATI INDIRA GANDHI COLLEGE

(Nationally Accredited at 'A' Grade (3rd Cycle) By NAAC)
Tiruchirappalli – 2.

QUESTION BANK FOR

B.Sc COMPUTER SCIENCE

2017-2018

DEPARTMENT OF COMPUTER SCIENCE

CONTENT

16 SCCCS1/16SCCCA1/16SCCIT2

B.Sc./B.C.A. DEGREE EXAMINATION,APRIL 2017.

Part III-computer Application/Computer Science/

Information Technology-Major

PROGRAMMING IN C

Time: Three hours Maximum :75 marks

SECTION A-(10*2=20)

Answer ALL questions.

1.What are assignment operators?
2.Write any two relational expressions?
3.Write example code for output operation.
4.Define while loop.
5.What is character array?
6.Define user defined function.
7.Structure and Union – Differentiate.
8.Write example code to open a file in write mode.
9.What is preprocessor?
10.What is dynamic memory allocation?

SECTION B-(5*5=25)

Answer ALL questions.

11. (a) Write suitable example, code write the uses of logical operators.

Or

(b) What are relational expressions? Explain them.

12. (a) What is else-if ladder? Give an example.

Or

(b) Write the syntax and use of switch-case with an example.

Or

13. (a) Write the user defined function to find factorial of a number.

Or

(b) Write short notes on character arrays.

14. (a) What is union in C? Write union with employee details.

Or

(b) Write C program to create, open and close file in C.

15. (a) What are programming guidelines? List those guidelines.

Or

(b) Write a C program to illustrate the preprocessor in C.

SECTION C-(3*10=30)

Answer any THREE questions.

16. Write in detail about various data types in C.
17. Explain in detail about looping control structures in C.
18. Write a C program to illustrate any three string functions in C.
19. Discuss in detail about the usage of pointers in C.
20. Write a C program to create and display a Linked List.

RCCS 10 CA 1/RCCS 10 CS 1/RCCS 10 SD 1

B.sc/B.C.A.DEGREE EXAMINATION,NOV- 2016.

Part III-Computer science/Computer Applications/Software Development-Major

PROGRAMMING IN C

Time:Three hours **Maximum:75 marks**

SECTION A-(10x2=20)

Answer All questions.

1. Write a short note on history of C.
2. Write any two importance of C.
3. Write a short note on Ternary operator.
4. Definr putchar.
5. What is Arrays?
6. Define String.
7. Write any two advantages of Pointers.
8. Define Union.
9. Write a short note on Circular Linked list.
10. Define File Inclusion.

SECTION B-(5x5=25)

Answer All question.

11. (a) Elaborate note on Data types in C with example.

Or

(b)Discuss about Mathematical functions with example.

12.(a) Elaborate note on Nested If with example.

Or

(b) Write a brief note on Switch statement with example.

13 (a) Write a C program to print the number in Ascending and Descending Order.

Or

(b)Discuss in detail about a String functions with example.

14. (a)Write a brief note on Structure with example.

Or

(b)Write the output of the program to reverse a string using pointers.

15. (a)Write a brief note on Dynamic memory allocation with example.

Or

(b)Explain in detail about the pre-processor with example.

SECTION C-(3x10=30)

Answer any three questions.

16. Discuss in detail about C operators with example.

17. Elaborate note on looping statement with example.

18. Write a brief note on Category of finctions with example.

19. Discuss about File management in C with example.

20.Explain in detail about linked list and its types with example.

16 SCCCS2
B.Sc DEGREE EXAMINATION
(B.Sc COMPUTER SCIENCE – APRIL 2017)
Programming in C++

SECTION A

Answer all the Questions

1. Write the principal advantages of Object Oriented Programming
2. Give the structure of C++ program
3. What is meant by Constructors and list various types of constructors?
4. What is meant by Destructor?Give example
5. What is meant by this pointer?
6. Distinguish Static and Dynamic binding
7. What is meant by file input and output streams?
8. Write a program to copy a content of file to another file
9. Draw the classic software development life cycle
10. Write three most popular container classes and its usage

SECTION B

Answer all the Questions

11.a) Explain various data types used in C++

or

b) Write a program to find maximum value Using friend function and friend class

12. a) Explain classes and objects with example

Or

b) Write short notes on Type conversion

13. a) What are the rules followed to implement virtual functions? Explain

Or

b) Write short notes on Pointers

14. a) Expalin console I/O operations in c++

Or

b) What is mean by templates?Explain with example

15. a) Write short notes on OOPS notation and graph

Or

b) Explain how to manipulate string objects

SECTION C

Answer any Three Questions

16.Expalin three control structures in c++ with examples.

