

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. Explain any four types of operators with example.
17. Discuss the application of looping statements with examples.
18. Write a C program for
 - String Copy
 - String Compare
 - String Concatenation
 - String length
19. Explain the concept of array with in structure and array of structure with example.
20. Explain any five file handling functions in detail.

Reg. No:

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G.T.N. ARTS COLLEGE (AUTONOMOUS)

(Affiliated to Madurai Kamaraj University)

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme :BCA

Course Code: 17UCAC11

Course Title : Programming in C

Date : 14.11.2019

Time : 10.00 am. to 1.00 pm.

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. _____ is the reservation of memory to hold the value permanently throughout the execution.
 - [a] Constant
 - [b] Variable
 - [c] Keyword
 - [d] Tocxen
2. float f1;
Double d1=43.28;
f1=(float)d1;
The conversion in above statement is _____
 - [a] implicit
 - [b] explicit
 - [c] automatic
 - [d] break
3. _____ is the entry control statement.
 - [a] While
 - [b] do...While
 - [c] for
 - [d] All of the above

4. Which one of the following is not a jump statement?
 [a] go to [b] return
 [c] if [d] break
5. Double d[4] allocates _____ bytes in c
 [a] 4 bytes [b] 8 bytes
 [c] 32 bytes [d] all the above
6. Float per[5]={92.3,90.7,48.5,46.7,93.3};
 Printf(“%f”,(per[2]-per[3]));
 What will be the output of above statement?
 [a] 2.4 [b] 42.2
 [c] 1.8 [d] 30.3
7. The arguments in function calling line is called as _____
 [a] actual arguments [b] formal Arguments
 [c] variable arguments [d] None
8. _____ & _____ are heterogeneous data types in c.
 [a] Array & structure [b] Array & union
 [c] Union & Structure [d] Array & functions
9. Int x=400;int *p=&x;
 What will be output of the following?
 Printf(“%d”,(*p));
 [a] 400 [b] Address of p
 [c] Address of X [d] None

10. _____ is the collection of related information or data stored permanently on harddisk
 [a] Structure [b] File
 [c] Pointer [d] Array

SECTION – B [5 X 7 = 35]

Answer ALL the Questions.

11. a) Explain the data types in C with example.
[OR]
 b) Briefly describe the usage of conditional operators. Give examples.
12. a) Explain any three I/O functions with examples.
[OR]
 b) Describe various **if** types with example.
13. a) Write a C program to find the sum of even numbers in an array.
[OR]
 b) Describe the usage of array with example.
14. a) Explain the benefits of union with example.
[OR]
 b) How the Structures are passed to functions? Explain.
15. a) Explain the file open method with different modes.
[OR]
 b) Explain the usage of pointer with functions.

Reg. No:

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme :BCA

Course Code: 17UCAC21

Course Title : OOPS WITH C++

Date : 13.11.2019

Time: 2.00 pm to 5.00 pm.

Max Marks :75

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. What are the advantages of using new operator as compared to the function malloc?
17. Define pointer. Give an explanation about this pointer and give one example program.
18. Write about Function Overloading and give one example program.
19. Explain Multiple Inheritance and give one example program
20. How to manage output with manipulators using C++? Give one example program.

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. Which of the following type of class allows only one object is to be created ?
[a] Virtual class [b] Abstract class
[c] Singleton class [d] Friend class
2. C out is a/an _____
[a] Operator [b] Functions
[c] Object [d] Macro
3. A Character array can be initialized using _____
[a] float value [b] integer values
[c] A string literal [d] none of these
4. Position number contained within a square bracket
(e.g) my_array [5] is referred as _____
[a] post script [b] sub script
[c] elements of an array [d] none of these-

5. C++ allows you to use same name for different functions with different parameter is

- [a] Overlapping [b] Overusing
[c] Overloading [d] Over flowing

6. Which is more effective while calling the function ?

- [a] Call by value [b] Call by reference
[c] Call by pointer [d] All the above

7. How many types of inheritance are there in C++?

- [a] 2 [b] 3
[c] 4 [d] 5

8. Destructor has the same name as the constructor and it is preceded by

- [a] ! [b] ?
[c] ~ [d] \$

9. What is meant by of stream in C++?

- [a] Writes to a file [b] reads from a file
[c] both a&b [d] none of these

10. The Standard input stream which refers to the keyboard is called_____

- [a] in [b] out
[c] stin [d] stout

SECTION – B

[5 X 7 = 35]

Answer ALL the Questions.

11. a) Briefly explain the member functions in C++.

[OR]

b) Write briefly about the objects as function argument.

12. a) How to declare and initialize pointers in C++?

[OR]

b) Briefly Explain the concept of copy constructor

13. a) Briefly explain the concept of Overloading binary operations.

[OR]

b) Write a C++ program for using overloading '+' operator.

14. a) Define pointer and give example program.

[OR]

b) Briefly explain the Hybrid Inheritance.

15. a) Write the difference between width () and precision ()

[OR]

b) How to manage output with manipulators in C++ ?

16. Evaluate the application of stack
17. Evaluate the representation of Binary Trees with an example.
18. Explain the Time complexity algorithms – Give example.
19. Discuss anyone minimum cost spanning tree algorithm.

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme :BCA

Date :7.11.2019

Course Code: 17UCAC31

Time : 2.00 pm to 5.00 pm.

