



November 2020

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018

III B.Sc.Computer Science/ III B.C.A.

Big Data Analytics - QVC5(6)/ RVC10(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. CCTV footage is an example of data format.
2. _____ is an example of Unsupervised Learning.
3. MongoDB uses _____, a binary object format similar to, but more expensive JSON.
4. RDBMS supports formats.
5. _____ is a collection of fields.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. Identify the Data warehousing tool
a) PIG b) HIVE c) Hadoop d) Spark
7. A _____ sends heartbeat message to Name node to ensure connectivity.
a) Name node b) Data node c) Master node d) None
8. _____ has no support for ACID property of transactions.
a) New SQL b) NoSQL c) MySQL d) SQL Server
9. There is only one _____ daemon per Hadoop Cluster.
a) Task Tracker b) Job Tracker c) Job Scheduler d) None
10. Metastore consists of _____ and a database.
a) JSON b) BSON c) Meta services d) Web Service

III. Answer the following in One or Two Sentences

(5 x 1= 5 Marks)

11. List any few analytical tools.
12. What is Euclidean Distance?
13. List the Hive data units.
14. Specify why do we need Hadoop?
15. Mention the Responsibilities of Job Tracker.



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Big Data Analytics - QVC5(6)/ RVC10(6)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Describe the Characteristics and Challenges in Big data.
17. Analyze the components of Hadoop Ecosystem.
18. Discuss on the Relational Operators in Fig.
19. Compare and Contrast NoSQL, NewSQL and RDBMS.
20. State CAP theorem. Justify CAP theorem with a neat example.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. What is Big data Analytics? Describe the terminologies in big data environment.
22. Elucidate the concept of Map Reduce Programming with a neat example.
23. Analyze the Machine Learning Algorithms.
24. Elaborate the key concepts of HDFS in Big data.

----- **All the Best** -----



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III SEMESTER (Arrear)–Applicable to candidates admitted in the year 2018
II B.Sc. Computer Science/ II B.C.A.

Data Structures - QIIICE1A(6)/RIIC4(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. A _____ refers to a single unit of values.
2. A linked – list is a linear collection of data elements called _____.
3. FIFO stands for _____.
4. In a binary tree, a node with successors are called _____.
5. _____ refers to the operation of arranging data in some order either increasing or decreasing.

II. Choose the correct answer

(5X1=5 Marks)

6. Stack is also called as
 - a) FIFO
 - b) LIFO
 - c) FILO
 - d) None of the above
7. A header linked list is a linked list which always contains a special node called the
 - a) Header node
 - b) Top node
 - c) Head node
 - d) None of the above
8. AB+ is an example of
 - a) Infix
 - b) Polish
 - c) Reverse Polish Notation
 - d) None of the above
9. In binary trees, the nodes with two children are called
 - a) Internal nodes
 - b) External nodes
 - c) Direct nodes
 - d) None of the above
10. The insertion sort algorithm is a very slow algorithm
 - a) When n is very large
 - b) When n is very small
 - c) When n is medium
 - d) None of the above



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III SEMESTER (Arrear)–Applicable to candidates admitted in the year 2018
II B.Sc. Computer Science/ II B.C.A.

Data Structures - QIIICE1A(6)/RIIC4(6)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define Data structure.
12. Name the two parts of the linked lists.
13. Define the term deque.
14. When a graph is said to be connected?
15. Mention any four sorting techniques.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain various data structure operations.
17. Give a brief account on header linked lists.
18. Write down the algorithm of PUSH, POP operations of Stack.
19. Discuss the sequential representation of binary trees.
20. Explain selection sort algorithm with an example.
21. Describe the representation of linear arrays in memory.
22. Explain about traversing a linked list.
23. Discuss the representation of queues.

Section – C

(3 x 15 = 45 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Analyse the complexity of algorithms with suitable example.
25. Explain the following: i) Garbage collection ii) Two – way list.
26. Discuss Quicksort with an illustrative example.
27. Elaborate on traversing a graph.
28. Discuss the concept of hashing.

----- All the Best -----



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IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year
2019

II B.C.A.

Database Management Systems – RIVC7(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1 = 5 Marks)

- _____ is to determine whether a proposed project is worth pursuing.
- _____ is a request for data from a database.
- A _____ is a key which uniquely identify a record in the database.
- _____ form displays data for one row at a time.
- _____ is responsible for store, organize and secure data in database.

II. Choose the correct answer

(5 x 1 = 5 Marks)

- _____ helps the developers to create input forms.
a) Query b) Report c) Form Generator d) Data Dictionary
- _____ command is used to change structure of a table.
a) Alter b) Create c) Drop d) Truncate
- A column in one table that is a primary key in a second table.
a) Primary Key b) Foreign Key c) Surrugate Key d) Secondary Key
- A _____ is a statement that the system executes automatically as a side effect of a modification to the database.
a) Constraint b) Trigger c) Procedure d) Function
- _____ is a system of interlinked documents accessed via the internet.
a) TCP b) Protocol c) WWW d) Hyperlink

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

- What is class Diagram?
- Define SQL.
- List the various type of Normal Forms.
- What is Form?
- Who is DBA?



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IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year
2019

II B.C.A.

Database Management Systems – RIVC7(6)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Illustrate various domain types in SQL.
17. Discuss in detail SELECT, FROM, WHERE commands in SQL with example.
18. Write notes on Boyce Code Normal Form.
19. Explain the Condition statements in Procedural language.
20. List the advantage of Distributed database.
21. What are the components of a DBMS system?
22. Name the various DDL commands. Explain any one with example.
23. Write short notes on the following:
 - i) Authentication
 - ii) Integrity

Section – C

(2 x 10= 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Describe the advantages of a DBMS.
25. Explain about Data Manipulation commands with examples.
26. Analyze the techniques of reducing redundancy through normalization.
27. Describe the effective design of forms in detail.
28. Enumerate briefly about Two/Three –Tier Client/Server Model.

----- All the Best -----



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III SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019
II B.Sc.Computer Science/ II B.C.A.

Data Structures – QIICE1A(6)/ RIIC4(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. Data structure contains a sequential representation of _____ data types.
2. Linked list can be implemented using _____.
3. Quick sort algorithm uses _____ design technique.
4. _____ Data structure represent the hierarchical relationship between the elements.
5. Search algorithm works only on the _____ list of data elements.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. Is the logical or mathematical model of the particular organization of data.
 - a) Data Structure
 - b) Data type
 - c) Data item
 - d) none
7. A data structure in which elements can be added or removed at either end but not in the middle
 - a) Linked List
 - b) Stack
 - c) Queue
 - d) Dequeue
8. Postponing decision take place in which data structure.
 - a) Stack
 - b) Graph
 - c) Queue
 - d) None
9. A Full binary tree with n leaves contains
 - a) n nodes
 - b) $2n+1$
 - c) $2n$
 - d) $2n-1$
10. The average case Time complexity of Quick sort algorithm
 - a) $O(\log n)$
 - b) $O(n \log n)$
 - c) $O(n)$
 - d) $O(2n)$



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Data Structures – QIIICE1A(6)/ RIIC4(6)

III. Answer the following in One or Two Sentences

(5 x 1= 5 Marks)

11. Define Composite data type.
12. What do you meant by Two-Way List?
13. Define Recursion.
14. List out 2 ways of representing Tree in memory.
15. Write the Advantages of Graph.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain Time Space complexity.
17. Explain Insert operation on singly Linked list
18. Evaluate the following Postfix Expression $53+62/*35*+$.
19. Explain Adjacency Matrix.
20. Define Topological Sorting.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. What is Array?-Explain the any two operations on Array.
22. Write an Algorithm for Infix to Postfix Conversion.
23. Explain Preorder Traversal Algorithm with example.
24. Explain Breadth and Depth First Algorithm.

----- **All the Best** -----



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Data Structures – QIIICE1A(6)/ RIIC4(6)



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V SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018

III B.C.A.

Data Mining and Warehousing – RVCE2A(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. What is Data Mining?
12. Define KDD.
13. What is data transformation?
14. List out the types of Data Mining.
15. Define Text Mining.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss the major issues in Data mining.
17. Illustrate the concept of Data Discretization.
18. Explain about Classification by Decision tree Induction.
19. Elaborate mining WWW.
20. What is Data Warehousing?

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Discuss the various data mining functionalities.
22. List out the steps involved in Data Preprocessing.
23. Elaborate the applications of Data Mining.
24. What is Multi-Dimensional Data Model?

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III B.Sc.Computer Science/ III B.C.A.

.Net Technologies – QVC7(6)/ RVC11(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. _____ is a conditional operator.
2. An _____ is a delegate type class member that is used by object to provide a notification to other object that an event has occurred.
3. The ASP.NET Framework includes _____ and _____ control to display text in a page.
4. The Range Validator control enables you to check whether the value of a form field falls between a certain _____ and _____ value.
5. Web.Config file is a _____ based configuration file

II. Choose the correct answer

(5 x 1= 5 Marks)

6. The current technology of .NET Technology has gone through _____ phases of development.
 - a) OLE Technology
 - b) COM Technology
 - c) .NET Technology
 - d) All the above
7. To create a string _____ method can be used.
 - a) ToString
 - b) Copy
 - c) Concat
 - d) ReadLine
8. The _____ property of Hyperlink Control enables you to open a new window.
 - a) Target
 - b) Enabled
 - c) Text
 - d) Image Url
9. The Response object represents the _____ response to the client request.
 - a) Server's
 - b) Client's
 - c) None of the above
 - d) All the above.
10. _____ is the server side state management technique.
 - a) Session State
 - b) Cookies
 - c) View State
 - d) View State



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III B.Sc.Computer Science/ III B.C.A.

.Net Technologies – QVC7(6)/ RVC11(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. What is Variables?
12. Define inheritance.
13. List out the properties of Check Box in ASP.NET.
14. Specify the purpose of Tree View Control.
15. Mention the attributes of page directives.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss the fundamentals of .NET framework.
17. Illustrate enumerations with example.
18. Explain the properties of Text Box.
19. Elaborate the Validation control in ASP.NET.
20. Elucidate the Session state to design the application.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Discuss the decision making statements in C# in detail.
22. Elucidate on the following.
 - a) Adrotator Control
 - b) DataGrid
 - c) HyperLink Control
 - d) Image Control.
23. List out the operators which can be overloaded and explain Operator Overloading in detail.
24. Elaborate ADO.NET in detail.

----- **All the Best** -----



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III SEMESTER (Arrear)–Applicable to candidates admitted in the year 2019
II B.Sc. Computer Science

Data Structures - QIIICE1A(6)

TIME: 90 Minutes

MAXIMUM MARKS: 50

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SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. A _____ refers to a single unit of values.
2. A linked – list is a linear collection of data elements called _____.
3. FIFO stands for _____.
4. In a binary tree, a node with successors are called _____.
5. _____ refers to the operation of arranging data in some order either increasing or decreasing.

II. Choose the correct answer

(5X1=5 Marks)

6. Stack is also called as
 - a) FIFO
 - b) LIFO
 - c) FILO
 - d) None of the above
7. A header linked list is a linked list which always contains a special node called the
 - a) Header node
 - b) Top node
 - c) Head node
 - d) None of the above
8. AB+ is an example of
 - a) Infix
 - b) Polish
 - c) Reverse Polish Notation
 - d) None of the above
9. In binary trees, the nodes with two children are called
 - a) Internal nodes
 - b) External nodes
 - c) Direct nodes
 - d) None of the above
10. The insertion sort algorithm is a very slow algorithm
 - a) When n is very large
 - b) When n is very small
 - c) When n is medium
 - d) None of the above



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Data Structures - QIIICE1A(6)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define Data structure.
12. Name the two parts of the linked lists.
13. Define the term deque.
14. When a graph is said to be connected?
15. Mention any four sorting techniques.

Section – B

(3x 5= 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain various data structure operations.
17. Give a brief account on header linked lists.
18. Write down the algorithm of PUSH, POP operations of Stack.
19. Discuss the sequential representation of binary trees.
20. Explain selection sort algorithm with an example.
21. Describe the representation of linear arrays in memory.
22. Explain about traversing a linked list.
23. Discuss the representation of queues.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Analyse the complexity of algorithms with suitable example.
25. Explain the following: i) Garbage collection ii) Two – way list.
26. Discuss Quicksort with an illustrative example.
27. Elaborate on traversing a graph.
28. Discuss the concept of hashing.

----- **All the Best** -----



September 2020

2017/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
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VI SEMESTER (Regular)–Applicable to candidates admitted in the year 2017
III B.Sc. Computer Science Computer Networks – QVIC8(5)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

- _____ have a single communication channel that is shared by all the machines on the network.
- The number of bit positions in which two code words differ is called the _____.
- The independent packets of the connectionless organization are called _____.
- TSAP stands for _____.
- The art of devising ciphers and breaking them is collectively known as _____.

II. Choose the correct answer

(5X1=5 Marks)

- Following is comes under guided media transmission.
 - Coaxial cable
 - Radio
 - Micro waves
 - Infrared
- An n – bit unit containing data and check bits is often referred to as an n – bit.
 - Parity fit
 - Code word
 - Polynomial code
 - Sign bit
- When too many packets are present in the subnet, performance degrades, this situation is called
 - Flooding
 - Tunnelling
 - Congestion
 - Addressing
- Following is not a primitive for a simple transport service.
 - CONNECT
 - SEND
 - RECEIVE
 - STOP
- The messages to be encrypted, known as the
 - Plain text
 - Product cipher
 - Crypt analysis
 - Cipher text



September 2020

2017/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
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VI SEMESTER (Regular)–Applicable to candidates admitted in the year 2017
III B.Sc. Computer Science Computer Networks – QVIC8(5)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. What is LAN?
12. Define Piggybacking.
13. What is Virtual circuit?
14. Find the expansion of the following terms: TCP, UDP.
15. Name any two generic domains.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain about Wide Area Network.
17. Illustrate the concept of one bit sliding window protocol with neat sketch.
18. Analyse the concept of Tunnelling.
19. Illustrate the TCP segment header and explain any five fields.
20. Discuss in detail about Electronic mail.
21. Explain the concept of Circuit switching.
22. Evaluate the concept of Shortest path routing.
23. Explain in detail about Addressing in networking.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Discuss the ISO-OSI reference model with neat diagram.
25. Explain about Error detection codes with suitable example.
26. Describe the functions of Distance vector routing with an illustrative example.
27. List and explain the role of various Transport service primitives.
28. Explain the RSA algorithm with suitable example.