17. Define operator overloading. Explain overloading binary operator with example

18. Explain different types of inheritance with example

19.Explain Exception handling with example

20. Explain three key components of standard Template library.

RCCS 10 CA5\RCCS10CS5

B.C.A./B.SC DEGREE EXAMINATIONS, APRIL2017

Part III – **Comp.Application/comp.science/inf.Tech/ Software Development.-Major**

DATA STRUCTURES AND ALGORITHMS.

TIME :Three hours Maximum:75 marks

PART-A(10*2=20)

ANSWER ALL QUESTIONS

1. What is stack?
2. Write the procedure for add the item into stack.
3. Define Tree.
4. What is an AOV Network?
5. What is algorithm?
6. Write an Algorithm for straight forward maximum and minimum
7. Write note on High Level description of job sequencing algorithm.
8. Write the procedure for general Greedy Method.
9. What is Back tracking?
10. What do you mean chromatic Number of the Graph.

PART B-(5*5=25)

Answer all questions.

11. (a) Write an algorithm for ADD Q and Delete Q with example.

or

(b). Write Short notes on linkes stacks and Queues.

12. (a)explain various Binary tree traversal.

or

(b).Write short note on Breadth First search algorithm

13.(a)Explain Recursive Binary Search algorithm

Or

(b).write the procedure for finding maximum and minimum value.

14.(a)Write short notes on Knapsack.problem with example.

Or

(b) Explain about optimal storage on tapes.

15.(a)Explain Recursive Back tracking Algorithm.

Or

(b) Write short Notes on N-Queen problem.

PART C –(3*10=30)

Answer any THREEquestions.

16. Write the procedure for Infix to postfix Notation with example.

17. Explain Kruskal algorithm for Minimum cost Spanning Tree.

18. Breifly Explain about Pseudocode convention.

19. Describe about job sequencing with deadlines.

20. Explain about sum of subset problem

RCCS 10CA6/RCCS 10 CS 6
B.C.A/B.SC.DEGREE EXAMINATION,
NOV 2013
Part III –Computer Application /Computer Science-Major
DATABASE SYSTEMS

Time:Three hours **Maximum:75 marks**

Part A (10*2=20)

Answer the questions

1. What do you mean by schema?Mention its types?
2. Who are called Naïve users ?
3. Define Tuple Variable.
4. What do you mean by primary key?
5. List any two set operations in sql.
6. What do you mean by Rollback word?
7. Define "Entity".
8. Define Storing Entity set.
9. What do you mean by lossy decomposition?
10. Name any four normal forms.

Part B (5*5=25)

Answer the questions

11. (a). Discuss about the drawbacks of file processing system.

Or

(b).Write down the function of Database administrator.

12. (a). Describe the project and union operation in Relational algebra.

Or

(b).Write a note on Aggregate functions in Relational Algebra.

13. (a). Explain the following clauses in SOL queries select,from,where.

Or

(b). Give a brief account on Authorization in SQL.

14. (a).What is an attribute ?Briefly discuss on its types.

Or

(b).Write a note on mapping cardinalities.

15. (a).Describe the Boyce-codd normal form.

Or

(b).What do you mean by multivalued dependencies? Discuss.

Part C (3*10=30)

Answer any three questions

16. Write a brief account on Database Languages.
17. Discuss in detail the Database schema.
18. Describe the set operations in SQL.
19. Discuss about queries on one relation and queries on several relations in query by example
20. Write a note on:

(a) Multivalued Dependencies

(b) Fourth normal form

RCCS 10 CS 7/RCCS 10 IT 7/RCCS 10 SD 7

(B.Sc.DEGREE EXAMINATION, APRIL 2017.