Course Title : Data Structure and Algorithm Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. The array is used for _____
[a] to store mixed data type [b] to store same data type
[c] to store sorted data [d] to store integer data only
2. An _____ is usually implemented as a consecutive set of memory locations.
[a] Union [b] List
[c] Array [d] Structure
3. The retrieval of items in a stack is _____ operation
[a] push [b] pop
[c] retrieval [d] access
4. A _____ indicates the end of the list.
[a] Guard [b] Sentinel
[c] End Pointer [d] Last pointer

5. The number of edges from the root to the node is called _____ of the tree
- [a] height [b] depth
[c] length [d] width
6. _____ is a collection of pairs.
- [a] Key [b] Tree
[c] Dictionary [d] Heap
7. _____ has to refer to a method that can be used by a computer for the solution of a problem.
- [a] Algorithm [b] Definiteness
[c] Input [d] Output
8. In _____ the division into two sub arrays is made so that the sorted sub arrays do not need to be merged later.
- [a] Quick sort [b] Merge sort
[c] Random sorting [d] Partition Algorithm
9. The _____ method suggests that one can diversify an algorithm that works in stages considering one input at a time.
- [a] Merge Sort [b] Quick sort
[c] Greedy [d] Knapsack
10. Any _____ algorithm must examine each edge in the graph at least once sense any of the edges covered be in a shortest path.
- [a] Shortest path [b] Graph
[c] linear [d] Optimal

SECTION – B

[5 X 7 = 35]

Answer ALL the Questions.

11. a) Write about the Two-dimensional array with an example
[OR]
b) What is linked list and what are the benefits of linked list?
12. a) What is stack? How to implement stack? Explain.
[OR]
b) Illustrate implementations of basic operations on linked list based queues.
13. a) Write about Threaded Trees
[OR]
b) Write a note on (i) In order Traversal .
14. a) What is Merge sort? Explain.
[OR]
b) With an example, explain binary search algorithm.
15. a) Write a KNAPSACK PROBLEM
[OR]
b) Write Greedy Algorithms to generate shortest paths.

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. Explain in detail Singly linked lists with an example

Reg. No:

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme : BCA.

Date : 09.11.2019

Course Code: 17UCAC32

Time: 2.00 pm. to 5.00 pm.

**Course Title : Computer Graphics
& Multimedia**

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. _____ allows artists to paint pictures on the screen of video monitor.
[a] HTML [b] Paint brush
[c] Paint art [d] Java
2. A _____ is defined as the set of points that are all at a given distance r from a center position.
[a] line [b] polygon
[c] circle [d] None of the above
3. A _____ transformation alters the size of an object.
[a] scaling [b] rotation
[c] translation [d] boundary
4. A _____ is a transformation that produces a mirror image of an object.
[a] shear [b] pivot point
[c] segment [d] reflection

5. The coordinate area selected for display is called a _____.
- [a] viewport [b] window
[c] vector [d] matrix
6. The picture parts to be saved are those that are outside the region is referred as a _____.
- [a] exterior clipping [b] curve clipping
[c] polygon clipping [d] window clipping
7. _____ palette displays the current background and foreground color.
- [a] Color [b] Navigator
[c] Layer [d] Options
8. Which tool selects an object by drawing a free hand drawing border around it in Photoshop?
- [a] Marquee [b] Brush
[c] Slice [d] Lasso
9. _____ represents a simple mode of visualization in flash.
- [a] Timeline [b] Layer
[c] Window [d] View
10. _____ tool is used to magnify and demagnify the stage in flash.
- [a] Bind [b] Eraser
[c] Zoom [d] Pencil

SECTION – B [5 X 7 = 35]
Answer ALL the Questions.

11. a) Write about Education and Training in computer graphics .
- [OR]**
- b) Give an account of points and lines briefly.
- 12.a) Write a note on matrix representations and homogenous coordinates.
- [OR]**
- b) Explain briefly about shearing transformation.
- 13.a) Discuss about window to viewport coordinate transformation.
- [OR]**
- b) Explain the following: a) Text clipping b) Curve clipping
14. a) Write about Workspace in photoshop.
- [OR]**
- b) Write a note on mastering layers in photoshop.
15. a) Explain the various drawing tools used in flash.
- [OR]**
- b) With example, explain motion tweening.

SECTION – C [3 X 10 = 30]
Answer Any THREE Questions.

16. Elaborate DDA line drawing algorithm.
17. Explain basic 2D transformations with diagram.
18. Explain Cohen-Sutherland line clipping algorithm.
19. What are the commonly used photoshop tools? Explain
20. How will you work with animations and videos in flash? Explain.

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme : BCA

Date : 11.11.2019

Course Code: 17UCAC33

Time: 2.00 pm to 5.00 pm

Course Title : Operating System

Max Marks : 75

15. a) Define fork (). and explain fork () System call in UNIX..

[OR]

b) Explain While loop in Linux with an example.

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. Describe the concept of interrupt and interprocess communication in detail.

17. How do enforce the mutual exclusion using a semaphore?

18. Illustrate the deadlock avoidance with Dijkstra's Banker's algorithm in detail.

19. Explain the SCAN and C-SCAN disk scheduling strategies with a suitable example.

20. Explain UNIX kernel structure architecture with a neat sketch.

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. To access the service of operating system, the interface is provided by the _____