----- **All the Best** -----



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VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018
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Operating Systems – QVICE3A(6)/RVICE3A(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions

15 Marks

I. Fill in the blanks

(5 x 1 = 5 Marks)

1. If a process fails, most operating system write the error information to a _____
2. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called _____
3. _____ is the deadlock avoidance algorithm.
4. Logical memory is broken into blocks of the same size called _____
5. All users in a group get _____ access to a file.

II. Choose the correct answer

(5 x 1 = 5 Marks)

6. Inter process communication
 - a) allows processes to communicate and synchronize their actions when using the same address space
 - b) allows processes to communicate and synchronize their actions
 - c) allows the processes to only synchronize their actions without communication
 - d) allows deadlock
7. In Operating Systems, which of the following is/are CPU scheduling algorithms?
 - a) Round Robin
 - b) Shortest Job First
 - c) Priority
 - d) All of the mentioned
8. A problem encountered in multitasking when a process is perpetually denied necessary resources is called
 - a) Deadlock
 - b) starvation
 - c) inversion
 - d) aging
9. Every address generated by the CPU is divided into two parts. They are
 - a) frame bit & page number
 - b) page number & page offset
 - c) page offset & frame bit
 - d) frame offset & page offset
10. Reliability of files can be increased by
 - a) keeping the files safely in the memory
 - b) making a different partition for the files
 - c) by keeping them in external storage
 - d) by keeping duplicate copies of the file



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Operating Systems – QVICE3A(6)/RVICE3A(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. Define process.
 12. What are monitors?
 13. What do you mean by swapping?
 14. Define paging.
 15. Define directory in file systems.
-

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks. (Each answer should not exceed 150 words)

16. Give a note on interprocess communication.
 17. Discuss on critical section problem.
 18. Explain segmentation in detail.
 19. Discuss about thrashing
 20. Explain the various file accessing methods.
 21. Describe Process control block in detail.
 22. Give a brief note on semaphores.
 23. Explain contiguous memory allocation.
-

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks. (Each answer should not exceed 300 words)

24. Discuss the OSI model in detail and explain its features.
25. Explain any two scheduling algorithms in detail.
26. Elaborate on deadlock prevention, avoidance and detection.
27. Briefly explain FIFO and LRU page replacement algorithms.
28. Explain free space management in detail.

----- **All the Best** -----



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I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I B.Sc.Computer Science/I B.C.A

Digital Electronics and Microprocessor – QIC1(6)/RIC1(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. A logic circuit that can store one bit of information is a _____.
2. _____ is the output of a NAND gate if two outputs are low.
3. Full adder is implemented with _____ half-adder and one _____ gate.
4. In RS flip-flop R stands for _____ and S stands for _____.
5. _____ bits are used in the data bus.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. Decimal equivalent of 25 in binary is _____.
a) 11001 b) 101010
c) 11000 d) 11110
7. A four-variable k-map has _____ cells.
a) 12 b) 10
c) 6 d) 8
8. _____ is a combinational logic circuit.
a) Register b) Flip-flop
c) Counter d) Subtractor
9. Ripple Counters are sometimes called as _____ counters.
a) Synchronous b) Asynchronous
c) Down d) None of these
10. Microprocessor is manufactured by using _____.
a) SSI b) MSI
c) LSI d) None



November 2020

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I B.Sc.Computer Science/I B.C.A

Digital Electronics and Microprocessor – QIC1(6)/RIC1(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. Construct the truth table for $F=XY'+X'Y$.
12. Draw the three-variable K-map.
13. What is Decoder?
14. Define Counters.
15. List out the components of the Microcomputer.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Convert $(107.6875)_{10}$ to its equivalent binary, octal and hexa-decimal.
17. Simplify using K-map $F(A,B,C,D)= \sum(0,1,2,6,8,9,10)$
18. Explain the working of half subtractor with truth table and logic diagram.
19. Explain J-K flip-flop in detail.
20. Compare Microprocessors and Microcomputers.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Define r 's and $(r-1)$'s complement.
 - i. Subtract $72532-3250$ using 9's and 10's complement.
 - ii. Subtract $1010100-1000100$ using 1's and 2's complement.
22. Explain decoder and demultiplexer.
23. Discuss about 4-bit binary Ripple Counter.
24. Explain the organization of microprocessor with neat diagram.

----- **All the Best** -----



September 2020

2017/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

VI SEMESTER (Regular)–Applicable to candidates admitted in the year 2017
III B.C.A. **Software Testing – RVIC12(5)**

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

- _____ test plan include actual test cases, expected results and capabilities to be demonstrated by each test.
- _____ is the process of dividing a software system into multiple independent modules.
- _____ is a fault in a program that causes it to produce incorrect or unexpected result.
- _____ is a program point at which control flow can diverge.
- Counting the number of line of code in a program and use that number as a measure of _____.

II. Choose the correct answer

(5X1=5 Marks)

- Project _____ summarizes the project and provides a record of what went well and what went wrong during the project.
a) Legacy b) Plan c) Report d) Testing
- Structured _____ is an indepth technical review of some aspect of a software system.
a) Walkthrough b) Inspection c) Development d) Design
- _____ testing is carried out at user's premises in absence of development team.
a) Beta b) Alpha c) Stress d) Performance
- _____ flows are natural agenda for system reviews or inspection.
a) Transaction b) Data c) Control d) Domain
- _____ in a programming language is the basic unit from which program are constructed.
a) Structure b) Token c) Junction d) Decision



September 2020

2017/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

VI SEMESTER (Regular)–Applicable to candidates admitted in the year 2017
III B.C.A. **Software Testing – RVIC12(5)**

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. What is Software Engineering?
12. State HIPO diagram.
13. What is Verification and Validation?
14. State the purpose of Process Block.
15. Define Hybrid Metrics.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks. (Each answer should not exceed 150 words)

16. Analyze the Managerial issues in detail.
17. Explain about Formal specification techniques.
18. Evaluate the various levels of testing.
19. Analyze the Data flow testing strategies.
20. Explain about Domain testing.
21. Classify the Project size categories.
22. Discuss about Design Notations.
23. Explain about Test Plan.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks. (Each answer should not exceed 300 words)

24. Discuss about Planning the Development process.
25. Appraise the Software Cost Factors.
26. Elaborate the types of testing.
27. Determine the basics of Path Testing.
28. Elucidate about the Domain and Interface testing.

----- All the Best-----



December 2020

2020/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

I IV SEMESTER (Arrear)-Applicable to candidate admitted in the year 2010

II B.C.A.

Programming in Java – RIVC8(6)

TIME: 90Minutes

MAXIMUM MARKS :50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5Marks)

1. The code generated by the java compiler is called as _____.
2. Java is a _____ independent language.
3. The method used to run a thread is _____.
4. AWT can also be used to create stand-alone windows that run in a _____.
5. _____ is a mechanism by which java program reads inputs from stdin.

II. Choose the correct answer

(5 X 1 = 5Marks)

6. Iteration statements are called
 - a) looping statement
 - b) conditional statement
 - c) executable statement
 - d) none of the above
7. System.err refers to
 - a) Standard error stream
 - b) Standard InputStream
 - c) StandardOutputStream
 - d) none of the above
8. Which of the following keyword is not an access specifier.
 - a) Public
 - b) Private
 - c) Static
 - d) Protected
9. Which of the following is not a method in applet life cycle.
 - a) Init
 - b)Start
 - b) Service
 - d) Paint
10. The Servlet Response is used to _____.
 - a) read data from client request
 - b) write data to a client response
 - a) c) indicates that the servlet is thread safe
 - d) none of the above



December 2020

2020/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

I IV SEMESTER (Arrear)-Applicable to candidate admitted in the year 2010

II B.C.A.

Programming in Java – RIVC8(6)

III. Answer in one or two Sentences:

(5 X 1 = 5Marks)

11. Define a token.
 12. What is an applet?
 13. Write the uses of servlets.
 14. Define *Referential Integrity*.
 15. Define a Resultset.
-

Section – B

(3 x 5 = 15 Marks)

Answer any Three Questions. All Questions Carry Equal Marks. | Each Answer Should Not Exceed 150 Words.

16. Discuss the features of java.
 17. What is Exception? Explain how it is managed by the java program.
 18. Explain the Life cycle of a Servlet.
 19. Write notes on Statement objects in JDBC.
 20. Write short notes on AWT controls.
-

Section – C

(2 x 10 = 20 Marks)

Answer any Two Questions. All Questions Carry Equal Marks. | Each Answer Should Not Exceed 300 Words.

21. Discuss the concept of method overriding with examples.
 22. What is a Thread? Discuss the ways of creating multi-threaded java program.
 23. Discuss about javax.servlet Package with suitable example.
 24. Explain the following operations in SQL with example
 - a) insertion
 - b) deletion
 - c) updation
-

All the Best



September 2020

2017/2016/UGR/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

VI SEMESTER (Regular & Arrear)–Applicable to candidates admitted in the year
2017 & 2016

III B.Sc. Computer Science
III B.C.A.

.Net Technologies – QVIC9(5)
.Net Technologies – RVIC13(5)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. The .NET framework provides a runtime environment called _____.
2. In C# _____ are user actions such as key press, clicks, mouse movements, etc., or some occurrence such as system generated notifications.
3. By default ASP.Net Session ID is stored in _____.
4. In ASP.NET _____ provides an interface for selecting a command from a collection of commands.
5. Each project can have _____ number of Global.asax file(s).

II. Choose the correct answer

(5X1=5 Marks)

6. CLR stands for
 - a) Common Linker Runtime
 - b) Common Loader Runtime
 - c) Common Language Runtime
 - d) Common Label Runtime
7. When one class inherits another class which is further inherited by another class, it is known as
 - a) Single Inheritance
 - b) Multiple Inheritance
 - c) Multi level Inheritance
 - d) Hierarchical Inheritance
8. What is the file extension of web service in ASP.NET?
 - a) .ascx
 - b) .asmx
 - c) .aspx
 - d) .docx
9. Which of the following control is used to validate that two fields are equal?
 - a) Regular expression validator
 - b) Compare validator
 - c) Range validator
 - d) Required field validator
10. When a User's Session times out which event should you respond to?
 - a) Application_Start
 - b) Session_End
 - c) Session_Start
 - d) Application_End



September 2020

2017/2016/UGR/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

VI SEMESTER (**Regular & Arrear**)–Applicable to candidates admitted in the year
2017 & 2016

III B.Sc. Computer Science
III B.C.A.

.Net Technologies – QVIC9(5)
.Net Technologies – RVIC13(5)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define .Net framework
12. State the purpose of Delegates.
13. What is ASP.Net?
14. Quote the function of Command class.
15. Expand IIS.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Outline the evolution of C#.
17. Explain the concept of exception handling with example.
18. Distinguish the functions of Check box and List box.
19. Highlight the operation of Tree view control.
20. Discuss on Web services and its creation.
21. Explain C# data types with example.
22. Describe the function of Calendar control.
23. Bring out the applications of ASP.NET.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks .(Each answer should not exceed 300 words)

24. Explain the Program control statements in C# with example.
25. Develop a C# program to demonstrate operator overloading.
26. Describe the functions of HTML server control.
27. Discuss on Request and Response object with example.
28. Elaborate on maintenance of session and application state.

----- **All the Best** -----



April 2020

2017/2015/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

V SEMESTER (**Arrear**)–Applicable to candidates admitted in the year 2017 & 2015
III B.C.A.

Computer Architecture – RVC10(5)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. The program that translates a high level language program into binary is called a _____.
2. The length of the one-byte instructs is _____ bits.
3. Input or output devices in the computers are also called _____.
4. _____ memory is fast memory lies between RAM and the CPU.
5. Computers are interconnected with each other by means of communication lines to form a _____.

II. Choose the correct answer

(5X1=5 Marks)

6. A set of common instruction that can be used in a program many times is called
a) Assembly language b) Instruction c) Subroutine d) Pneumonic Code
7. The process of storing the data in the stack is called _____ operation.
a) POP b) PUSH c) Program counter d) All of the above
8. The DMA transfer are performed by a control circuit called as
a) Device interface b) DMA Controller c) Data Controller d) Overlooker
9. The fastest data access is provided using
a) Cache b) DRAMS c) SRAMS d) Registers
10. MIMD stands for
a) Multiple Instruction stream Multiple Data Stream
b) Multiple Insert stream Multiple Data Stream
c) Multiple Instruction stream Multiple Decoder Stream
d) Multiple Inspect stream Multiple Data Stream



April 2020

2017/2015/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

V SEMESTER (**Arrear**)–Applicable to candidates admitted in the year 2017 & 2015
III B.C.A.

Computer Architecture – RVC10(5)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define assembler.
12. What do you mean by CISC?
13. What is polling?
14. Define multiprogramming.
15. What do you mean by tightly coupled multiprocessor?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the rules of Assembly language program.
17. Discuss the characteristics of RISC.
18. Write short notes on any two peripheral devices.
19. Explain the block diagram of RAM.
20. Write a note on cache coherence.
21. List the logic operations and explain with example.
22. Give a brief note on status register bits.
23. Explain daisy chain priority in detail.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Discuss about first pass assembler in detail.
25. Explain the various instruction formats in detail.
26. Describe the functions of DMA with neat diagram.
27. With the help of a block diagram explain direct mapping in cache memory.
28. Explain in detail about crossbar switch interconnection structures.

----- All the Best -----



April 2021

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018
III B.Sc. Computer Science/B.C.A

Python Programming – QVIC9(6)/RVIC13(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions

15 Marks

I. Fill in the blanks

(5 x 1 = 5 Marks)

- _____ is not the core data type.
- _____ Command is used to create a list.
- What will be the output of the following Python statement?

```
>>>print('new' 'line')
```
- Suppose list1 is [3, 5, 25, 1, 3], what is min(list1) _____ .
- _____ data type is not supported in Python ?

II. Choose the correct answer

(5 x 1 = 5 Marks)

- Which of the following is invalid?
a) `_a = 1` b) `__a = 1` c) `__str__ = 1` d) none of the Above
- Which of the following is an invalid variable?
a) `my_string_1` b) `1st_string` c) `foo` d) `_`
- Which of the following is not a keyword?
a) `eval` b) `assert` c) `nonlocal` d) `pass`
- What arithmetic operators cannot be used with strings?
a) `+` b) `-` c) `*` d) None of the Above
- Which of the following statements is used to create an empty set?
a) `{}` b) `set()` c) `[]` d) `()`

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

- What is membership operator? Give examples.
- List out list data type operations.
- How to create sets in python. Explain with example.
- Difference between List & Tuples.
- Suppose list1 is [1, 5, 9], what is sum (list1)?