Part III-Inf.Tech./Computer Science/Software

OPERATING SYSTEM

PART A- (10*2=20)

Answer All questions.

1.Define dynamic Allocation.

2.What is a process?

3.Define segmentation.

4.What is demand paging?

5.Define deadlock.

6.What is multi programming?

7.Define microkernel.

8.What is spooling?

9.Define file type.

10.What is a device file?

PART B – (5*5=25)

Answer ALL questions.

11.(a) Write short notes on Batch processing.

Or

(b) Explain the features of Time sharing systems.

12.(a) Define contiguous memory allocation.

Or

(b) Explain overlay technique and how it is different form paging?

13.(a) Write short notes on process scheduling.

Or

(b) Explain the concept semaphores.

14.(a) Write about I/O scheduler

Or

(b) What is the function of I/O Traffic controller?

15.(a) Write short notes on logical file system.

Or

(b) Explain general model of a file system.

PART C –(3*10=30)

Answer any THREE questions.

16. Discuss about the evolution of OS function.

17. Explain in detail about relocatable partitioned allocation.

18. Explain the concept of Banker's algorithm eith example.

19. Discuss about the techniques of device management in detail.

20. Explain the lenix OS and its features in detail.

Computer Application/Computer Science

BCA DEGREE EXAMINATION– NOV 2016

SOFTWARE ENGINEERING

SUB CODE:MBECA1:1/10/MBECS1:1/10 MAX MARKS:75

CLASS: BCA TIME: 3 Hrs

SECTION-A (10X2=20)

ANSWER ALL QUESTIONS.

1. Define software Engineering.
2. Write a short note on trivial projects?
3. What is COCOMO?
4. Write any two major factors that influence software cost
5. What is Transition Tables?
6. Define Petri net.
7. Differentiate Structure chart Vs Flow chart.
8. Define HIPO
9. What is Debugging?
10. Write short note Stress tests.

SECTION-B (5 X 5 = 25)

ANSWER ALL QUESTIONS.

11. a) Explain in detail about Programming Team structure with example.

(OR)

b).Discuss in detail about Software size factors with example.

12. a) Elaborate note on Prototype Life Cycle Model with example.

(OR)

b) Discuss in detail about Project Structure with example.

13. a) Write a brief note on Formal specification techniques with example.

(OR)

b) Elaborate note on Fundamental design concepts with example.

14. a) Discuss about Design techniques with example.

(OR)

b).Explain in detail about documentation guidelines with example.

15. a) Elaborate note on Managerial aspects of software maintenance.

(OR)

b) Explain in detail about Quality assurance with example.

SECTION-C **(10 X 3 = 30)**

ANSWER ANY THREE QUESTIONS.

16. Discuss in detail about Quality and productivity factors with example.

17. Explain in detail about Software cost estimation techniques with example.

18. Elaborate note on Cohesion and Coupling with example.

19. Explain in detail about Design notations with example.

20. Discuss in detail about Unit testing and debugging with example**.**

******ALL THE BEST********

B.Sc.DEGREE EXAMINATION - NOVEMBER 2016

PART-III-Computer Science-Major Based Elective

COMPUTER GRAPHICS AND MULTIMEDIA

SECTION A

Answer ALL questions.

1. what is CAD?
2. Define Persistence.
3. Write the various line-type attributes.
4. what do you mean by bundled attributes?
5. write the equations for rotation of a point about any specified rotation position (x1,y1).
6. Define Shear.
7. What is Multimedia? Give an example.
8. List out the benefits of Multimedia.
9. What is GIF?
10. What is frequency?

SECTION B

Answer ALL questions.

11. (a) Explain any five input devices.

    (b) Write short notes on graphics software.

12. (a) Explain the DDA line algorithm.

    (b) Write about character attributes.

13. (a) Write about any two composite transformations.

    (b) Discuss about reflection.

14. (a) List out the application and problems of multimedia.

    (b) write about multimedia platforms.

15. (a) List out the explain the characteristics of multimedia

    audio.