[a] API

[b] System Call

[c] Library

[d] Kernel

2. Example of monolithic architecture

[a] VMS

[b] Windows XP

[c] UNIX

[d] WINDOWS NT

3. Semaphores are used to implement _____

[a] System Call

[b] IPC Mechanism

[c] System protection

[d] None of the above

4. A Mutex:_____
- [a] Is a binary mutex
 - [b] must be accessed from only one process
 - [c] can be accessed from multiple processes
 - [d] None of the mentioned
5. A problem encountered in multitasking when a process is perpetually denied necessary resources is called_____
- [a] deadlock
 - [b] starvation
 - [c] inversion
 - [d] aging
6. The interval from the time submission of a process to the time of completion is termed as _____
- [a] waiting time
 - [b] turnaround time
 - [c] response time
 - [d] throughput
7. In the _____ algorithm ,the disk arm starts at one end of the disk moves toward the other end, servicing request till the other end of the disk. At the other end the direction is reversed and servicing continues.
- [a] Look
 - [b] Scan
 - [c] C-Scan
 - [d] C-Look
8. In _____ information is recorded magnetically on platters.
- [a] magnetic disk
 - [b] electrical disk
 - [c] assemblies
 - [d] cylinder
9. Linux is _____
- [a] Single user, single tasking
 - [b] Single user, Multi tasking
 - [c] Multi user, Single tasking
 - [d] Multiuser, Multi tasking

10. Which of the following is not a part of all the versions of UNIX?
- [a] Kernel and Shell
 - [b] Commands and utilities
 - [c] GUI
 - [d] System call

SECTION – B

[5 X 7 = 35]

Answer ALL the Questions.

11. a) What is the difference between a monolithic architecture and microkernel architecture?
- [OR]**
- b) Explain the process Descriptors with a neat sketch.
12. a) Describe the implementation of mutual exclusion primitives in detail.
- [OR]**
- b) Explain the Peterson’s algorithm for mutual exclusion in detail.
13. a) Elaborate the Resource allocation graph in detail.
- [OR]**
- b) What do you mean by CPU scheduling? Discuss CPU/IO burst cycle.
14. a) What are the characteristic of moving head disk storage? Draw the schematic top view of disk surface with neat sketch.
- [OR]**
- b) Write down three criteria to measure disk scheduling strategies. and draw the disk request pattern with neat sketch.

18. Describe Structured analysis and design techniques (SADT) in detail.
19. What are the techniques used in software design?
20. What are the development activities that enhance software maintainability?

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme :BCA

Date : 14.11.2019

Course Code: 17UCAC34

Time : 2.00 pm. to 5.00 pm.

Course Title : Software Engineering

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

- _____ number of source line involved in large size category project.
[a] 1k-2k [b] 10-50k
[c] 500 source lines [d] 50-100k
- The programmers spend _____ percentage of time for writing the program
[a] 13% [b] 70%
[c] 100% [d] 5%
- Which is the cost estimation for software?
[a] The phase model [b] Expert judgement
[c] Decision table [d] Structured English
- Factors influence in software cost is _____
[a] programmer ability [b] Space complexity
[c] Mechanics drawback [d] proposed system

5. Which of the following is included in software requirement specification

- [a] Cost
- [b] Design constraint
- [c] Staffing
- [d] delivery schedule

6. _____ is not included in software requirement specification

- [a] Performance
- [b] Functionality
- [c] Design solution
- [d] External interfaces

7. _____ is collectively called interner design in software design

- [a] Conceiving and planning
- [b] Requirement and Establishment
- [c] Architectural and detailed
- [d] None of the above

8. _____ data flow diagram are represented as

- [a] arc
- [b] line
- [c] circle
- [d] Diamond

9. Alpha and Beta testing are forms of _____

- [a] Acceptance
- [b] Integration
- [c] System
- [d] Unit

10. Debugging methods include_____

- [a] Induction
- [b] Deduction
- [c] Back Tracking
- [d] All the above

SECTION – B

[5 X 7 = 35]

Answer ALL the Questions.

11. a) Explain in brief project size catagories.

[OR]

b) Describe about the prototype life cycle model.

12. a) Discuss about Delphi cost estimation technique.

[OR]

b) Explain in brief the major factors that influence software cost.

13. a) Explain in brief transition table

[OR]

b) Write short notes on SSA

14. a) Explain in brief HIPO diagram

[OR]

b) How do you guide for organising the activities of software design?

15. a) Write short notes on Software Testing

[OR]

b) Explain in brief source code metrics

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. Explain in detail planning an organizational structure

17. How do you estimate software maintenance cost ?

Reg. No:

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme :BCA

Date : 8.11.2019

Course Code: 17UCAC41

Time: 2.00 pm. to 5.00 pm.

Course Title : Java Programming

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. Boolean logical values are handled under the type _____.
[a] boolean [b] char
[c] integer [d] float
2. Modulus operator works for _____ values.
[a] boolean [b] char
[c] float [d] int
3. The _____ operator creates an object and returns an object reference.
[a] begin [b] new
[c] start [d] end
4. A _____ method cannot access any instance variable of that class.
[a] dynamic [b] run-time
[c] static [d] change
5. _____ class is wrapper for short type.
[a] Byte [b] Short
[c] Integer [d] Long

6. An _____ are abnormal condition occurring in a program.
 [a] exception [b] interrupt
 [c] interface [d] inheritance
7. FileWriter is a subclass of _____.
 [a] DisplayStream [b] OutputStream
 [c] OutputStreamWriter [d] I/O Stream
8. The thread is said to be runnable, when _____ method is called.
 [a] begin() [b] end()
 [c] stop() [d] start()
9. _____ method is used to initialize the variables of the applet.
 [a] start() [b] init()
 [c] paint() [d] stop()
10. Text in the status bar of the browser window can be displayed using the _____ method.
 [a] showCode() [b] showActive()
 [c] showStatus() [d] showState()

SECTION – B [5 X 7 = 35]
Answer ALL the Questions.