April 2021

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018
III B.Sc. Computer Science/B.C.A

Python Programming – QVIC9(6)/RVIC13(6)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Illustrate the salient features of Python.
 17. Discuss about while and for loop with example.
 18. Identify the functions and operations used in Python Files with examples.
 19. Compare the usage of lists, tuples data type? Give an example for each data type.
 20. Tabulate the different modes for opening a file and explain the same.
 21. Distinguish between Sets and Dictionaries? Explain about its operations and methods.
 22. Identify the use of string methods with examples. Describe why strings are immutable with an example.
 23. Describe the concept of math functions in python with examples.
-

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Explain the Identifiers, Keywords, Expressions, and Variables in Python programming language with examples.
25. Describe Arithmetic Operators, Assignment Operators, Comparison Operators, Logical operators and Bitwise Operators in detail with examples.
26. What are user-defined functions? Identify How can we pass parameters in user defined functions? Explain with suitable example.
27. Classify the use of Exception Handling in Python.
28. Identify the operations and methods used in Tuple datatype with examples.

----- **All the Best** -----



November 2020

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

III SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II B.Sc.Computer Science/ II B.C.A.

Object Oriented Programming with C++ - QIIC3(6)/ RIIC5(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

- _____ operator allocates sufficient memory to hold a data object and returns the address of the object.
- In a _____ function the compiler replaces the function call with the corresponding function code.
- A constructor that accepts no parameters is called the _____ constructor.
- A class that inherits attributes of two or more classes is known as _____ inheritance.
- _____ function is used to specify the required field size for displaying an output value.

II. Choose the correct answer

(5 x 1= 5 Marks)

- endl is a _____
 - Keyword
 - operator
 - function
 - symbolic constant
- Actual arguments are present in the _____
 - Function definition
 - calling program
 - Function declaration
 - called program
- Default visibility modifier in C++ is _____.
 - Private
 - protected
 - default
 - public
- Selection of appropriate function done dynamically at runtime is called _____.
 - Late binding
 - instant binding
 - compile time binding
 - static binding
- _____ operator is overloaded in the ostream class.
 - ::
 - >
 - <<
 - >>



November 2020

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

III SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II B.Sc.Computer Science/ II B.C.A.

Object Oriented Programming with C++ - QIIC3(6)/ RIIC5(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. List three manipulators.
12. Define static data member.
13. Define a copy constructor.
14. Define this pointer.
15. What is a stream?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain scope resolution operator with an example.
17. Explain Friendly functions.
18. Discuss on Basic to Class type conversion with an appropriate program.
19. Compare Multiple Inheritance with Multilevel Inheritance.
20. Discuss on Error Handling during file operations.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Elaborate on the basic concepts of Object Oriented Programming.
22. Discuss in detail Constructors and Destructors in C++.
23. Explain in detail Compile time Polymorphism and Run time Polymorphism.
24. Explain in detail Formatted console I/O operations.

----- **All the Best** -----



April 2021

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019
II B.Sc. Computer Science /II B.C.A

Programming in Java- QIVC4(6)/RIVC8(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions

15 Marks

I. Fill in the blanks

(5 x 1 = 5 Marks)

1. Java was developed by _____ at Sun Microsystems.
2. When a _____ block completes without problem, the finally block executes.
3. _____ is a Java program that can be embedded into a webpage.
4. The servlet is initialized by calling the _____ method.
5. _____ is a Java API that manages the database connection.

II. Choose the correct answer

(5 x 1 = 5 Marks)

6. Which of the following is used with the switch statement?
 - a) continue
 - b) exit
 - c) break
 - d) do
7. Which of these keywords is used to define packages in Java?
 - a) pkgee
 - b) pkg
 - c) package
 - d) Packages
8. Which of the following stream contains the classes which can work on character stream?
 - a) InputStream
 - b) OutputStream
 - c) Character Stream
 - d) All of the mentioned
9. Give the abbreviation of AWT?
 - a) Applet Windowing Toolkit
 - b) Abstract Windowing Toolkit
 - c) Absolute Windowing Toolkit
 - d) None of the above
10. How constructor can be used for a servlet?
 - a) Initialization
 - b) Constructor function
 - c) Initialization and Constructor function
 - d) Setup() method



April 2021

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019
II B.Sc. Computer Science /II B.C.A

Programming in Java- QIVC4(6)/RIVC8(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. Define “java virtual Machine”
12. How to import a package?
13. What is Layout manager?
14. Define Servlets.
15. What is Foreign key?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks.(Each answer should not exceed 150 words)

16. How do you declare and create Arrays? Give example.
17. Write short notes on Inheritance.
18. Discuss about the Working with Graphics.
19. Write short notes on servlet and its life cycle.
20. Describe about the Database connection with suitable example.
21. Evaluate the Overview of Java.
22. Explain the features of any five AWT controls.
23. Discuss the handling the Selecting data from table.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. What are the different types of operators available in Java? Give example.
25. Elaborate the exception handling in java.
26. Give an Overview of Applet programming.
27. Describe the steps for Reading form data from servlet.
28. Illustrate the JDBC architecture and its connectivity procedure in details.

----- **All the Best** -----



April 2021

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**)– Applicable to candidates admitted in the year 2020

I B.Sc. Computer Science

Programming in C – QIIC2(6)

I B.C.A.

Programming in C – RIIC2(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. The Zeroes and ones are called _____
2. A Single Character can be entered into the computer using _____ function.
3. _____ is a process by which a function calls itself repeatedly until some specified condition has been satisfied.
4. A _____ Pointer is a function that represents the location.
5. _____ contain multiple members that share the same storage area.

II. Choose the correct answer

(5X1=5 Marks)

6. A _____ Constant is a name that substitution for a sequence of character.
a) address b) symbolic c) abstract d) gets
7. _____ Conversion character is used to display a floating point value with an exponent.
a) a b) e c) d d) f
8. A _____ is a collection of information stored as a separate entity within the computer.
a) data b) field c) file d) records
9. The _____ Functions accepts two strings as argument and return an integer value.
a) len b) strlen c) strlen d) strcmpi
10. _____ contain multiple members that share the same storage area.
a) address b) pointer c) reference d) union

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. List out the three Characteristics of a digital Computer.
12. What are the two factors contribute to the legibility of writing C program?
13. Define Parameter.
14. What is Array?
15. Define Structure.



April 2021

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**)– Applicable to candidates admitted in the year 2020

I B.Sc. Computer Science

Programming in C – QIIC2(6)

I B.C.A.

Programming in C – RIIC2(6)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss the Mode of Operation.
17. Create a program to calculate the Average of two numbers.
18. What is function Prototype? How do you implement in C programming.
19. Explain about passing pointers to a function.
20. How to create user defined Data type in C ? Explain with example.
21. Classify the Data types in C.
22. Describe about operators on pointers.
23. Write about Self Referential Structure.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. What is an Operator? Elaborate the different types of Operator with example.
25. Analyze the looping statement in C. Compare with Example.
26. Elucidate the different Storage classes with example.
27. Discuss about Multidimensional Array in C.
28. Classify the open and close a data file in C.

-----**All the Best** -----



April 2021

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018
III B.Sc. Computer Science/B.C.A

Python Programming – QVIC9(6)/RVIC13(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions

15 Marks

I. Fill in the blanks

(5 x 1 = 5 Marks)

- _____ is not the core data type.
- _____ Command is used to create a list.
- What will be the output of the following Python statement?
>>>print('new' 'line')
- Suppose list1 is [3, 5, 25, 1, 3], what is min(list1) _____ .
- _____ data type is not supported in Python ?

II. Choose the correct answer

(5 x 1 = 5 Marks)

- Which of the following is invalid?
a) `_a = 1` b) `__a = 1` c) `__str__ = 1` d) none of the Above
- Which of the following is an invalid variable?
a) `my_string_1` b) `1st_string` c) `foo` d) `_`
- Which of the following is not a keyword?
a) `eval` b) `assert` c) `nonlocal` d) `pass`
- What arithmetic operators cannot be used with strings?
a) `+` b) `-` c) `*` d) None of the Above
- Which of the following statements is used to create an empty set?
a) `{}` b) `set()` c) `[]` d) `()`

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

- What is membership operator? Give examples.
- List out list data type operations.
- How to create sets in python. Explain with example.
- Difference between List & Tuples.
- Suppose list1 is [1, 5, 9], what is sum (list1)?



April 2021

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018
III B.Sc. Computer Science/B.C.A

Python Programming – QVIC9(6)/RVIC13(6)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Illustrate the salient features of Python.
17. Discuss about while and for loop with example.
18. Identify the functions and operations used in Python Files with examples.
19. Compare the usage of lists, tuples data type? Give an example for each data type.
20. Tabulate the different modes for opening a file and explain the same.
21. Distinguish between Sets and Dictionaries? Explain about its operations and methods.
22. Identify the use of string methods with examples. Describe why strings are immutable with an example.
23. Describe the concept of math functions in python with examples.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Explain the Identifiers, Keywords, Expressions, and Variables in Python programming language with examples.
25. Describe Arithmetic Operators, Assignment Operators, Comparison Operators, Logical operators and Bitwise Operators in detail with examples.
26. What are user-defined functions? Identify How can we pass parameters in user defined functions? Explain with suitable example.
27. Classify the use of Exception Handling in Python.
28. Identify the operations and methods used in Tuple datatype with examples.

----- **All the Best** -----



April 2020

2017/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

V SEMESTER (Arrear)–Applicable to candidates admitted in the year 2017

III B.Sc. Computer Science

Software Testing – QVCE4(5)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

- _____ is the base factor to determine effort, duration, schedule, and cost.
- The production of the requirements stage of the software development process is _____.
- Verification is focused on _____.
- _____ is an approach to testing where you ensure that every path through a program has been executed at least once.
- A _____ defines in quantitative terms the degree to which a system, system component, or process possesses a given attribute.

II. Choose the correct answer

(5X1=5 Marks)

- The nature of software applications can be characterized by their information
a) Complexity b) Content c) Determinacy d) Both b and c
- Test cases are created in which phase?
a) Test Specification b) Test Planning c) Test Requirement d) Test Configuration
- Which is not the state of bug in bug Life Cycle?
a) Verified b) Deferred c) Critical d) Postponed
- _____ is not a Software Development Life Cycle Phase.
a) Requirements Gathering b) Coding c) Test Closure d) Testing
- Domain testing used to select
a) Metrics b) Automated testing c) Infinite group of test d) All the above

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

- Define Size factors.
- List any two features of good SRS.
- State the difference between validation and verification.
- List out the advantages of Path testing.
- Define Domain testing.



April 2020

2017/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

V SEMESTER (Arrear)–Applicable to candidates admitted in the year 2017

III B.Sc. Computer Science

Software Testing – QVCE4(5)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Analyze the various size factors of software engineering.
17. Determine the fundamental design concepts.
18. State the difference between testing and debugging.
19. Discuss Path testing basics in detail.
20. Summarize the need of automated testing tools.
21. Explain about Quality and productivity factors in software engineering.
22. Discuss Design guidelines in detail.
23. Explain Interface testing in detail.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Analyze various steps in planning the development process in detail.
25. Determine the Software requirement specification for conventional software project.
26. Elaborate various types of testing.
27. Describe the Data flow testing in detail.
28. Analyze the structural metrics in detail.

----- All the Best -----



April 2020

2017/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

V SEMESTER (Arrear)–Applicable to candidates admitted in the year 2017

III B.Sc. Computer Science

Visual Programming – QVC7(5)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. The property which the form cannot respond to any events is called _____.
2. _____ keyword is used to declare a constant variable.
3. The method which displays the form on the screen _____.
4. The control used to group other VB controls is _____.
5. MDI stands for _____.

II. Choose the correct answer

(5X1=5 Marks)

6. _____ method is used to clear the form of the screen.
a) Me.cls b) Me.clear c) Me.clr d) Me.cla
7. The data type which is used to store various types of data is called
a) Integer b) String c) Variant d) Currency
8. The error code of _____ explains the printer driver error
a) 57 b) 58 c) 482 d) 483
9. _____ control provides the form look of a tabbed dialog box.
a) Progress bar b) Tool bar c) Tab Strip d) Slide control
10. The setting in DLL allows to create as many objects is
a) Multiuse b) Multiline c) Private d) None

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. List any four shortcut keys for manipulating the properties window.
12. Write any two features of Function.
13. What is called Procedure?
14. List any four Microsoft Windows Common controls.
15. State the use of LOF command.



April 2020

2017/UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI – 600 018

V SEMESTER (Arrear)–Applicable to candidates admitted in the year 2017

III B.Sc. Computer Science

Visual Programming – QVC7(5)

Section – B

(3 x 5= 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss about the Scale properties available to position the objects.
17. Explain the TextBox Properties with example.
18. Write a VB program to find the reverse of a given number.
19. Discuss about Error Trapping.
20. Describe the basic features of MDI form.
21. Write short notes on Common Dialog Box.
22. How you will use ProgressBar control in your program? Give example.
23. Explain in detail about file handling functions in VB.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Explain in detail about VB IDE.
25. Discuss fundamental data types available in VB.
26. Explain various Tools and Techniques available for testing and debugging.
27. Describe the steps to create objects in visual basic with example.
28. Explain the important File System Controls in VB with example.

----- All the Best -----



November 2020

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

III SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II B.C.A.

Computer Graphics – RIIICE1A(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. _____ are widely used fine art and commercial art applications.
2. Random scan monitors uses _____ method to display color pictures.
3. The gray scale number value ranges from _____
4. Every line end point in a picture is assigned as _____
5. A hardware implementation of a 3D viewing operation using ____ chip for the coordinate transformation and clipping operations

II. Choose the correct answer

(5 x 1= 5 Marks)

6. A Primary gun in DVST is used to store the
a) Picture b) Picture definition c) Picture display d) Picture Pattern
7. In graphics system the array of pixels in the picture are stored in
a) Memory b) Frame buffer c) Processor d) Picture tube
8. The region against which an object is clipped is called
a) Window port b) View port c) Clip window d) Device co-ordinate
9. An object positions transformed to the view plane along lines that converge to a point called
a) Projection reference point b) View point c) Projection point d) Region code
10. Expansion of line DDA algorithm is
a) Digital difference analyser b) Direct differential analyser
c) Dynamic differential analyser d) Digital differential analyser

III. Answer the following in One or Two Sentences

(5 x 1= 5 Marks)

11. Define Computer Graphics
12. What is mean by display list?
13. How to clarify depth relationship in a wireframe?
14. List some 3D Viewing devices.
15. What is sheering.