    (b) Discuss about multimedia image.

SECTION C

Answer any THREE questions.

16. Explain the working principle of refresh CRT with neat diagrams.
17. Illustrate the Bresenham's line drawing algorithm.
18. Explain the various 2D basic transformations.
19. Explain the multimedia system components with a block diagram.
20. Discuss briefly about the various multimedia development tools.

********ALL THE BEST***********

MBECS 2: 1/10

B.SC. DEGREE EXAMINATION, APRIL 2016.

Part III- Computer Science- Major Based Elective.

COMPUTER GRAPHICS AND MULTIMEDIA

Time: Three Hours Maximum: 75marks

PART-A (10*2=20)

Answer ALL questions.

1. What is CAD?
2. Define resolution.
3. Define output primitives.
4. Write the straight line equation.
5. What is composite transformation?
6. What is pivot point?
7. What is multimedia? Give an example.
8. List out the applications of multimedia.
9. What is frequency?
10. What is MIDI?

PART-B (5*5=25)

Answer ALL questions.

11. (a). Discuss about color CRT monitors.

Or

(b). Explain about any Five input devices.

12. (a) Illustrate the DDA line drawing algorithm.

Or

(b)Discuss about line attributes.

13. (a) write about:
    (i) Reflection
    (ii) Shear.

Or

(b).Discuss about any two composite transformations.

14.(a) why do we need multimedia?

Or

(b) List out and explain the benefits and problems of multimedia.

15.(a). Discuss about multimedia tool selection.

Or

(b).Write about multimedia image.

PART-C (3*10=30)

Answer any THREE questions.

16. Explain the working principle of refresh CRT with neat diagrams.
17. Discuss briefly about the 2D basic transformations.
18. Illustrate the Bresenham's line drawing algorithm.
19.Explain the multimedia system components with a neat block diagram.
20.Explain the various multimedia development tool categories.

****ALL THE BEST*******

B.Sc/B.C.A DEGREE EXAMINATION, APRIL 2016

PartIII-Computer Application-Major

COMPUTER NETWORKS (RCCS 10CA9/RCCS 10 CS9)

SECTION-A(10*2=20)

Answer ALL Questions

1. Define MAN.

2. Write a short note on protocol.

3. Define PSTN.

4. Differentiate Radio transmission Vs Microwave Transmission.

5. Define Parity bit.

6. Write a short note on ARQ.

7. Differentiate Datagram subnet Vs Virtual circuit.

8. Define Congestion.

9. Write a short note on Name Servers.

10. Define URL.

SECTION_B (5*5=25)

Answer ALL Questions

11. (a) Discuss in detail about Network Hardware with example.

Or

(b) Elaborate note on OSI reference model.

12. (a) Write a brief note on Radio Transmission with example.

Or

(b) Discuss in detail about Communication Satellites.

13. (a) Write a brief note on Data Link layer design issues.

Or

(b) Discuss in detail about Sliding Window Protocol.

14. (a) Explain in detail about Internetworking with example.

Or

(b) Write a brief note on Quality of Service with example.

15. (a) Discuss in detail about DNS with example.

Or

(b) Elaborate note on SMTP.

SECTION –C (3*10=30)

Answer any THREE Question

16. Discuss in detail about Connection Oriented networks with example.
17. Write a brief note on Transmission media with example.
18. Explain in detail about Error detection and Correction with example.
19. Discuss in detail about Routing algorithm with example.
20. Elaborate note on World Wide Web with example.

B.Sc COMPUTER SCIENCE DEGREE EXAMINATION
MICROPROCESSOR AND ITS APPLICATIONS
(RCCS10CS 8)
Section-A

Answer all the questions

1. What is general purpose register?
2. What is opcode?
3. Define addressing.
4. What is one pass assembler?
5. Which number system is followed in microprocessors ? why?
6. Write the function of mnemonics MOV and HLT.
7. List out schemes of the allocation of addresses.
8. What is Intel 8253/
9. What is the use of delay?
10. How will you measure the frequency of a signal?

Section-B

Answer all the questions

11.a) Write a note on magnetic memory.