11. a) Write notes on variables in java.
 [OR]
 b) Illustrate the concept of Multi-dimensional array.
12. a) Explain the following:
 (i) Defining a Class (ii) The new operator and objects
 [OR]
 b) Write about access modifiers and their visibility.

13. a) What is the use of string class? Explain any four string methods with suitable example.
 [OR]
 b) How to create your own exception in java? Explain it.
14. a) Write about Random Access File.
 [OR]
 b) Describe the different states of a java thread.
15. a) Explain about methods of building an applet.
 [OR]
 b) Describe the isActive() and showStatus() Methods.

SECTION – C [3 X 10 = 30]
Answer Any THREE Questions.

16. Explain about One-dimensional array with suitable example.
17. What is an interface? How to implement an interface in your java program? Explain it.
18. Describe the Number class and its subclasses.
19. Explain about FileInputStream and FileOutputStream.
20. Write notes on Applet Basics.

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme :BCA

Course Code: 17UCAC42

**Course Title : Relational Database
Management System**

Date : 11.11.2019

Time: 2.00 pm. to 5.00 pm.

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. Which Database level is one closest to the physical storage ?

[a] Internal

[b] External

[c] Conceptual

[d] Abstraction

2. Which of the following is hierarchical database model?

[a] IDMS

[b] IMS

[c] DB2

[d] ORACLE

3. Who is called the father of RDBMS?

[a] E.F. Codd

[b] Donald chamberlain

[c] C.J.Date

[d] H.F.Korth

4. An instance of a relation is a set of _____

[a] attribute

[b] domain

[c] tuple

[d] fields

5. Which clause is not in the basic form of an SQL Select Query?
 [a] Select [b] From [c] Where [d] Any
6. _____ handles null values just like other values.
 [a] min [b] count(*)
 [c] count [d] max
7. Functional Dependencies are the type of Constraints that are based on_____.
 [a] key [b] key revisited
 [c] Super key [d] primary key
8. Third Normal Form is based on the concept of _____.
 [a] Closure Dependency [b] Transitive Dependency
 [c] Normal Dependency [d] Functional Dependency
9. _____ is the list of actions from a set of transaction
 [a] Schedule [b] Rollback
 [c] Recovery [d] Abort
10. Overlapping I/O and CPU activity reduces the idle time and increase system_____.
 [a] Response Time [b] Average Time
 [c] Through put [d] Complete Time

SECTION – B [5 X 7 = 35]

Answer ALL the Questions.

11. a) Compare and Contrast File System versus a DBMS.

[OR]

- b) Write about Database design and ER Diagram.

12. a) Discuss about Destroying / Altering Tables and Views.

[OR]

- b) Describe about Tuple Relational Calculus.

13. a) Discuss in detail about GROUP BY and HAVING Clause

[OR]

- b) Explain Designing Active Databases..

- 14.a) Write in detail about Multivalued dependencies.

[OR]

- b) Summarize on Third Normal Form.

15. a) Describe about Performance of Locking.

[OR]

- b) Write about transaction characteristics in SQL.

SECTION – C [3 X 10 = 30]
Answer Any THREE Questions.

16. Briefly explain the Structure of a DBMS.
 17. Discuss about Integrity Constraints over Relations.
 18. Summarize about Nested Queries
 19. Briefly explain Lossless Join Decomposition
 20. Discuss about Lock – Based Concurrency Control.

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END SEMESTER EXAMINATION – NOVEMBER 2019

Programme :BCA

Date :15.11.2019

Course Code: 17UCAC43

Time: 2.00 pm. to 5.00 pm.

**Course Title : Data Communication &
Computer Networks**

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. Node-to-Node delivery of the data unit is the responsibility of the _____ layer.

[a] Physical

[b] Data link

[c] Network

[d] Transport

2. Which layer is responsible for data translating ?

[a] Application

[b] Network

[c] Presentation

[d] Data link

3. _____ is a standard for transmitting data on fibers.

[a] ISO

[b] SONET

[c] IEEE

[d] ITU

4. Different computer are connected to an LAN by a cable and _____.

[a] Modem

[b] Interface card

[c] Special wires

[d] Telephone lines

5. ___ equipment to convert their signal to an ISDN compatible format.
 [a] TE1 [b] TE2
 [c] NT1 [d] NT2
6. How many physical layers are defined in the original 802.11 standard?
 [a] One [b] Two
 [c] Three [d] Four
7. Total length of the IP datagram has _____ fields.
 [a] One byte [b] Two byte
 [c] Three byte [d] Four byte
8. IP version 6 has _____ address.
 [a] 32 bits [b] 64 bits
 [c] 128 bits [d] variable
9. What protocol is used between E-mail server?
 [a] FTP [b] SMTP
 [c] SNMP [d] POP
10. URL stands for _____.
 [a] Unique Resources Location [b] Uniform Resources Locator
 [c] Unique Request Locator n [d] Uniform Response Locator

SECTION – B [5 X 7 = 35]

Answer ALL the Questions.

11. a) Discuss modulation and demodulation with a neat Sketch
 [OR]
 b) What is flow control? What are the two techniques of flow control? Explain.

12. a) Discuss fiber distributed data interface.
 [OR]
 b) Discuss WAN transmission equipment with example.
13. a) Illustrate the principal characteristics of ATM.
 [OR]
 b) Compare ISDN, ATM and Frame Relay.
14. a) Illustrate the characteristic features of IPv6.
 [OR]
 b) Write short notes on Transport Protocols with a neat diagram.
15. a) With a neat sketch explain how TELNET works.
 [OR]
 b) Explain POP, IMAP and MIME

SECTION – C [3 X 10 = 30]
Answer Any THREE Questions.