November 2020

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

III SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II B.C.A.

Computer Graphics – RIIICE1A(6)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Write down the applications of Computer graphics.
17. Explain the working principle of CRT and Color monitor.
18. What are the basic 2D transformations? Explain.
19. Explain about Sutherland-Hodgeman polygon Clipping.
20. Draw and explain the circle generation algorithm

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. List out any five input devices. Explain with suitable diagram.
22. Briefly explain the Bresenham's line drawing algorithm with example.
23. Discuss window to viewport coordinate and give example
24. List out the advantages of B-Splines and its Properties. Explain.

----- **All the Best** -----



April 2021

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II B.C.A.

Computer Networks – RIVC6(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. An agreement which provides communication between communicating parties is called _____.
2. _____ technique that allows the receiver to deduce an error has occurred.
3. The settling of routes to best paths across the network is called _____.
4. _____ layer is responsible for end to end communication in network.
5. _____ algorithm also known as asymmetric algorithms.

II. Choose the correct answer

(5X1=5 Marks)

6. The _____ layer is responsible for transmitting raw bits into a communication channel.
a) Data link b) Network c) Physical d) Transport
7. Cyclic Redundancy check is also known as _____ code.
a) Polynomial b) Parity c) Convolution d) Systematic
8. Distance vector routing is also called as _____ routing algorithm.
a) Bellman-Ford b) Dijkstra's c) Flooding d) Link state
9. _____ records the information about the TSAP address and its services.
a) DNS b) Portmapper c) Webserver d) None
10. Expansion of SMTP is
a) Soft Mail Transfer Protocol b) Simple Mail Transport Protocol
c) Simple Main Transfer Protocol d) Simple Mail Transfer Protocol

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. What do you mean by UDP?
12. Write on byte stuffing.
13. What is called Optimality Principle?
14. List the two styles for terminating a connection.
15. Define Digital Signature.



April 2021

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
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IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II B.C.A.

Computer Networks – RIVC6(6)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss the principles of any two guided transmission media.
17. Identify the model to connect multiple networks and explain it.
18. How the Hamming distance algorithm used to correct the error while transmitting the data?
19. What is Sliding window protocol & explain how it works?
20. Write the steps involved in Link State routing algorithm.
21. Explain how the tunneling works to handle the transmission between different types of networks.
22. Discuss the service primitives done by the transport layer.
23. Describe about the architecture of the email system.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. With a neat diagram, explain about the OSI reference model.
25. Discuss about the error detecting codes techniques with an example.
26. Elaborate about the Shortest path routing algorithm with an example.
27. Discuss in detail about three way handshake method to establish a TCP connection with a neat diagram.
28. Describe in detail about the Symmetric key algorithm to perform encryption.

----- **All the Best** -----



April 2021

2018/UGR

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CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year
2018

III B.C.A.

Internet of Things - RVIC12(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1 = 5 Marks)

1. ____ Solutions allow end-users to capture data about events from assets, such as temperature or inventory level.
2. _____ is a 8-bit, 16-bit or 32-bit working memory and storage.
3. A _____ server is a logical protocol and it can be hosted on a constrained device.
4. IOT Domain model is presented using _____ diagrams
5. _____ are excellent environment for wireless propagation where RF shields can occur.

II. Choose the correct answer

(5 x 1 = 5 Marks)

6. Tags using technologies such as _____ provide means to put electronic identifier on any object and can be cheaply produced.
a) RFID b) BLE c) NFC d) Beacons
7. _____ serves as translator between different protocols.
a) Gateways b) Bridges c) Routers d) Switches
8. _____ standard provide Geospatial information support to the web and wireless location based services for M2M and IOT.
a) ETSI b) IETF c) ITU-T d) OGC
9. _____ uses Hop-by-Hop communication equipped with mesh radio networking technologies.
a) IEEE 802.11 b) IEEE 802.3 c) IEEE 802.5 d) IEEE 802.15.4
10. _____ are to be defined in case of service provisions for IOT applications.
a) SM b) QOS c) SLA d) ISO



April 2021

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year
2018

III B.C.A.

Internet of Things - RVIC12(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. Define IOT.
12. List the Device Management tasks.
13. What is the purpose of ARM?
14. What are Sensors in IOT?
15. What is PS?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Classify the key application areas of M2M.
17. Analyze M2M and IOT in Knowledge Management Reference Architecture.
18. Explain the working of IETF architecture addressing M2M and IOT.
19. Discuss about the Deployment and Operational view of IOT system.
20. Illustrate the Interaction and Remote control over IOT applications.
21. Discuss about the overview of typical M2M solutions.
22. Evaluate the services of Basic Devices of IOT.
23. Explain the main design principles and needed capabilities for M2M and IOT.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Elaborate on IOT value chains.
25. Assess the Data Management with respect to M2M.
26. Appraise the ETSI M2M High-level Architecture.
27. Analyze the Informational View in an IOT System.
28. Elaborate the Technical Design Constraints of IOT.

----- All the Best -----



April 2021

2019/2012/PGR/PGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular & Arrear**) – Applicable to candidates admitted in the
year 2019 & 2012

II M.Sc. Computer Science/ II M.C.A

Data Mining – MGIVC9(6)/MHIVC12(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. KDD stands for _____.
2. _____ refers how much the data are targeted by users.
3. OLAM stands for _____.
4. A _____ of class – labelled tuples is used to estimate cost complexity.
5. Clustering can also be used for _____.

II. Choose the correct answer

(5X1=5 Marks)

6. To remove noise and inconsistent data is called
 - a) Data Integration
 - b) Data Cleaning
 - c) Data Mining
 - d) Data Pre process
7. Data mining often requires
 - a) Data cleaning
 - b) Data Pre process
 - c) Data Integration
 - d) Data Transformation
8. Apriori is a seminal algorithm proposed by
 - a) Agarwal
 - b) Srikant
 - c) Agarwal & Srikant
 - d) Apriori
9. In Decision tree, the top most node in a tree is the
 - a) Root node
 - b) Head node
 - c) Top node
 - d) List node
10. The method works by grouping data objects into a hierarchy.
 - a) Hierarchical clustering methods
 - b) Tree based method
 - c) Knowledge based method
 - d) Analytical method



April 2021

2019/2012/PGR/PGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular & Arrear**) – Applicable to candidates admitted in the
year 2019 & 2012

II M.Sc. Computer Science/ II M.C.A

Data Mining – MGIVC9(6)/MHIVC12(6)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define Data mining.
12. Identify any four fields of data quality.
13. Mention the use of multi-dimensional data mining in cube space.
14. Define Classification.
15. What is Clustering?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the concept of data warehouse.
17. Discuss an overview of data reduction strategies.
18. Explain about association rule mining.
19. Analyse the concept of back propagation.
20. Illustrate an overview of basic clustering methods.
21. Analyse the concept of web mining.
22. Evaluate the concept of Naïve Bayesian classification method.
23. Explain briefly about types of Outliers.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

24. Discuss various major issues in Data mining.
25. Analyse the major tasks in Data pre-processing.
26. Describe in detail about Apriori algorithm.
27. Classify various typical requirements of clustering in data mining.
28. Elaborate the concept of Spatial and Temporal mining.

----- All the Best -----



April 2021

2019/2012/PGR/PGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular & Arrear**) – Applicable to candidates admitted in the
year 2019 & 2012

II M.Sc. Computer Science/ II M.C.A

Data Mining – MGIVC9(6)/MHIVC12(6)



April 2021

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.Sc. Computer Science

Artificial Intelligence and Expert Systems– MGIICE2(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. The father of artificial intelligence is _____.
2. The fundamental goal of _____ is to facilitate inferencing from knowledge.
3. Min-Max algorithm is mostly used for _____ in AI.
4. Expert system are part of the general area of research known as _____.
5. _____ is a process to interpret, acquire, select and organize the sensory information that is captured from real world.

II. Choose the correct answer

(5X1=5 Marks)

6. What is the term used for describing the judgmental or common sense part of problem solving?
a) Heuristic b) Critical c) Value based d) Analytical
7. What are the properties of a good knowledge representation system?
a) Representation Adequacy b) Inferential Adequacy
c) Inferential Efficiency d) All of these
8. Which of the following is true in Statistical reasoning?
a) The representation is extended to allow some kind of numeric measure of certainty to be associated with each statement.
b) The representation is extended to allow 'TRUE or FALSE' to be associated with each statement.
c) The representation is extended to allow some kind of numeric measure of certainty to be associated common to all statements.
d) The representation is extended to allow 'TRUE or FALSE' to be associated common to all statements.
9. Which computer based model is developed after human brain?
a) Fuzzy Logic b) Neural Network c) Virtual Reality d) All of the above
10. One of the main challenge/s of NLP is
a) Handling Ambiguity of Sentences b) Handling Tokenization
c) Handling POS - Tagging d) All of the mentioned



April 2021

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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
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II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.Sc. Computer Science

Artificial Intelligence and Expert Systems– MGIICE2(6)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. What is the difference between Intelligence and Artificial Intelligence?
 12. Define predicate logic.
 13. What do you know about Fuzzy Logic?
 14. List the benefits of expert system.
 15. Describe NLP.
-

Section – B

(3 x 5= 15 Marks)

Answer any three questions All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss the significances of AI Techniques.
 17. How are simple facts represented using Predicate Logic?
 18. Discuss about game playing in AI.
 19. Bring out the advantages of an Expert System.
 20. Explain the A* algorithm.
 21. Explain the concept of Means End Analysis Procedure.
 22. Discuss the Instance of ISA Relationship.
 23. What is the difference between forward and backward reasoning?
-

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

24. Explain the concept of Heuristic Search Techniques.
25. Illustrate various knowledge representation approaches.
26. Discuss in detail about Bayes theorem and Bayesian network.
27. Summarise the significances of knowledge acquisition techniques.
28. Classify and demonstrate various types of learning in expert system.

----- All the Best -----



April 2021

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.C.A

Artificial Intelligence and Deep Learning - MHIICE3A(7)

TIME: 90 Minutes

MAXIMUM MARKS: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. Artificial Intelligence is about _____.
2. A _____ is used to demonstrate, on a purely syntactic basis, that one formula is a logical consequence of another formula.
3. _____ is involved in Expert system building
4. Expert System must have _____
5. The most popular and widely used programming language for expert system Application is _____

II. Choose the correct answer

(5X1=5 Marks)

6. The component of an Expert system is
 - a) Knowledge Base
 - b) Inference Engine
 - c) User Interface
 - d) All of the above
7. The statement comprising the limitations of FOL is/are
 - a) Expressiveness
 - b) Formalizing Natural Languages
 - c) Many-sorted Logic
 - d) All of the mentioned
8. Human Expert is
 - a) Creative
 - b) Narrow
 - c) Symbolic
 - d) all of these
9. Some of the task domains of AI
 - a) System
 - b) Engineering
 - c) algorithms
 - d) all of these
10. Forward Chaining is a
 - a) Rule based system
 - b) chain based system
 - c) rule and chain
 - d) all of these



April 2021

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.C.A

Artificial Intelligence and Deep Learning - MHIICE3A(7)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. What is a AI?
 12. Define Matching.
 13. What is a Logic reasoning?
 14. What is Deep learning?
 15. Define Graph.
-

Section – B

(3 x 5 = 15 Marks)

Answer any three questions All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the Production system Characteristics.
 17. Discuss about the Implementation of DFS and BFS.
 18. Describe the Fuzzy logic in detail.
 19. Write notes on the various RLU function.
 20. Describe about the Forward propagation suitable example.
 21. Evaluate the Overview forward reasoning.
 22. Compare contrast human and artificial expertise.
 23. Justify how to the function model.
-

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

24. Explain in detailed note on Heuristic search techniques.
25. Illustrate the representing knowledge using rules in detail.
26. Elaborate the Debugging gradient decent with gradient checking.
27. Describe about the statistical reasoning probability and Bayesian networks.
28. List and explain the hand written digit classification using tensor flow.

----- All the Best -----



December 2020

2020/PG
R

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidates admitted in the year
2019 and 2018

III M.C.A

Android Programming – MHVC17 (6)

TIME: 90 Minutes

MAXIMUM MARKS :50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5Marks)

-
1. Android is a _____ operating system that is based on a modified version of Linux.
 2. The _____Layout enables you to specify how child views are positioned relative to each other.
 3. To execute a block of code at a regular time interval you can use _____ class within a Service.
 4. A Key store is commonly known as _____.
 5. One way to communicate with the outside world is through _____.
-



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2020/PG
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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidates admitted in the year
2019 and 2018

III M.C.A

Android Programming – MHVC17 (6)

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. _____ is used for testing your Android Applications.
a) AVD b) ADT c) APK d) SDK
7. The method called when the activity becomes visible to the user.
a) onCreate() b) onStart() c) onResume() d) None
8. There are _____ Screen Densities recognized by Android.
a) 4 b) 2 c) 3 d) None
9. The _____ class handles asynchronous request on demand.
a) Service b) Activity c) IntentService d) None
10. The _____ class acts as a bridge between an Adapter View and the data source that feeds data into it.
a) Adapter b) BaseAdapter c) Image Adapter d) None

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. List the features of android.
12. Define Image Switcher.
13. What is a View in Android?
14. Define Sockets Programming.
15. List the steps to publish your Android application.

IV. Section – B

(3 x 5 = 15 Marks)

Answer any Three questions .All questions carry equal marks. (Each answer should not exceed 150 words)

16. Explain with an example how to navigate between two activities?
17. Illustrate with an example how you can use the SpinnerView in your activity?
18. Describe how to use the Gallery view to display a set of images.
19. Elucidate how you can send e-mail messages programmatically from within your Android application.
20. Describe the various ways to deploy your APK files.

V. Section – C

(2 x 10 = 20 Marks)

Answer any Two questions. All questions carry equal marks.(Each answer should not exceed 300 words)



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidates admitted in the year
2019 and 2018

III M.C.A

Android Programming – MHVC17 (6)

-
21. Define Android. Describe its architecture with the anatomy of android application.
 22. Illustrate with an example how to navigate to a specific Location in Map.
 23. Analyze the Specialized Fragments in Android with a neat example.
 24. Elaborate with an example how to perform CRUD (Create,Read,Update,Delete) operations on databases using content provider.

All the Best



December 2020

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (Autonomous),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year 2018

, II M.C.A.