Or

b) Describe instruction and data format

12.a) Give an introduction to assembly language

Or

b) Describe data and address bus of Intel 8085

13. a) Write a programme to find one's complement of an 8-bit number.

Or

b) Write a program to find sum of a series of 8-bit numbers; sum :8-bit

14. a) Explain memory and i/o interfacing.

Or

b) Write a short note on analog to digital converter.

15. a) Explain delay subroutine using one register

Or

b) Write a note on 7-Segment LED display.

Section-C

Answer any Three questions

16. Discuss instruction cycle of Intel 8085 in detail
17. Explain various addressing modes of intel 8085
18. Elucidate multibyte addition with an example
19. Describe various data transfer schemes
20. Explain frequency measurements in detail

B. Sc DEGREE EXAMINATION– NOVEMBER 2016

MICROPROCESSOR AND ITS APPLICATIONS

SUB CODE: RCCS10CS8 **MAX MARKS:75**

CLASS: B.Sc CS **TIME: 3 Hrs**

SECTION-A (10X2=20)

ANSWER ALL QUESTIONS.

1. List out any four flags of Intel 8085.
2. What is program counter?
3. What is two pass assembler?
4. How the negative result will be presented in 8-bit unsigned subtraction?
5. What is the use of DAA in decimal addition of 8-bit numbers?
6. List out the addressing modes of Intel 8085.
7. When the synchronous data transfer technique will be employed?
8. What is vectored interrupt?
9. What is the limitation of 7-segment LED display?
10. What is resistance thermometer?

SECTION-B (5 X 5 = 25)

ANSWER ALL QUESTIONS.

11. a) Write a note on optical disks.

(OR)

b).What is instruction word size?

12. a) Explain register addressing with example.

(OR)

b) Discuss the operations of stacks.

13. a) Write a program to find two's complement of an 8- bit number.

(OR)

b) Write a program to find sum of a series of 8-bit number: sum: 16 bit.

14. a) Describe interrupt driven data transfer.

(OR)

b).Write a note on digital to analog converter.

15. a) Explain delay subroutine using register pair.

(OR)

b) Write a note on display of decimal numbers.

SECTION-C **(10 X 3 = 30)**

ANSWER ANY THREE QUESTIONS.

16. Explain various components of magnetic memory.

17. Discuss arithmetic group of Intel 8085 instructions.

18. Explain multibyte subtraction with an example.

19. Describe interrupts of Intel 8085 in detail.

20. How microprocessors are used in temperature measurement?

******ALL THE BEST********

B.Sc.Degree Examination,April 2016

Part –III – Computer Science /Information Techonlogy - Major Based Elective

PHP SCRIPTING LANGUAGE

Part – A (10X2=20)

ANSWER ALL THE QUESTIONS.

1. Define PHP.
2. What is String in Hypertext Preprocessor?
3. How to create the function in PHP?
4. What is mean by Browser?
5. Define OOPs.
6. What is Inheritance? List out it Types.
7. Define cookies.
8. Define FTP.
9. Why we need an Ajax?
10. List out the advantages an AJAX.

PART -B (5X5=25)

ANSWER ALL THE QUESTIONS.

11. a) Explain about an operation in PHP. (OR)

    b) Give the suitable example for arrays in PHP.

12. a) Discuss about the Function in PHP.

(OR)

b) How to read the data in PHP web pages?

13. a) Explain Polomorphism with suitable example in OOPS.

(OR)

b) Discuss about the Overriding with suitable example in OOPs

14. a) How to create the sessions in PHP?Explain.

(OR)

b) Describe about File Handling Concepts in PHP.

15. a) How to draw image in an AJAX?

(OR)

b) Briefly write out an advantages and Disadvantages in AJAX.

PART – C (3X10=30)

ANSWER ANY 3 OF THE FOLLOWING.

16. Expalin in detail about the conditional statements with suitable example.

17. Discuss in detail about the Handling Power in PHP.

18. Explain in detail about the Advanced Object Oriented Programming with example.

19. How to Working and accessing the database in PHP?

20. Describe in deatl about Overview of an AJAX and working principles..