16. Discuss the layers of OSI model with a neat diagram.
17. Explain technologies of ETHERNET in detail.
18. Briefly discuss about Frame Relay with its advantages and disadvantages.
19. Explain TCP implementation policies and its reliability.
20. Discuss Client-Server Model with a neat diagram.

Reg. No:

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15. a) How will you create a web application project? Explain

[OR]

b) How do web forms work? Explain.

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. Explain about calendar control.

17. Explain the various data types with suitable examples.

18. Discuss briefly about graphics.

19. Explain briefly about dealing with large database.

20. Explain the various web controls with examples.



G.T.N. ARTS COLLEGE (AUTONOMOUS)

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme : BCA

Date : 13.11.2019.

Course Code: 17UCAC51

Time: 10.00 am. to 1.00 pm.

Course Title : Dot Net Programming

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. A/An _____ is an action or occurrence such as a mouse click ,a key press, mouse movements or any system generated notification.

[a] event

[b] method

[c] Process

[d] menu

2. CLI stands for _____

[a] Common Language Interface

[b] Command Language Interface

[c] Common Line Interface

[d] Command Line Interface

3. A/An _____ is a set of named integer constants.

[a] integer

[b] int

[c] enumeration

[d] const

4. The Keyword _____ is used to create an instance of the array
[a] new [b] create
[c] this [d] create instance
5. Graphics objects are created by calling the _____ method
[a] CallGraphics() [b] CreateGraphics()
[c] DrawGraphics() [d] CreateGraphicsObjects()
6. _____ is a Microsoft windows programming interface for creating an application that enables users to work with multiple documents at the same time.
[a] MDI [b] MIDI
[c] SDI [d] SIDI
7. A _____ is an in- memory data store that can hold numerous tables.
[a] Row set [b] Column set
[c] Table set [d] Data set
8. The _____ holds the SQL commands and connection object reading and writing data
[a] sqlCommandBuilder [b] sqlDataAdapter
[c] sqlCommandObject [d] sqlConnectionObject
9. _____ refers to the code that is written inside an ASP.NET web page that has an extension of .aspx which allows the code to be written along with the HTML source code.
[a] Inline Code [b] Code behind
[c] ASP Code [d] Source code

10. _____ is used to provide various links to navigate to other web page depending on the place where the user clicks
[a] Image control [b] Image button control
[c] Image Map control [d] Button control

SECTION – B

[5 X 7 = 35]

Answer ALL the Questions.

11. a) Explain the steps to implement an ASP.NET property editor.
[OR]
b) Write about combo box control with examples.
12. a) Explain the basic structure and parts of a C# program with an example program
[OR]
b) Explain the various forms of 'if' statement with suitable examples.
13. a) Write about exception handling with an example.
[OR]
b) How will you create and run a console application? Explain.
14. a) Write down the fundamentals of database connectivity.
[OR]
b) How will you create a report? Explain with an example.

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme : BCA

Date : 15.11.2019

Course Code: 17UCAC52

Time: 10.00 am to 1.00 pm.

Course Title : PHP & Java script

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. PHP is an example of _____ scripting language.
[a] server-side [b] client-side
[c] browser-side [d] in-side
2. PHP stands for _____
[a] Hypertex Processor [b] Hyper Markup Processor
[c] Hyper Markup Preprocessor [d] Hypertext Preprocessor
3. Which of the following function returns a text in title case from a variable?
[a] ucwords(\$var) [b] upper(\$var)
[c] toupper(\$var) [d] ucwords(\$var)
4. PHP's numerically indexed array begin with position _____.
[a] 0 [b] 2
[c] 1 [d] -1
5. All PHP classes come with a default constructor that takes ___ arguments.
[a] one [b] two
[c] three [d] no

6. Once a class has been defined, objects can be created from the class with the keyword.

- [a] new object [b] construct
[c] new [d] both A and C

7. The _____ looks much like an array constructor.

- [a] object constructor [b] inheritance
[c] chatting [d] all the above

8. JavaScript provides _____ ways to access the values of properties in objects

- [a] 1 [b] 3
[c] 2 [d] 4

9. The _____ object, which allows access to the debugging console if available

- [a] console [b] content
[c] history [d] length

10. The _____ method enables the viewer to print the current window.

- [a] print() [b] setInterval()
[c] clearInterval() [d] getInterval()

SECTION – B **[5 X 7 = 35]**
Answer ALL the Questions.

11. a) Explain about Destroying Variables in PHP.

[OR]

b) What are the differences between PHP constants and variables?

12. a) Write short note on switch case with suitable example.

[OR]

b) Explain the syntax for 'foreach' loop with suitable example.

13. a) Write the syntax of function with an example.

[OR]

b) Write short note on Cookie Attributes.

14. a) Explain about Object Literal Notation.

[OR]

b) Write short note on Infinite Loops.

15. a) Explain the Methods of the String Object.

[OR]

b) Explain the Usage of Properties and Methods of the Form Object in JavaScript.

SECTION – C **[3 X 10 = 30]**
Answer Any THREE Questions.

16. Discuss the various types of operators in PHP with examples.

17. Explain Built-in array functions of PHP.

18. Briefly explain about class and objects in PHP.

19. Explain the Understanding Predefined JavaScript Objects.

20. Discuss about the Main Window and New Windows in JavaScript.

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. Discuss about fundamental steps in Digital Image processing.
17. What are the elements of visual perception? Explain in detail.
- 18 Explain the piecewise – linear transformations functions.
19. Evaluate some important noise Probability Density Functions
20. Briefly explain the converting colors from HIS to RGB.