ARTIFICIAL NEURAL NETWORKS

MHVCE2(6) / MGIIC7(6)

TIME: 90 Minutes

MAXIMUM MARKS: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. The axon terminates in a specialized contact called a _____
2. Neural Networks are complex _____ with many parameters.
3. The Kohonen network is _____ self organizing learning networks.
4. A _____ network is able to recognize unclear pictures correctly.
5. ART stands for _____.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. A perceptron adds up all the weighted inputs it receives, and if it exceeds a certain value, it outputs a 1, otherwise it just outputs a 0.
 - a) True
 - b) False
 - c) Sometimes – it can also output intermediate values as well
 - d) Can't say
7. Which of the following is an application of NN (Neural Network)?
 - a) Sales forecasting
 - b) Data validation
 - c) Risk management
 - d) All of the mentioned
8. In self organizing network, how is input layer connected to output layer?
 - a) some are connected
 - b) all are one to one connected
 - c) each input unit is connected to each output unit
 - d) none of the mentioned



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN(Autonomous),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year 2018

II M.C.A.

ARTIFICIAL NEURAL NETWORKS

MHVCE2(6) /MGHIC7(6)

9. Boltzman learning is a?
- fast process
 - steady process
 - slow process
 - none of the mentioned
10. If the weight matrix stores the given patterns, then the network becomes?
- autoassociative memory
 - heteroassociative memory
 - multidirectional associative memory
 - temporal associative memory

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

- What are artificial neural networks explain with a real example?
- What is the biggest difference between Widrow & Hoff's Delta Rule and the Perceptron Learning Rule for learning in a single-layer feedforward network?
- What is Vector Quantization?
- What is the use of Boltzmann machine?
- What is Associative memory in Neural Networks?

SECTION – B (3 x 5 = 15 Marks)

Answer any three questions. All questions carry equal marks. (Each answer should not exceed 150 words)

- Mention the limitations of Perceptron
- Discuss about XOR problem
- Explain Phonetic typewriter
- Write short note on Adaptive Resonance Theory
- Explain any one method for implementing associative memory

SECTION - C (2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks. (Each answer should not exceed 300 words)



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (Autonomous),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year 2018

, II M.C.A.

ARTIFICIAL NEURAL NETWORKS

MHVCE2(6) /MGHIC7(6)

21. Explain Multi-layer perceptron algorithm
22. Explain Kohonen network Self Organizing Map
23. Discuss Hopfield model in detail
24. Explain Wilshaw's associative net.

-----**All the Best**-----



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CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year2018

, II M.C.A.

ARTIFICIAL NEURAL NETWORKS

MHVCE2(6) /MGHIC7(6)



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular) - Applicable to candidate admitted in the year 2018
III MCA **Big Data Analytics – MHVC16(6)**

TIME: 90 Minutes

MAXIMUM MARKS: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. The concept of the 'Wisdom of Crowds' leveraged by _____ method.
2. _____ is the process of extracting useful knowledge from continuous rapid stream.
3. HDFS is implemented in _____ programming language.
4. _____ can best be described as a programming model used to develop Hadoop-based applications that can process massive amounts of data.
5. Hive's SQL dialect, called _____.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. Present size of the Digital Universe is in the order of _____.
 - a) Gigabyte(GB)
 - b) Terabyte (TB)
 - c) Exabyte (GB)
 - d) Petabyte (PB)
7. _____ is an open source analytic tool that has experienced increased adoption in recent
 - a) SAS
 - b) SPSS
 - c) R
 - d) KNIME
8. The split size is normally the size of a _____ block, which is appropriate for most applications.
 - a) Generic
 - b) Task
 - c) Library
 - d) HDFS
9. MapReduce is meant for _____.
 - a) Data Visualization
 - b) Massive Parallel programs
 - c) Query Reports
 - d) Data Storage in Cloud
10. ZooKeeper allows distributed processes to coordinate with each other through registers, known as _____.
 - a) Znodes
 - b) Vnodes
 - c) Hnodes
 - d) Rnodes



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular) - Applicable to candidate admitted in the year 2018
III MCA **Big Data Analytics – MHVC16(6)**

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. Which condition data is called by “Big Data”?
12. Outline the advantages of Visual Data Exploration.
13. State the purpose of Hadoop Pipes.
14. Define Data Locality Optimization.
15. What is Hive?

SECTION - B

(3 x 5 = 15 Marks)

Answer any three questions. All questions carry equal marks. (Each answer should not exceed 150 words)

16. Enumerate the characteristics of Big Data
17. Formulate how Big Data Analytics helps business people to increase their revenue.
18. Illustrate the core components of Hadoop Framework.
19. Explain the different types and formats of MapReduce with examples.
20. Summarize the various data processing operators in Pig.

SECTION - B

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks. (Each answer should not exceed 300 words)

21. Analyze the role of Analytic Sandbox and its benefits in the Analytic Process.
22. Describe the architecture of Data Stream Management System.
23. Discuss about the concepts of Hadoop Distributed File System.
24. With necessary diagrams explain the anatomy of MapReduce job runs in Hadoop.

-----*All the Best*-----



December 2020

2020/PG
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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year
2019 and 2018

II M.Sc (Computer Science)

Cryptography –

MGHICE4(6)

TIME: 90 Minutes

MAXIMUM MARKS :50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. _____ is the scrambled message produced as output from plaintext.
2. Two integers a and b are said to be congruent modulo n if _____.
3. The most widely used public key cryptosystem is _____.
4. Denial of transmission of message by source is _____.
5. _____ and _____ are two categories of digital signature.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. A stream cipher is one that encrypts a digital data stream one ____ at a time.
a.bit b. byte c. both d.data
7. GCD of two integers is the ____ positive integer that divides both integers.
a.largest b. least c. common d. none.
8. Discrete logarithms are fundamental to a number of public key algorithms including
a.DSA b. RSA c. SHA d. SRA
9. Authentication function is
a. cryptographic application b. Residue c. KDC d. MAC
10. A digital signature is a mathematical technique which validates?
a. authenticity b. integrity c. Non-repudiation d. All of the above



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year
2019 and 2018

II M.Sc (Computer Science)

Cryptography –

MGHICE4(6)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. Define secret key.
12. State the Euler's Totient function
13. List the substitution techniques.
14. What is public key certificate?
15. Mention the uses of a digital signature.

Section – B

(3 x 5 = 15 Marks)

**Answer any Three
questions.**

**All questions carry equal marks.(Each answer should not
exceed 150 words)**

16. Discuss the AES key expansion algorithm
17. Analyze the message authentication requirements
18. Illustrate the transposition techniques.
19. Explain in detail about the hash functions.
20. Discuss the properties of modular arithmetic.

Section – C

(2 x 10 = 20 Marks)

**Answer any Two
questions.**

**All questions carry equal marks.(Each answer should not
exceed 300 words)**

21. Describe the RSA algorithm.
22. Elucidate the digital signature standard.
23. Discuss about the concept of key exchange using Diffie Hellman algorithm
24. Elaborate on Fermat's and Euler's theorem

All the Best



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year
2019 and 2018

II M.Sc (Computer Science)

Cryptography –

MGHICE4(6)



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year
2019 and 2018

II M.Sc (Computer Science)
MGHICE4(6)

Cryptography –



December 2020

2020/UG
R

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER/IV SEMESTER (Regular)-Applicable to candidate admitted
in the year 2018

III M.C.A /II M.SC COMPUTER SCIENCE
Digital Image Processing - MHVC15(6)/MGIICE3(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. Digitizing the amplitude value is called-----.
2. A circulant matrix is called _____.
3. The relationship between the spatial and frequency domain is called -----.
4. Restoration attempts to _____ an image.
5. Data Compression involves reconstruction and _____.

II. Choose the correct answer (5 Marks)

(5 X 1)

6. Set of pixels are known as the 4-neighbors of P, and is denoted by
 - a) N4(P)
 - b) N2(P2)
 - c) N4(R)
 - d) None of the above
7. _____ is called as accepting or rejecting certain frequency components.
 - a) Filtering
 - b) Eliminating
 - c) Slicing
 - d) None of the above.
8. Low pass filters attenuates _____.
 - a) Low frequencies
 - b) Medium frequencies
 - c) High frequencies
 - d) none
9. Function having both properties of additivity and homogeneity is called
 - a) Sharpening
 - b) Spike noise
 - c) Restoration
 - d) Superposition
10. Data compression and encryption both work on binary
 - a) False
 - b) True
 - c) Data Compression only
 - d) Encryption only



December 2020

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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER/IV SEMESTER (Regular)-Applicable to candidate admitted
in the year 2018

III M.C.A /II M.SC COMPUTER SCIENCE
Digital Image Processing - MHVC15(6)/MGIICE3(6)



December 2020

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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER/IV SEMESTER (Regular)-Applicable to candidate admitted
in the year 2018

III M.C.A /II M.SC COMPUTER SCIENCE
Digital Image Processing - MHVC15(6)/MGIICE3(6)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. Define pixel.
12. State the arithmetic operations that can be performed on an image.
13. What is smoothening in digital image processing?
14. How is the Forward Fourier transformation is used in the digital image processing?
15. State the Periodic noise.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the RGB color model.
17. Differentiate between spatial and frequency domain.
18. Discuss any two high-pass filtering technique.
19. Explain the model of image degradation with neat diagram.
20. Write short notes on lossy compression.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Explain the steps in digital image processing with neat diagram.
22. Discuss the types of Gray level transformations in digital image processing.
23. Elucidate types of sharpening techniques.
24. Explain any three noise probability density function.

All the Best



April 2021 2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020 I
M.Sc. Computer Science Compiler Design – MGIIC4(6)

TIME: 90 Minutes MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions. 15 Marks I. **Fill in the blanks** (5X1=5 Marks) 1. The output of lexical analyzer is_____.

2. The concept of grammar used in the compiler is _____.

3. The symbol table implementation is based on the property of locality of reference is known as _____.

4. _____ scanning is the process where the stream of characters making up the source program is read from left to right and grouped into tokens. 5. $AB+(A+B)'$ is equivalent to _____.

II. **Choose the correct answer** (5X1=5 Marks) 6. A compiler is a program that

- a) Puts the program into memory and then executes it
- b) Translates assembly language into machine language
- c) Accepts a program written in a high level language and produces an object program
- d) None of the above

7. _____ phase of compiler is Syntax Analysis.

- a) First b) Second c) Third d) None of the mentioned
8. The process of assigning load addresses to the various parts of the program and adjusting the code and data in the program to reflect the assigned addresses is called a) Assembly b) Parsing c) Relocation d) Symbol resolution
9. The graph that shows basic blocks and their successor relationship is called a) Dag b) Flow Graph c) Control Graph d) Hamilton Graph

10. Relocating bits used by relocating loader are specified by

- a) Relocating loader itself b) Linker c) Assembler d) Macro Processor



II SEMESTER (Regular) – Applicable to candidates admitted in the year 2020 I
M.Sc. Computer Science Compiler Design – MGIC4(6)

III. Answer the following in One or Two Sentences (5X1=5 Marks) 11. List the two phases of lexical analysis.

12. Define Parser.

13. What is meant by translation?

14. Write on loop optimization.

15. Define DAG.

Section – B (3 x 5 = 15 Marks) Answer any three questions All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the functions of lexical analyzer.

17. Discuss about the Top-down parser.

18. Describe syntax-directed translation schemes.

19. Illustrate on data flow analysis.

20. Describe about the Peephole Optimization with suitable

example. 21. Evaluate the Overview of Finite automata.

22. Explain the steps to construct LALR sets of items.

23. Justify how to eliminate global common sub expressions.

Section – C (2 x 10 = 20 Marks) Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words) 24. Explain the Approach to design a lexical analyzer.

25. Illustrate context free grammars in detail.

26. Elaborate the principles of shift reduce parsing.

27. Discuss different types of errors.

28. Explain in detail about the code generation from DAG's.

----- All the Best -----



April 2021

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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.Sc. Computer Science .Net Technologies – MGIC5(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. A _____ is an identifier that denotes a storage location used to store a data value.
2. HTML stands for _____.
3. _____ is an example for Rich controls.
4. ADO stands for _____.
5. _____ is a comment statement in XML.

II. Choose the correct answer

(5X1=5 Marks)

6. Maximum value of integer data type in C# is
a) 2147483647 b) 2174843467 c) 251987441 d) 65535
7. _____ is an example of web controls in ASP.NET.
a) Path control b) Table control c) Check control d) Label control
8. _____ are small files which are stored on a user's computer.
a) Cookies b) Interface c) Packages d) Inheritance
9. _____ is a general technique that binds data sources from the provider and consumer together and synchronizes them.
a) Data binding b) Data cleaning c) Data streaming d) Data clustering
10. LINQ stands for
a) Language-Integrated Query b) Level – Integrated Query
c) Location – Integrated Query d) Language Interface Query



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.Sc. Computer Science .Net Technologies – MGIC5(6)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define the term Interface.
 12. Identify various list controls.
 13. Define View state
 14. What is Grid view?
 15. State the use of XML classes.
-

Section – B

(3 x 5 = 15 Marks)

Answer any three questions All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss various data types in C#.
 17. Explain the anatomy of a web form.
 18. Explain Tree view control.
 19. Give a brief account on Data binding.
 20. Explain in brief XML validation.
 21. Analyze the concept of Delegates.
 22. Compare and contrast C# and VB.NET.
 23. Discuss about Data Provider model.
-

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

24. Enumerate various Operators in C#.
25. Discuss the concept of Exception handling.
26. Explain the following:
 - i) Validation controls.
 - ii) Application state.
27. Explain the various types of data binding.
28. Elaborate the basics of LINQ.

----- **All the Best** -----



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.C.A

Advanced Java - MHIIC4(7)

TIME: 90 Minutes

MAXIMUM MARKS: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. In Java development Kit, _____ is used to translate the java source code to byte code
2. The mechanism of deriving a new class from the old one is called _____
3. The smallest unit of sub process is called _____
4. _____ stream is used to read data from a source.
5. The _____ bridge driver uses ODBC driver to connect to the database.