Reg. No:

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme : BCA

Date : 18.11.2019

Course Code: 17UCAE52

Time: 10.00 am to 1.00 pm.

Course Title : Digital Image Processing

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. What is called Pixel?
[a] An element of a digital image
[b] An element of an analogue image
[c] The cluster of digital image
[d] the cluster of an analogue image
2. Radio bands used in _____
[a] Medicine
[b] Astronomy
[c] Both (a) and (b)
[d] Education
3. Cornea is tough transparent tissues that covers eye's_____
[a] Eye lid
[b] lashes
[c] anterior
[d] exterior

4. Histogram equalization also called as _____
[a] Histogram matching [b] Histogram linearization
[c] image transformation [d] image enhancement
5. The transition between continuous values of the image function and its digital equivalent is called ___
[a] Quantization [b] Sampling
[c] Rasterisation [d] All of these
6. Convolution and correlation are functions of _____
[a] Distance [b] Time
[c] Intensity [d] Displacement
7. Gaussian noise is referred to as _____
[a] Red noise [b] Black noise
[c] White noise [d] Blue noise
8. Principle source of noise arise during image is _____
[a] Destruction [b] Acquisition
[c] Restoration [d] Degradation
9. Which of the following color model are used for color printing?
[a] RGB [b] CMY
[c] CMYK [d] CMY & CMYK
10. How many categories divided the color image processing?
[a] 2 [b] 3
[c] 4 [d] 5

SECTION – B

[5 X 7 = 35]

Answer ALL the Questions.

11. a) What is image processing? Explain

[OR]

- b) Explain the two applications of digital image processing.

12. a) Explain the structure human eye

[OR]

- b) How to image acquisition using linear and circular sensor strip?

13. a) Write short notes on Gray level transformation.

[OR]

- b) Differentiate between histogram equalization and its matching.

14. a) Describe the image degradation/restoration process.

[OR]

- b) Define noise and explain the Rayleigh noise.

15. a) Show the relationship between the RGB and HSI model.

[OR]

- b) What is pseudo color processing? How is it working in Mat lab?

15. a) Discuss i) Internet ii) Home Page

[OR]

b) Discuss about search engines.

SECTION – C

[3 X 10 = 30]

Answer Any THREE Questions.

16. Explain about Information processing cycle

17. Explain the different types of computers

18. Discuss about Input devices in detail.

19. Explain the major software issues

20. Discuss i) Internet addresses ii) www

Reg. No:

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G.T.N. ARTS COLLEGE (AUTONOMOUS)

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END SEMESTER EXAMINATION - NOV 2019

Programme : B.Com/B.Com(CA)

Date :

Course Code: 17UCAN11

Time:

Course Title : Introduction to

Information Technology

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. The five steps, input, processing, output, storage and retrieval and distribution and communication are all part of _____
[a] The information super high way [b] The Internet
[c] The Information processing cycle [d] None of the above
2. Typical operating systems include
[a] Microsoft word and excel
[b] Adobe photoshop and page maker
[c] Both a and b
[d] Neither a nor b
3. The most powerful computer is most likely called a _____
[a] Work station [b] Mini computer
[c] Main frame [d] Super computer

4. A personal computer can _____
- [a] add numbers [b] sort lists
[c] display graphs [d] all of the above
5. Most computers are capable of display a resolution of _____
- [a] 640*480 [b] 480*600
[c] 256*512 [d] none of the above
6. When selecting a scanner, be sure to base your decision on _____
- [a] The number of bits assigned to each pixel
[b] its optical resolution
[c] Whether it has optical character recognition software included
[d] All of the above
7. The operating system determines if a computer can be _____
- [a] single tasking or multitasking
[b] Single threading or multithreading
[c] Character based or graphic
[d] All of the above
8. The most widely used operating system is _____
- [a] Unix [b] Dos
[c] Windows [d] windows NT
9. In addition to the web, the Internet also includes _____
- [a] E-mail [b] Gopher and ftp
[c] usenet and telnet [d] All of the above

10. A browser _____
- [a] Displays web documents [b] allows you to navigate
[c] Allows you to copy, print [d] All of the above
And transfer documents

SECTION – B

[5 X 7 = 35]

Answer ALL the Questions.

11. a) Discuss about the computers in business
[OR]
b) Discuss about the computers in home
12. a) Explain about digital versus Analog
[OR]
b) Discuss about ROM.
13. a) How a scanner works? Explain
[OR]
b) Discuss about server operating systems.
14. a) Write the role of BIOS
[OR]
b) Discuss about server operating systems

Reg. No:

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme : B.Com(CA)

Date :12.11.2019

Course Code: 17UCAN21

Time: 2.00 pm. to 5.00 pm.

Course Title : Introduction to HTML

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. The remote login in the LAN is done by _____
[a] FTP [b] Telnet
[c] Gopher [d] TCP/IP
2. The private network is also called as _____
[a] Internet [b] Intranet
[c] LAN [d] MAN
3. Apart from tag, what other tag makes text bold?
[a] <fat> [b]
[c] <emp> [d] <black>
4. _____ is a list of style rules applied to tags within HTML
[a] Cascading Style Sheet [b] Embedded Style
[c] External Style Sheet [d] Internal Style Sheet
5. What tag is used to display a picture in a html page?
[a] img [b] picture
[c] image [d] src

6. In graphics 800 x 600 expressed as image_____.
- [a] file size [b] color depth
[c] resolution [d] compression
7. To add caption for image use _____ tag.
- [a] caption [b] float
[c] heading [d] figcaption
8. Main container for <TR>,<TD> and <TH> is
- [a] <DATA> [b] <GROUP>
[c] <COL [d] <TABLE>
9. To define layouts ____ tag is used.
- [a] division [b] layout
[c] semantic [d] define
10. Find out the odd one in the common multimedia container.
- [a] .avi [b] .mp3
[c] .mkv [d] .orv

SECTION – B
Answer ALL the Questions.

[5 X 7 = 35]

11. a) How to register web pages?
- [OR]**
- b) Describe briefly about search engines.
12. a) What are the various levels of heading in HTML?
- [OR]**
- b) How to create and hyperlink to anchors?

13. a) How to insert a Graphics on a web page?
- [OR]**
- b) How to control image size using HTML?
- 14.a) How to create a Thumbnail graphics? Give its use.
- [OR]**
- b) Describe the border attributes that can be applied to the tables in HTML.
15. a) How to create a list of a user form?
- [OR]**
- b) How to incorporate an audio on a web page?

SECTION – C **[3 X 10 = 30]**
Answer Any THREE Questions.

16. Write short notes on Computer Viruses.
17. Discuss about applying styles to hyperlinks.
18. Describe the various Graphics format in detail.
19. What is Image Map? Write a HTML program implementing Image Map.
20. Discuss How to create divisions within a page?

1. b) telnet
2. [b] Intranet
3. [b]
4. [a] Cascading Style Sheet
5. [a] img
6. [c] resolution
7. [d] figcaption
8. [d] <TABLE>
9. [c] semantic
10. [b] .mp3

11. a) Explanation of the following points to register web pages(7):-

- Indexed by search engine
- Other pages hyperlink to page
- On-line form
- Speed and number of hits
- Directory services
- Traffic

11. b) Explanation about search engines(7):

A web search engine or Internet search engine is a software system that is designed to carry out web search (Internet search), which means to search the World Wide Web in a systematic way for particular information specified in a web search query. The search results are generally presented in a line of results, often referred to as search engine results pages (SERPs). The information may be a mix of web pages, images, videos, infographics, articles, research papers and other types of files. Some search engines also mine data available in databases or open directories.

12. a) Explanation of various levels of heading in HTML(7)

Headings in Web pages function the same way as they do in printed documents—they separate text into sections. The HTML standard defines six levels of headings, <h1>through <h6>, each one progressively smaller in font size.

```
<h1> Welcome </h1>
```

Output is : **Welcome**

12. b) Explanation to create and hyperlink to anchors(2x3.5=7)

An anchor is a marker within an HTML document, roughly analogous to a bookmark in a Word document. You define a specific location in the document with an anchor name, and then you can hyperlink directly to that anchor.

To define an anchor, create an <a> tag around the destination text and include a name= attribute. For example, suppose you have a heading that reads Conclusion, and you want to create an anchor point with that same name:Conclusion To refer to the anchor point, include its name in the href= attribute . Precede the anchor name with a pound sign (#). If the anchor point is in the same document as the hyper-link, you can use a relative reference like this:View the Conclusion

13. a) Explanation to insert a Graphics on a web page(7)

Inserting a graphic on a Web page is as simple as placing an tag where you want the graphic to appear, like this:

13. b) To control image size using HTML(7)

Image size is expressed in pixels . If you want, you can specify only the width; the height will be resized proportionally, or vice versa . But you also have the option to specify both the width and the height.

You could add a height="75" attribute to the tag, without specifying a width, like this:<imgsrc="tree.gif" style="float: left" height="75">

14.a) Explanation to create a Thumbnail graphics(5) and its use(2)

To create a thumbnail, you will need small versions of each of the graphics . You can create them by opening the original graphic in a program like Photoshop or Paint Shop Pro, and then using that program to scale the picture to a lower resolution (for example, 100pixels high) . Then save the file under a different name . For example, if the original is tree.jpg, you might call the thumbnail sm-tree.jpg . Then you place the thumbnail images on the page and create hyperlinks to the larger files . Set each of the larger files to open in its own window by using the target="_blank" attribute, as shown in the following.

```
<a href="tree.jpg" target="_blank"><imgsrc="sm_tree.jpg"></a>
```

Thumbnails are most useful when you have a lot of images to display.

14. b) Explanation of the border attributes that can be applied to the tables in Html(7)

The border attribute applies a border to all sides of all cells. If you do not want the border on some of the sides, you can use the frame and/or rules attributes. The frame attribute specifies which sides of the outer frame of the table will display the border. The valid values are:● aboveTop border only ●belowBottom border only ●borderAll four sides ●boxAll four sides ●hsidesTop and bottom only (stands for horizontal sides) ●vsidesLeft and right only (stands for vertical sides) ●lhsLeft side only (stands for left-hand side) ●rhsRight side only (stands for right-hand side) ●voidNo outer border

15. a) Explanation to create a list of a user form with example(7)

A list can contain as many options as needed, yet it takes up very little space on the form. To create a list, start with a two-sided <select>tag . Within it, place each option in its own <option>tag. Place the text that you want to appear on the list between the opening and closing <option>tags. For example, to create the list just shown, do the following:

```
<p>Color:<select name="colors" size="1">
<option>Red</option><option>Blue</option><option>Green</option>
<option>Yellow</option><option>Pink</option><option>Brown</option>
<option>Black</option><option>Teal</option><option>Beige</option>
</select></p>
```

15. b) Explanation to incorporate audio on a web page(7)

<audio> tag is used to play audio.