II. Choose the correct answer

(5X1=5 Marks)

6. Wrapping up f data of different types into a single unit is known as _____
 - a) data hiding
 - b) polymorphism
 - c) dynamic binding
 - d) encapsulation
7. Java does not support _____
 - a) Operator Overloading
 - b) Multiple Inheritance
 - c) Templates
 - d) All of the above
8. Divide by Zero error is an _____ exception
 - a) I/O
 - b) NumberFormat
 - c) Arithmetic
 - d) NullPointerException
9. Java swing provides _____
 - a) Light weight
 - b) powerful components
 - c) MVC pattern
 - d) All of the above
10. _____ method calls only once during the life cycle of servlet
 - a) load()
 - b) init()
 - c) service
 - d) destroy



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.C.A

Advanced Java - MHIIC4(7)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Elucidate the use of ternary operator.
12. Define Inheritance.
13. List the methods available for file object.
14. Define Multithreading.
15. What are the parameters to be passed for connection string?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Compare and contrast do..while and while loop in looping constructs.
17. State the reasons for the need and creation of Java programming language.
18. Write a Java program to find the Sum of Digits of a given number.
19. Classify the various types of exceptions with examples.
20. Is multiple inheritance is supported by Java? Justify.
21. Review any five controls to design a page using Swing.
22. With a neat diagram, explain about the life cycle of servlet.
23. Construct the steps to create and assess the cookies.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Elaborate the various operators used in Java with examples.
25. Identify and discuss the different ways to create your own packages.
26. Describe the various types of layout managers available in AWT.
27. Interpret the methods available to read and write the files in Java.
28. Develop the steps to connect a Java application with database using JDBC.

----- *All the Best* -----



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2020/UG
R

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2018
II MSc Computer Science **Linux and Shell Programming –**

MGHIC8 (6)

TIME: 90 Minutes

MAXIMUM MARKS :50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. _____ is a Distribution of Linux.
2. VFS is used to deal _____.
3. Cat command used to _____ and display the content of the file.
4. _____ command is used to monitor the process.
5. The opendir command used for _____.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. Which of the following is a Full Desktop Solution.
a) Ubuntu Linux b) Slakeware
c) Red Hat d) None
7. The first file system in Linux is
a) Minix b) Ext
c) Ext2 d) Ext3
8. Which of the following command is the file utilities command.
a) cp b) mv
c) rm d) all
9. The command is used to terminate process.
a) kill b) killall
c) exit d) none
10. Which of the following is/are Directory API
a) opendir b) readdir
c) rmdir d) all



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2018
II MSc Computer Science **Linux and Shell Programming –**

MGHIC8 (6)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. What is Ubuntu Linux?
12. Define inode.
13. Explain Kill command in Linux.
14. Give Example for Parent Child relationships.
15. Explain umask.

SECTION – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the term GNU “slash” Linux.
17. Discuss about Virtual File System in Linux.
18. Explain Sed and grep command in Linux.
19. Explain Loops in Shell Programming.
20. Explain changing positional parameters and argument validation.

SECTION – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Explain VI Editor.
22. Explain File Utilities Commands.
23. List out File Management System Call statements.
24. Write the shell script for Matrix Addition.

All the Best



November 2020

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.Sc Computer Science

Mobile Computing - MGICE1(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. PDA stands for _____.
2. Data transmission at the physical layer typically uses _____ systems.
3. The WLAN behaves like a slow wired _____.
4. A TCP connection is identified by the tuple also known as _____.
5. RTT stands for _____.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. Several directed antennas can be combined on a single pole to construct a _____
 - a) Sectorized antenna
 - b) Smart antenna
 - c) Multi-element antenna
 - d) None of the above
7. RNS stands for _____
 - a) Radio Network System
 - b) Radio Network SubSystem
 - c) Radio Network Services
 - d) None of the above
8. _____ is used for allocating separated space to users in wireless networks.
 - a) SDMA
 - b) TDMA
 - c) FDMA
 - d) CDMA
9. Data is transmitted in small portions called as _____.
 - a) Bursts
 - b) Guard Space
 - c) Radio Interface
 - d) Option b and c
10. The behaviour TCP shows after the detection of congestion is called as _____.
 - a) Slow start
 - b) Fast retransmit
 - c) Fast recovery
 - d) None of the above



November 2020

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.Sc Computer Science

Mobile Computing - MGICE1(6)

III. Answer the following in One or Two Sentences

(5 x 1= 5 Marks)

11. Define Multiplexing.
12. Define Digital Cellular Networks.
13. Mention the use of Routing.
14. List out type of MAC Service.
15. What is meant by Fast retransmit?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain Frequencies for Radio Transmission.
17. What is meant by Hidden and Exposed Terminal problem?
18. Explain about Digital Video Broadcasting.
19. Describe the advantages of WLANs
20. Explain about Mobile Adhoc Network.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Briefly discuss about Multiplexing and its types.
22. Explain the functions of GSM with its architecture.
23. Explain in Brief
 - (a) Snooping TCP
 - (b) Mobile TCP
24. Explain about Bluetooth Technology with security Features.

----- **All the Best** -----



April 2021

2019/2012/PGR/2012

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular & Arrear**) – Applicable to candidates admitted in the year
2019 & 2012

II M.Sc Computer Science/ II M.C.A

Cloud Computing - MGIVC10(6)/MHIVC13(6)

TIME: 90 Minutes

MAXIMUM MARKS: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

- _____ represents a technology platform used for the creation of virtual instances of IT reports.
- _____ is the characteristic of being accessible and usable during a specified time period.
- The _____ architecture establishes a high – availability cluster of hypervisors across multiple physical servers.
- _____ is a form of virtualization software that emulates a physical server.
- SLA stands for _____.

II. Choose the correct answer

(5X1=5 Marks)

- It is a cloud environment comprised of two or more different cloud deployment models.
 - Private Cloud
 - Public cloud
 - Community cloud
 - Hybrid cloud
- It is a possibility of loss or harm arising from performing an activity.
 - Risk
 - Threat
 - Vulnerability
 - Threat agent
- A program that organizes sequences of automated provisioning tasks.
 - Sequence Logger
 - Sequence manager
 - Application packager
 - Service template
- Following mechanism is a fundamental part of virtualization infrastructure that is primarily used to generate virtual server instances of a physical server.
 - Audit Monitor
 - Pay – per – use monitor
 - Hypervisor
 - Fail over system.
- Following is an collaborative authoring and information sharing.
 - Wikipedia
 - Zimbra
 - Skype
 - Google Talk



April 2021

2019/2012/PGR/2012

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular & Arrear**) – Applicable to candidates admitted in the year
2019 & 2012

II M.Sc Computer Science/ II M.C.A

Cloud Computing - MGIVC10(6)/MHIVC13(6)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define Cloud computing.
12. What is Encryption?
13. Identify any three core functions performed by resilient watchdog system.
14. What are two basic configurations comes under failover system.
15. What is cloud provisioning contract?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions All questions carry equal marks.(Each answer should not exceed 150 words)

16. Prepare a brief history of Cloud computing.
17. Explain various forms of Encryption.
18. Discuss about workload distribution architecture.
19. Explain about cloud usage monitor.
20. Illustrate the diagram of sample cloud provisioning contract.
21. Explain various cloud deployment models.
22. Explain about Public Key Infrastructure.
23. Discuss in brief dynamic scalability architecture.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

24. Analyze various cloud characteristics.
25. Discuss the concept of cloud security.
26. Elaborate on reserve pooling architecture.
27. Explain in detail about cloud storage device.
28. Explain about SLA guidelines.

----- *All the Best* -----



November 2020

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.C.A

Python Programming – MHIC1(7)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. A reserved word that is used by the compiler to parse a program is _____.
2. A file that contains a collection of related functions and other definitions is _____.
3. A statement that controls the flow of execution depending on some condition is called as _____.
4. The property of a sequence whose items cannot be assigned is called as _____.
5. To prevent an exception from terminating a program using the _____ and _____ statements.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. A processing pattern that traverses a sequence and accumulates the elements into a single result.
a) Map b) Reduce c) Filter d) None
7. A mapping from a set of keys to their corresponding values.
a) Dictionary b) List c) Tuple d) Set
8. A path that starts from the topmost directory in the file system.
a) Absolute path b) Relative path
c) Current path d) None
9. Objects are _____
a) Mutable b) Immutable c) Both a and b d) None
10. The principle that the interface provided by an object should not depend on its implementation, in particular the representation of its attributes.
a) Polymorphism b) Information hiding
c) Operator overloading d) None



November 2020

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
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I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.C.A

Python Programming – MHIC1(7)

III. Answer the following in One or Two Sentences

(5 x 1= 5 Marks)

11. What is a string in python? Give an example.
12. What is `__init__` method?
13. What is the syntax to open a file in read mode?
14. Define pickling.
15. Name five widgets they make up a GUI program?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain in detail about Functions in python programming.
17. Describe with example i) Modulus operator ii) Boolean expressions
iii) Logical operator
18. Discuss about tuple in python.
19. Discuss about pure functions in python.
20. Explain operator over loading and polymorphism with suitable example

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Explain Variables, expressions and statements in python.
22. Describe conditionals and recursion in python.
23. Explain in detail about lists in python.
24. Explain in detail about classes and objects in python.

----- **All the Best** -----



November 2020

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.C.A

Advanced Data Structures – MHIC3(7)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. A _____ is a logical method of representing data in memory.
2. Linked List can be implemented using _____.
3. Queue is also called _____.
4. A tree node with no children is called a _____ node.
5. _____ search algorithm works only on the sorted list of data elements.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. Which one is the simplest data structure _____?
 - a) Array
 - b) Linked List
 - c) Tree
 - d) Struct
7. Each node in a linked list must contain at least _____ fields.
 - a) One
 - b) Two
 - c) Three
 - d) Four
8. A data structure in which elements can be added or removed at either end but not in the middle.
 - a) Linked List
 - b) Stack
 - c) Queue
 - d) Dequeue
9. A full binary tree with n leaves contains _____
 - a) n nodes
 - b) $2n+1$
 - b) $2n$
 - d) $2n-1$
10. The average case time complexity of Quick Sort algorithm is _____
 - a) $O(\log n)$
 - b) $O(n \log n)$
 - c) $O(n)$
 - d) $O(2n)$



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
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I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.C.A

Advanced Data Structures – MHIC3(7)

III. Answer the following in One or Two Sentences

(5 x 1= 5 Marks)

11. What are the main objectives of Data structure?
12. Differentiate collection and compaction.
13. Define Recursion?
14. List the various representation of Graph.
15. Arrange the given array using Bubble Sort {12, 4, 5, 10, 1}.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss about the asymptotic notations with example.
17. Compare Doubly and Circularly Linked List.
18. Evaluate the following postfix expression $AB+ C-BA+C$ to find the result with assumption that $A = 1$, $B=2$ and $C = 3$.
19. Explain directed and undirected graph with examples.
20. Write the algorithm for insertion sort with examples and discuss the complexities.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Illustrate the linked representation of list.
22. Describe the working of a Priority Queue.
23. You are given the following integers in the order shown 46, 29, 59,30, 13,79,67,91,43.
build a max-heap out of these elements. Suppose array is used for implementing this heap show the contents of this array is used for implementing this heap. Show the contents of this array after each value is “inserted” into the max-heap.
24. Classify the hashing function and explain with an example.

----- **All the Best** -----



November 2020

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.C.A

Digital Image Processing (Integrated) – MHICE1A(7)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. _____ are the foundation for representing images in various degrees of resolution.
2. A circulant matrix is called _____.
3. The relationship between the spatial and frequency domain is called _____.
4. Averaging the low intensity and high intensity values in the neighborhood is called _____.
5. The _____ ratio is the number of bits required to represent the data before compression to the number of bits required to represent the data after compression.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. _____ gives the measures of the amount of energy that an observer perceives from a light source.
 - a) Luminance
 - b) Chromatic
 - c) Brightness
 - d) None of the above
7. _____ is the process of moving filter mask over the image and computing the sum of products at each location.
 - a) Correlation
 - b) Convolution
 - c) Slicing
 - d) None of the above
8. _____ is called as accepting or rejecting certain frequency components.
 - a) Filtering
 - b) Eliminating
 - c) Slicing
 - d) None of the above
9. Filters that replaces pixel value with the median of intensity level is _____.
 - a) Arithmetic mean
 - b) Geometric mean
 - c) Median filter
 - d) sequence mean filter
10. Lossy techniques are generally used for the compression of data that originate as analog signals, such as _____.
 - a) Speech
 - b) Video
 - c) Both
 - d) None of these



November 2020

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020
I M.C.A

Digital Image Processing (Integrated) – MHICE1A(7)

III. Answer the following in One or Two Sentences

(5 x 1= 5 Marks)

11. List the applications of digital image processing.
 12. What is Gray scale image?
 13. How is the Forward Fourier transformation is used in the digital image processing?
 14. State the Periodic noise.
 15. What is Digital video?
-

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. List the steps in digital image processing with neat diagram.
 17. Differentiate between high-pass filter and low-pass filter.
 18. How will you apply Fourier transformation to an image in spatial domain?
 19. Explain the image degradation Model.
 20. Write short notes on lossless compression techniques.
-

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Describe the structure of an eye with neat diagram.
22. Explain the types of Gray level transformations in digital image processing.
23. Elucidate types of Smoothing techniques.
24. Explain briefly about the noise model.

----- **All the Best** -----



November 2020

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

III SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019
II M.C.A.

Operating Systems – MHIIC11(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. _____ gives control of the CPU to the process selected by the short-term scheduler.
2. TLB stands for _____.
3. Mapping of file is managed by _____.
4. NORMA stands for _____.
5. In Unix, the system call creates the new process is _____.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. Classical Problems of synchronization
 - a) Reader-writer Problem
 - b) Consumer-producer problem
 - c) Dining Philosopher Problem
 - d) All of the above
7. Which of the following is a condition that causes deadlock?
 - a) Mutual exclusion
 - b) Hold and wait
 - c) Circular wait
 - d) All of these
8. When does page fault occur?
 - a) The page is present in memory
 - b) The deadlock occurs
 - b) The page does not present in memory
 - d) The buffering occurs
9. If a kernel thread performs a blocking system call, _____
 - a) the kernel can schedule another thread in the application for execution
 - b) the kernel cannot schedule another thread in the same application for execution
 - c) the kernel must schedule another thread of a different application for execution
 - d) the kernel must schedule another thread of the same application on a different processor
10. The root directory is represented by _____
 - a) \
 - b) /
 - c) *
 - d) \$



November 2020

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

III SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019
II M.C.A.