Here's an example that shows the <audio> tag with two files, which are called with the help of the <source> element.

```
:<audio controls><source src="myaudio.mp3"></source>
<source src="myaudio.ogg"></source></audio>
```

16. Explanation on Computer Viruses(10)

A computer virus is a malicious program that self-replicates by copying itself to another program. In other words, the computer virus spreads by itself into other executable code or documents. The purpose of creating a computer virus is to infect vulnerable systems, gain admin control and steal user sensitive data.

17. Explanation about applying styles to hyperlinks(10)

You can control hyperlink formatting by placing attributes in the <a> tag for each link, although it's tedious to do so . For example, to make an individual hyperlink magenta, use the following:Diagnosing Foliage Problems

You do not need to apply anything to the individual hyperlink tags within the <body>section to use pseudo-classes. Simply create the style rule in the <style> section for the pseudo-classes, and the browser will apply that rule throughout the document. For example, to make all visited links magenta and all unvisited links black:<style> a:link {color: black} a:visited {color: magenta}</style>There are

- *Focus
- * Hover
- * Active

18. Explanation of the following Graphics format(10)

- * Color Depth
- * Compression/file size
- * Animation
- * Transparency

19. Explanation of Image Map(3) Html program implementing Image Map(7)

An image map is an overlay for a graphic that assigns hyperlinks to specifically defined areas (hotspots) on the image. The hotspots can be rectangular, circular, or irregularly shaped (called a poly hotspot).

```
<nav>

<map name="navbar" id="navbar">
<area shape="rect" coords="0,0,60,30" href="home.htm">
<area shape="rect" coords="70,0,155,30" href="tips.htm">
</map></nav>
```

20. Explanation about creating divisions within a page(10)

You use an id attribute to give a name to a division, like this:

```
<div id="masthead">
```

Each ID must be unique within the document, but multiple documents can use the same division names. Such reuse is good, in fact, because it lets you define the formatting of multiple documents with a single style sheet.

```
<body><div id="masthead"><a href="http://www.contoso.com" title="Homepage">
</a>
<h1 class="pagetitle">The Garden Company</h1>
<h5 class="tagline"><i>Helping you help your gardens grow since 1975</i></h5></div>
```

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme :BCA

Date : 22.11.2019

Course Code: 17UCAS21

Time: 2.00 pm. to 5.00 pm.

**Course Title : Computer Architecture &
Logic Design**

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Best Answer.

1. _____ algebra deals with binary variables and logic operations.
[a] Boolean [b] Numerical
[c] Binary [d] Logic
2. $+70+(-39) =$ _____.
[a] B [b] 31 [c] 21 [d] 12
3. A basic module used in arithmetic element is the _____.
[a] Half Adder [b] Full Adder
[c] Both a and b [d] None
4. The purpose of a parallel binary adder is to add two _____ binary integers.
[a] 4 bit [b] 3 bit
[c] 2 bit [d] 1 bit
5. Magnetic disk memories are _____ basic tapes of disk head placement system.
[a] 5 [b] 7 [c] 2 [d] 3

Reg. No:

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END SEMESTER EXAMINATION - NOVEMBER 2019

Programme : BCA

Course Code: 17UCAS41

**Course Title : Software Project
Management**

Date : 19.11.2019.

Time: 2.00 pm. to 5.00 pm.

Max Marks :75

SECTION – A

[10 X 1 = 10]

Answer ALL the Questions.

Choose the Correct Answer.

1. The cost of Recruitment and Staff training comes under _____.
[a] development cost [b] setup cost
[c] operational cost [d] maintenance cost
2. _____ is known as the accounting rate of return.
[a] ROI [b] NPV
[c] IRR [d] WBS
3. _____ models limit the costs of accommodating change request by customer.
[a] RAD [b] Waterfall model
[c] Spiral model [d] Prototyping
4. According to COCOMO model, effort=_____.
[a] $C/(size)^k$ [b] $C+(size)^k$
[c] $C(size)^k$ [d] $C-(size)^k$

5. The third step in scheduling a project is called_____.
- [a] Resource Allocation [b] Activity plans
[c] Schedule production [d] Maintenance
6. _____ is the shortest time in which we could expect to complete the activity, barring outright miracles.
- [a] Optimistic time [b] Pessimistic time
[c] Most likely time [d] Payback time
7. The simplest and oldest technique for tracking project progress is _____.
- [a] Gantt chart [b] Slip chart
[c] Timeline [d] Flow chart
8. The Schedule variance is measured in cost terms as_____.
- [a] EV/PV I [b] EV-PV
[c] EV*PV [d] EV+PV
9. _____are where workers are paid a fixed sum for each item they produce.
- [a] Piece-rates [b] Day rates
[c] Month rates [d] Year rates
10. For large complex projects ,Which team organization would be suitable?
- [a] matrix [b] chief programmer team
[c] functional [d] hybrid

SECTION – B
Answer ALL the Questions.

[5 X 7 = 35]

11. a) What is a project? Why software project management is important?
[OR]
b) Discuss about management control.
12. a) Discuss about RAD.
[OR]
b) Describe about agile methods.
13. a) Give an account on Risk Management.
[OR]
b) Explain about backward pass.
14. a) Explain about cost monitoring.
[OR]
b) Explain about change control.
15. a) Discuss about communication genres.
[OR]
b) Give an account on communication plans.

SECTION – C **[3 X 10 = 30]**
Answer Any THREE Questions.

16. Discuss project portfolio management.
17. Briefly explain about the basis for software estimation.
18. Explain about projects and activities.
19. Explain the process in collecting the data.
20. Explain about working in a team.