Operating Systems – MHIIC11(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. What is IPC?
12. List down the states of a process.
13. What is meant by thrashing?
14. Write a short note on thread.
15. How many types of files are there in UNIX?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss on IPC.
17. Enumerate the necessary conditions of deadlock.
18. Describe the structure of page table.
19. Discuss on a) Trojan Horse b) virus.
20. Discuss on various file types in Unix.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Explain with example any three CPU scheduling algorithms.
22. Explain with example any three page replacement algorithms.
23. Discuss on various architecture of multiprocessor operating system.
24. Elaborate on the security in UNIX.

----- **All the Best** -----



April 2021

2019/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II M.C.A.

Soft Skills IV – Internet of Things – MHIVK4(6)

Time: 90 Minutes

Maximum Marks:40

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

(3 x 2= 6 Marks)

Answer any three questions. All questions carry equal Marks.(Each answer should not exceed 50 words)

1. What is mean by IoT?
2. State the difference between IOT and M2M.
3. List the uses of NETCONF.
4. Write short note on Raspberry Pi.
5. Where is IoT Data Stored?

Section – B

(2 x 5 = 10 Marks)

Answer any two questions All questions carry equal Marks. (Each answer should not exceed 250 words)

6. Explain about IoT enabling Technologies.
7. Discuss about the features of SDN and NFV.
8. Sketch the architecture of NETCONF-YANG.
9. Explain about Raspberry Pi Interface.
10. Summarise the significances of Apache Hadoop.

Section – C

(2 x 12 = 24 Marks)

Answer any two questions. All questions carry equal Marks. (Each answer should not exceed 300 words).

11. Elucidate the design guidance for IoT.
12. Elaborate the generic M2M system solution with neat diagram.
13. Determine the need for IoT System Management.
14. Analyze about the IoT Design Methodology.
15. Elaborate the concept of Cloud Storage Model.

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



November 2020

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018
III M.C.A.

Big Data Analytics – MHVC16(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1= 5 Marks)

1. The concept of the 'Wisdom of Crowds' leveraged by _____ method.
2. _____ is the process of extracting useful knowledge from continuous rapid stream.
3. HDFS is implemented in _____ programming language.
4. _____ can best be described as a programming model used to develop Hadoop-based applications that can process massive amounts of data.
5. Hive's SQL dialect, called _____.

II. Choose the correct answer

(5 x 1= 5 Marks)

6. Present size of the Digital Universe is in the order of _____.
 - a) Gigabyte(GB)
 - b) Terabyte (TB)
 - c) Exabyte (GB)
 - d) Petabyte (PB)
7. ___ is an open source analytic tool that has experienced increased adoption in recent
 - a) SAS
 - b) SPSS
 - c) R
 - d) KNIME
8. The split size is normally the size of a _____ block, which is appropriate for most applications.
 - a) Generic
 - b) Task
 - c) Library
 - d) HDFS
9. MapReduce is meant for _____.
 - a) Data Visualization
 - b) Massive Parallel programs
 - c) Query Reports
 - d) Data Storage in Cloud
10. ZooKeeper allows distributed processes to coordinate with each other through registers, known as _____.
 - a) Znodes
 - b) Vnodes
 - c) Hnodes
 - d) Rnodes



November 2020

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018

III M.C.A.

Big Data Analytics – MHVC16(6)

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. Which condition data is called by “Big Data”?
12. Outline the advantages of Visual Data Exploration.
13. State the purpose of Hadoop Pipes.
14. Define Data Locality Optimization.
15. What is Hive?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Enumerate the characteristics of Big Data.
17. Formulate how Big Data Analytics helps business people to increase their revenue.
18. Illustrate the core components of Hadoop Framework.
19. Explain the different types and formats of MapReduce with examples.
20. Summarize the various data processing operators in Pig.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Analyze the role of Analytic Sandbox and its benefits in the Analytic Process.
22. Describe the architecture of Data Stream Management System.
23. Discuss about the concepts of Hadoop Distributed File System.
24. With necessary diagrams explain the anatomy of MapReduce job runs in Hadoop.

----- **All the Best** -----



April 2021

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.C.A

Operating Systems - MHIICE2A(7)

TIME: 90 Minutes

MAXIMUM MARKS: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5X1=5 Marks)

1. _____ is one of pre-emptive scheduling algorithm.
2. Banker's algorithm is used for _____ purpose.
3. The file that stores an integer as a sequence of characters is a _____.
4. How many states can a process be in _____
5. In UNIX, the forking process is called the _____.

II. Choose the correct answer

(5X1=5 Marks)

6. An example of a non-pre-emptive CPU scheduling algorithm is
 - a) Shortest job first scheduling
 - b) Round robin scheduling
 - c) Priority scheduling
 - d) Fair share scheduling
7. A page fault
 - a) Is an error in specific page
 - b) Is an access to the page not currently in main memory
 - c) Occurs when a page program accesses a page of memory
 - d) Is reference to the page which belongs to another program
8. The purpose of Cryptography is to take a message or file called
 - a) Plain text
 - b) Cipher text
 - c) Decrypted text
 - d) None of the above
9. In which of the following, ready to execute processes must be present in RAM?
 - a) Multiprocessing
 - b) Multiprogramming
 - c) Multitasking
 - d) All of the above
10. Which of the following OS treats hardware as a file system?
 - a) UNIX
 - b) DOS
 - c) Windows NT
 - d) None of the above



April 2021

2020/PGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

II SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2020

I M.C.A

Operating Systems - MHIICE2A(7)

III. Answer the following in One or Two Sentences

(5X1=5 Marks)

11. Define Operating System.
12. What is swapping?
13. Name any two types of directory systems.
14. What is Multiprocessor?
15. Indicate the shell script.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain Round – Robin scheduling with an example.
17. Classify any two Page Replacement Algorithms.
18. Discuss the details about User authentication.
19. Write a note on Multiprocessor systems.
20. What do you mean by a Shell in Unix? Explain
21. Distinguish between long term and short term scheduler.
22. Give a short note on swapping.
23. Discuss the various operations of a file.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

24. Elaborate details about Dining – Philosophers problem with suitable example.
25. Classify in deadlock and its detection and recovery.
26. Explain the different types of directory structure for a file.
27. What is CPU scheduling? Explain any two Scheduling Algorithms.
28. Describe about any ten UNIX commands.

----- All the Best -----



December 2020

2020/UG
R

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (Autonomous),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018
III B.Com Information System Management .NET TECHNOLOGIES - QPSVC11(3)

TIME: 90Minutes

MAXIMUM MARKS :50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5Marks)

1. All C# applications begin execution by calling the _____ method.
2. An _____ is a delegate type class member that is used by object to provide a notification to other object that an event has occurred.
3. The methods that have the same name, but different parameter lists and different definitions is called _____.
4. An _____ is a group of contiguous or related data items that share a common name..
5. An instance variable represents the _____ of an object.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. Which of the following operator can be used to access the member function of a class?
a) : b) :: c) . d) #
7. To create a string _____ method can be used.
a) ToString b) Copy
c) Concat d) ReadLine
8. When an instance method declaration includes the abstract modifier, the method is said to be an _____.
a) Abstract method b) Instance method
c) Sealed method d) Expression method
9. The formal-parameter-list is always enclosed in _____.
a) Square b) Semicolon
c) Parenthesis d) Colon
10. _____ is the server side state management technique.
a) Session State b) Cookies
c) View State d) View State



December 2020

2020/UG
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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018
III B.Com Information System Management .NET TECHNOLOGIES - QPSVC11(3)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. What is Polymorphism?
12. Define delegates.
13. List out the properties of Labels in ASP.NET.
14. Specify the HTML Server Controls.
15. Explain CLR.

Section - B

(3 x 5 = 15 Marks)

Answer any Three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Discuss the evolution of C#.
17. Illustrate the concept of Arrays with example.
18. Explain the properties of Text Box.
19. Elaborate the Validation control in ASP.NET.
20. Elucidate the Basic Server Controls.

Section - C

(2 x 10 = 20 Marks)

Answer any Two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Discuss the decision making statements in C# in detail.
22. Elucidate the concept of Console I/O operations.
23. List out the operators which can be overloaded and explain Operator Overloading in detail.
24. Elaborate Data List Web Server Controls in detail.

All the Best



December 2020

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CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018

III B.Com Information System Management .NET TECHNOLOGIES - QPSVC11(3)



December 2020

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V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018

III B.Com Information System Management .NET TECHNOLOGIES - QPSVC11(3)



December 2020

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R

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular) - Applicable to candidate admitted in the year 2018

III B.Sc. Electronics and Communication Science

Database Management System – WVCE2(5)

TIME: 90 Minutes

MAXIMUM MARKS: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. A goal of a _____ study is to determine whether a proposed project is worth pursuing.
2. _____ keyword specified in the query, eliminate duplicate rows.
3. An attribute in a relation is a foreign key if the _____ key from one relation is used as an attribute in that relation.
4. A transaction completes its execution is said to be _____.
5. DBA stands for _____.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. Who proposed the relational model?
 - a) Bill Gates
 - b) Charles Babbage
 - c) E.F. Codd
 - d) Herman Hollerith
7. _____ is an Oracle Database Language.
 - a) MS Access
 - b) SQL
 - c) XML
 - d) All of the above
8. The primary concept of constraint is basically on _____.
 - a) Single table
 - b) Boolean algebra
 - c) Redundancy
 - d) Integrity
9. A form can be used to _____.
 - a) Modify a record
 - b) Delete a record
 - c) Format printed output
 - d) All the above
10. Which technique is used to restore a database upto the last consistent state after system failure?
 - a) Backup
 - b) Recovery
 - c) Both (a) and (b)
 - d) None of the above



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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular) - Applicable to candidate admitted in the year 2018

III B.Sc. Electronics and Communication Science

Database Management System – WVCE2(5)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. List any two applications of DBMS?
12. Which circumstance you would choose to use embedded SQL rather than SQL alone?
13. Define Functional Dependency.
14. Write the ACID properties of Transactions.
15. What is Database administration?

SECTION - B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks. (Each answer should not exceed 150 words)

16. Compare the features of file system with database system.
17. Explain the process of joining tables in a query.
18. How do you convert class diagrams into normalized table? Give example.
19. Enumerate the basic elements of Reports.
20. Highlight the responsibilities of Database Administrator.

SECTION - B

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks. (Each answer should not exceed 300 words)

21. With a neat diagram, explain the structure of DBMS.
22. Discuss about various commands DDL and DML with example.
23. Summarize Normalization and its types with examples.
24. Describe the significance of Client/Server Databases.

----- *All the Best*



April 2020

2017 /UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018
V SEMESTER (**Arrear**) –Applicable to candidates admitted in the year 2017
III B.Com. Information Systems Management
Programming in Java – PSVC11(2)

Time: 90 Minutes

Maximum Marks: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes

Section - A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. The _____ comes with a collection of tools that are used for developing and running java program.
2. An _____ is a symbol that tells the computer to perform certain mathematical or logical manipulations.
3. A class that cannot be subclassed is called a _____ class.
4. _____ represents a sequence of characters.
5. An applet is said to be _____ when it is removed from the memory.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. _____ are programmer-designed tokens.
a) Keywords b) Identifiers c) Operators d) Separators
7. The _____ operator is used to access the instance variables and methods of class objects.
a) Dot b) Bitwise c) Instanceof d) Logical
8. Java does not directly implement _____ inheritance
a) Multilevel b) Multiple c) Hierarchical d) Hybrid
9. Primitive data types may be converted into object type using _____ classes.
a) Vector b) Constructor c) Wrapper d) Super
10. Applet enters the running state when the system calls the _____ method.
a) init() b) start() c) paint() d) stop()

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. List the kinds of java variables.
12. Write the basic form of class definition.
13. List the types of visibility modifiers.
14. Define array.
15. Write the states of applet life cycle.



April 2020

2017 /UGA

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018
V SEMESTER (**Arrear**) –Applicable to candidates admitted in the year 2017
III B.Com. Information Systems Management
Programming in Java – PSVC11(2)

Section – B

(3 x 5 = 15 Marks)

Answer any three questions. All questions carry equal Marks. (Each answer should not exceed 150 words).

16. List and explain the features of java.
17. Discuss the entry controlled statements with an example.
18. Write short notes on method overriding.
19. Describe briefly about two-dimensional array.
20. Discuss the steps involved in adding and running an applet.
21. Describe the various constants in java with example.
22. Explain conditional operator with an example.
23. Discuss briefly on vector class.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal Marks. (Each answer should not exceed 300 words).

24. Explain in detail java statements with suitable example.
25. Describe in detail constructor and method overloading.
26. List and explain various types of inheritance.
27. With an example explain various string methods.
28. Describe the various sections of a web page.

----- **All the Best** -----



December 2020

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018

II' B.Sc. Electronics and communication science Introduction to Java Programming–WIIIA3(6)

TIME: 90 Minutes

MAXIMUM MARKS :50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. The sequence of instructions is called a _____
2. Java was developed by _____.
3. _____ statement is used to skip out of *switch* structure.
4. When two different objects interpret a single message differently and respond differently, it is known as _____
5. Two primary components make up the implementation of a class in Java: the *class* _____ and the *class* _____.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. _____ is used to find and fix bugs in Java program
 - a) JVM
 - b) JDK
 - c) JRE
 - d) JDB
7. Which of the following option leads to the portability and security of java ?
 - a) Byte code is executed by JVM
 - b) applet makes java code secure
 - c) exception handling
 - d) dynamic binding
8. Which package contains random class?
 - a) java.util.package
 - b) java.lang.package
 - c) java.awt.package
 - d) java.io.package
9. Which option is false about the final keyword?
 - a) cannot be overridden in its subclasses
 - b) cannot be extended
 - c) cannot extend other classes
 - d) can be inherited
10. In which memory, a string is stored when we create a string using new operator
 - a) stack
 - b) string memory
 - c) heap memory
 - d) random storage space



December 2020

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018

II' B.Sc. Electronics and communication science Introduction to Java Programming–WIIIA3(6)

III. Answer the following in One or Two Sentences

(5 X 1 = 5Marks)

11. What is Encapsulation?
12. Give one use of JVM and JDK
13. What is Inheritance?
14. What are wrapper classes.
15. Give one difference between overloading and overriding.

Section – B

(3 x 5 = 15 Marks)

Answer any Three
questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the OOPS concepts in Java.
17. Explain constructor with examples.
18. Discuss about abstract classes and methods.
19. Write a java program using one-dimensional array, to sort the given n numbers.
20. Explain about applets

Section – C

(2 x 10 = 20 Marks)

Answer any Two
questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

21. Discuss about Java decision making statements.
22. Explain the concept of two dimensional array with example.
23. Explain nested classes and inner classes with example.
24. Give an account on multiple inheritance in Java?

All the Best



December 2020

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018

II' B.Sc. Electronics and communication science Introduction to Java Programming–WIIIA3(6)



December 2020

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

V SEMESTER (Regular)-Applicable to candidate admitted in the year 2019 and 2018

II' B.Sc. Electronics and communication science Introduction to Java Programming–WIIIA3(6)

**TIME : 90Minutes****MAXIMUM MARKS :50**

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A**Answer all the questions.****15 Marks****I. Fill in the blanks****(5 X 1 = 5Marks)**

1. _____ is a collection of related data.
2. _____ command combines matching rows of data from two tables.
3. Duplication of data in a table is called _____.
4. _____ and _____ are the schema change command in SQL .
5. A _____ is a kind of relation that generalizes the concept of the key.

II. Choose the correct answer**(5 X 1 = 5Marks)**

6. DDL stands for

a) Data Definition Language	b) Data Detail Language
c) Data Decomposition Language	d) None of the above
7. The order by class used in _____ command.

a) JOIN	b) DELETE
c) CREATE	d) SELECT
8. _____ data type is of 8 byte.

a) Date and time	b) varchar
c) varchar2	d) number
9. A key with only atomic relation is _____.

a) 1 NF	b) 2 NF	c) 3 NF	d) BCNF
---------	---------	---------	---------
11. _____ can be used for concurrency control.

a) CREATE TABLE	b)LOCKS	c)JOIN	d)NONE
-----------------	---------	--------	--------

**III. Answer the following in One or Two Sentences****(5 X 1 = 5Marks)**

11. Define Data Independence.
12. Define trigger.
13. What is data model?
14. What is functional dependency?
15. Define lock.

Section – B**(3 x 5 = 15 Marks)****Answer any three questions.****All questions carry equal marks.(Each answer should not exceed 150 words)**

16. What are the primary benefits provided by a DBMS?
17. Write about aggregate operators.
18. Explain briefly about domain relational calculus.
19. Discuss about lossless-join decomposition.
20. Explain how to implement lock and unlock request.

Section – C**(2 x 10 = 20 Marks)****Answer any two questions.****All questions carry equal marks. (Each answer should not exceed 300 words)**

21. Explain in detail the key and participation constraints of the ER model.
22. Write an example and explain about nested queries.
23. What is normalization? Explain the various normal forms.
24. Explain lock based concurrency control in detail.

All the Best



December 2020

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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI-600018

III SEMESTER (Regular)-Applicable to candidate admitted in the year 2017

II B.Sc Electronics and Communication Science
Programming in C and OOPs -WIIC5(6)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. Define variable.
12. Discuss about continue statement.
13. State any two functions of recursion.
14. What is an array?
15. Define class.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions. All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the different types of data types
17. Differentiate between if statement and switch –case statement with an example
18. Discuss any two ways to pass an arguments to a function.
19. Discuss about pointers
20. Elaborate application of OOPS concepts

Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

21. Elaborate different types of operators available in C with suitable example
22. Discuss the storage classes available in C
23. Elucidate library functions available in C with suitable example.
24. Explain file operations in C

All the Best



December 2020

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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

III SEMESTER (Regular)-Applicable to candidate admitted in the
year 2017

II B.Com Information System Management

Programming in C QPSIIC7(3)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section - A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1 = 5 Marks)

1. When a function calls itself again and again, it is called _____
2. An array is a collection of data elements of the same _____
3. _____ is the built-in library function to compare two strings.
4. Dynamic allocation of memory is done by _____ operator.
5. Each string is terminated with a _____ character.

II. Choose the correct answer

(5 X 1 = 5 Marks)

6. Which of the following statements should be used to obtain a remainder after dividing 3.14 by 2.1 ?
 - a) `rem = 3.14 % 2.1;`
 - b) `rem = modf(3.14, 2.1);`
 - c) `rem = fmod(3.14, 2.1);`
 - d) Remainder cannot be obtain in floating point division.
7. Which of the following special symbol allowed in a variable name?
 - a) * (asterisk)
 - b) | (pipeline)
 - c) - (hyphen)
 - d) _ (underscore)
8. By default a real number is treated as a -----
 - a) Float
 - b) Double
 - c) long double
 - d) far double
9. When we mention the prototype of a function?
 - a) Defining
 - b) Declaring
 - c) Prototyping
 - d) Calling
10. Enumeration is ----- data type.
 - a) Integer
 - b) register
 - b) Userdefined
 - d) auto



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CHENNAI – 600 018

III SEMESTER (Regular)-Applicable to candidate admitted in the
year 2017

II B.Com Information System Management

Programming in C QPSIIC7(3)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. Write any 2 rules to declare variables.
12. Define an array.
13. State any two functions of recursion.
14. What is Symbolic constant?
15. Write a C program to find the factorial of a given number using function.

IV. Section – B

(3 x 5 = 15 Marks)

Answer any three question All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain Scanf() and Printf() with examples.
17. Differentiate between if statement and switch –case statement with an example
18. Discuss any two ways to pass arguments to a function.
19. Write short notes on Multidimensional array.
20. Explain structure in C with example.

V. Section – C

(2 x 10 = 20 Marks)

Answer any two questions. All questions carry equal marks.(Each answer should not exceed 300 words)

21. Elaborate different types of operators available in C with example.
22. Discuss control statements in C with suitable example.
23. Elucidate string functions available in C with example.
24. Explain file operations in C.

All the Best



November 2020

2020/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

I SEMESTER (**Regular**)–Applicable to candidates admitted in the year 2020

I B.Com. Information Systems Management

Fundamentals of Computer and Information Technology – QPSIC2(3)

III. Answer the following in one or two sentences

(5 X 1= 5 Marks)

11. List any two applications of computer.
12. Convert $146_{10} = ?_2$.
13. What is file backup?
14. List the careers in Information System.
15. What is a firewall?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal Marks. (Each answer should not exceed 150 words)

16. Bring out the differences between Hardware and Software.
17. Convert a) $2057_8 = ?_{10}$ b) $1AF_{16} = ?_{10}$.
18. Discuss briefly on File Organization.
19. Write a note on Ethical and Social issues of Business Information System.
20. Write a note on the working and the types of Search Engines.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal Marks. (Each answer should not exceed 300 words)

21. Explain in detail the Generations of computer.
22. Discuss in detail any five Input and Output devices each.
23. Write in detail about Primary memory and Secondary Memory.
24. Explain in detail the working and steps in sending and receiving an E-mail.

-----**All the Best.**-----



April 2021

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JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018
II SEMESTER (**Regular**) –Applicable to candidates admitted in the year 2020
I B.Com. Information Systems Management
Database Management Systems – QPSIIC4(3)

III. Answer the following in One or Two Sentences

(5 X 1 = 5 Marks)

11. Define DBMS.
12. Identify the purpose of ALL operator in a subquery.
13. What is Normalization?
14. List any two uses of forms.
15. What is the role of database administrator?

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal Marks. (Each answer should not exceed 150 words).

16. Discuss about Feasibility study.
17. Explain aggregation operator in detail.
18. Specify the purpose of group by clause and give example.
19. What is functional dependency? Explain.
20. Sketch Boyce-Codd Normal form.
21. Illustrate Report Layout.
22. Explain three types of relationships among the entities.
23. Show the Web as a client-server system.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal Marks. (Each answer should not exceed 300 words).

24. What are the various components of DBMS? Explain.
25. Explain subquery and nested subquery with example.
26. Discuss in detail about first three normal forms with suitable example.
27. Elucidate various common controls used in building a form with example.
28. Explain distributed and client-server databases.

----- **All the Best** -----



November 2020

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER (**Regular**)–Applicable to candidates admitted in the year 2018

III B.Com. Information Systems Management

.Net Technologies – QPSVC11(3)

Time: 90 Minutes

Maximum Marks: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

Section – A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 X 1=5 Marks)

1. All C# applications begin execution by calling the _____ method.
2. An _____ is a delegate type class member that is used by object to provide a notification to other object that an event has occurred.
3. The methods that have the same name, but different parameter lists and different definitions is called _____.
4. An _____ is a group of contiguous or related data items that share a common name.
5. An instance variable represents the _____ of an object

II. Choose the correct answer

(5 X 1= 5 Marks)

6. Which of the following operator can be used to access the member function of a class?
a) : b) :: c) . d) #
7. To create a string method can be used.
a) ToString b) Copy c) Concat d) ReadLine
8. When an instance method declaration includes the abstract modifier, the method is said to be an _____.
a) Abstract method b) Instance method
c) Sealed method d) Expression method
9. The formal-parameter-list is always enclosed in _____.
a) Square b) Semicolon c) Parenthesis d) Colon
10. _____ is the server side state management technique.
a) Session State b) Cookies
c) View State d) Hidden fields



November 2020

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

V SEMESTER (**Regular**)–Applicable to candidates admitted in the year 2018

III B.Com. Information Systems Management

.Net Technologies – QPSVC11(3)

III. Answer the following in one or two sentences

(5 X 1= 5 Marks)

11. What is Polymorphism?
12. Define delegates.
13. List out the properties of Labels in ASP.NET.
14. Specify the HTML Server Controls.
15. Explain CLR

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal Marks. (Each answer should not exceed 150 words)

16. Discuss the evolution of C#.
17. Illustrate the concept of Arrays with example.
18. Explain the properties of Text Box.
19. Elaborate the Validation control in ASP.NET.
20. Elucidate the Basic Server Controls.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal Marks. (Each answer should not exceed 300 words)

21. Discuss the decision making statements in C# in detail.
22. Elucidate the concept of Console I/O operations.
23. List out the operators which can be overloaded and explain Operator Overloading in detail.
24. Elaborate Data List Web Server Controls in detail.

-----All the Best.-----



April 2021

2018/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018

III B.Com. Information Systems Management

Computer Networks – QPSVIC14(3)

Time: 90 Minutes

Maximum Marks: 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes

Section – A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5x1=5 Marks)

1. The set of devices connected by links is called _____.
2. Communication Satellites contains many _____ amplify the incoming signal.
3. Two or more bits in the data unit have changed from 0 to 1 or vice-versa is called -----
_____ error.
4. In _____ routing, a route remains in force for the entire session.
5. Transport layer aggregates data from different applications into a single stream before passing it to _____.

II. Choose the correct answer

(5x1=5 Marks)

6. The network that spans a large geographical area often a country or continent is
Called _____
a) WAN b) MAN c) LAN d) PAN
7. The high speed and advanced transmission media is _____
a) Fiber Optic b) Coaxial Cable c) Twisted Pair d) Power Lines
8. _____ byte is used as both the starting and ending delimiter.
a) Flag b) Frame c) Check d) Error
9. The network layer is concerned with _____ of data.
a) Bits b) Frames c) Packets d) Bytes
10. The messages sent from Transport entity to Transport entity is called _____
a) Packet b) Partition c) Segment d) Session



April 2021

2018/UGR

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CHENNAI – 600 018

VI SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2018

III B.Com. Information Systems Management

Computer Networks – QPSVIC14(3)

III. Answer the following in One or Two Sentences

(5x1=5 Marks)

11. Define LAN.
12. What is meant by Wireless Transmission media?
13. List any two functions of Data Link Layer.
14. Define Router?
15. List any two services rendered by transport layer.

Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal Marks. (Each answer should not exceed 150 words).

16. Write short notes on Network Hardware.
17. Write briefly about Wireless Transmission.
18. Discuss about the functions of Data Link Layer.
19. Discuss about any one of the Congestion Control Algorithm.
20. Explain the elements of Transport protocol.
21. With neat diagram explain TCP/IP reference model.
22. Discuss about Data Link Layer design issues.
23. Write about DNS.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal Marks. (Each answer should not exceed 300 words).

24. Elaborately discuss about OSI reference model with neat diagram.
25. Discuss in detail about various Guided Transmission Media methodologies.
26. Explain about error detection and error correction.
27. Elaborately describe any two routing methods used in Network Layer.
28. Discuss about Email in detail.

-----All the Best-----



April 2021

2019/UGR

JUSTICE BASHEER AHMED SAYEED COLLEGE FOR WOMEN (*Autonomous*),
CHENNAI – 600 018

IV SEMESTER (**Regular**) – Applicable to candidates admitted in the year 2019

II B.B.A

Computing Tools For Management – UIVA4(6)

TIME: 90 Minutes

MAXIMUM MARKS : 50

The first ten minutes should be used for reading the question paper only. The students should not begin to answer the questions in the first ten minutes.

SECTION-A

Answer all the questions.

15 Marks

I. Fill in the blanks

(5 x 1 = 5 Marks)

1. The alignment of the document is indicated in the _____.
2. A cell in MS Excel is reference to _____ and column.
3. In Power Point, save command is in _____ menu.
4. TDS stands for _____.
5. A _____ is a collection of ledgers of the same nature.

II. Choose the correct answer

(5 x 1 = 5 Marks)

6. Short cut for checking the spelling in an active document is
a) F7 b) F5 c) Ctrl+K d) Ctrl+E
7. An Excel workbook is a collection of
a) Workbooks b) Worksheets c) Files d) Directories
8. MS Power Point file is a collection of
a) Documents b) Slides c) Pages d) Spread sheets
9. Tally solutions, then known as Peutronics, started its operations in the year
a) 1980 b) 1983 c) 1986 d) 1970
10. Company creation screen divided into
a) Two sections b) Three sections c) Four sections d) Seven sections

III. Answer the following in One or Two Sentences

(5 x 1 = 5 Marks)

11. Define Thesaurus.
12. What is meant by Chart?
13. State the term Slide Master.
14. Define Tally Vault.
15. What is Trial balance?



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Section – B

(3 x 5 = 15 Marks)

Answer any three questions.

All questions carry equal marks.(Each answer should not exceed 150 words)

16. Explain the features available for formatting documents.
17. Discuss the concept of absolute and relative cell reference.
18. Explain about Templates.
19. Discuss the features of Tally.
20. Explain about Gateway of Tally.
21. Discuss the steps to create and save a document.
22. Evaluate the data sort and data filter of Excel.
23. Illustrate the balance sheet preparation.

Section – C

(2 x 10 = 20 Marks)

Answer any two questions.

All questions carry equal marks.(Each answer should not exceed 300 words)

24. Elaborate on the concept of Mail Merge.
25. Discuss the Logical and Mathematical Functions in Excel with an example.
26. Explain about Auto Content Wizard.
27. Elaborate the Tally and Financial Management.
28. Elucidate the procedure involved in the Creation, Alteration and deletion of group.

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