

University of Mumbai

Examinations Commencing from 7th January 2021 to 20th January 2021

Program: **Computer Engineering**

Curriculum Scheme: Rev2019

Examination: BE SemesterVII

Course Code: CSC701 and Course Name: Digital Signal and Image Processing

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	The process of converting continuous-time signal to a discrete-time signal?
Option A:	Sampling
Option B:	Differentiating
Option C:	Integrating
Option D:	Differentiating + Integrating
2.	The signal $u(n) = 1, n \geq 0$ $= 0, \text{ otherwise}$ is a-----
Option A:	Unit step Signal
Option B:	Impulse signal
Option C:	Delta Signal
Option D:	Ramp Signal
3.	A digital signal is said to be Odd if $x(k) = \text{-----}$
Option A:	$x(k) = x(-k)$
Option B:	$x(k) = -x(-k)$
Option C:	$x(k) = x(k)$
Option D:	$x(k) = -x(k)$
4.	If $y(n) = x(n/2)$ then it is-----
Option A:	Up scaling
Option B:	Downscaling
Option C:	Scalar multiplication
Option D:	shifting
5.	For Periodic signal Fourier series used and for Aperiodic signal -----is used.
Option A:	Fourier series
Option B:	Unitary transform
Option C:	Fourier transform
Option D:	Z transform
6.	To compute DFT at any one value of 'k' following computations required?
Option A:	$4N-2$ real multiplications and $4N$ real additions

Option B:	4N real multiplications and 4N-4 real additions																											
Option C:	4N-2 real multiplications and 4N+2 real additions																											
Option D:	4N real multiplications and 4N-2 real additions																											
7.	Find DFT of $x(n)=\{0,1,2,1\}$.																											
Option A:	$\{4,2,0,2\}$																											
Option B:	$\{4,-2,0,-2\}$																											
Option C:	$\{-4,-2,0,-2\}$																											
Option D:	$\{-4,2,0,-2\}$																											
8.	DIT algorithm divides the sequence into																											
Option A:	Positive and negative values																											
Option B:	Even and odd samples																											
Option C:	Even and odd samples																											
Option D:	Small and large samples																											
9.	For a decimation-in-frequency FFT algorithm, which of the following is true?																											
Option A:	Both input and output are in order																											
Option B:	Both input and output are shuffled																											
Option C:	Input is shuffled and output is in order																											
Option D:	Input is in order and output is shuffled																											
10.	Decreasing sample in image causes																											
Option A:	Enhanced image																											
Option B:	Checker board effect																											
Option C:	False counteracting																											
Option D:	High contrast image																											
11.	To convert analog image into Digital image ----- required?																											
Option A:	Sampling																											
Option B:	Quantization																											
Option C:	Both Sampling and Quantization																											
Option D:	Neither Sampling and Quantization																											
12.	Find $D_m(P,Q)$ in given image where $v\{0,1\}$			<table><tr><td>1</td><td>2</td><td>P</td><td>1</td><td>2</td><td>2</td></tr><tr><td>3</td><td>1</td><td>1</td><td>3</td><td>0</td><td></td></tr><tr><td>0</td><td>2</td><td>3</td><td>1</td><td>0</td><td></td></tr><tr><td>Q</td><td>1</td><td>3</td><td>1</td><td>1</td><td>0</td></tr></table>	1	2	P	1	2	2	3	1	1	3	0		0	2	3	1	0		Q	1	3	1	1	0
1	2	P	1	2	2																							
3	1	1	3	0																								
0	2	3	1	0																								
Q	1	3	1	1	0																							
Option A:	5																											
Option B:	3																											
Option C:	4																											
Option D:	2																											
13.	What is the expanded form of JPEG?																											
Option A:	Joint Photographic Expanded Group																											
Option B:	Joint Photographic Experts Group																											
Option C:	Joint Photographic Expansion Group																											

Option D:	Joint Photographs Expansion Group												
14.	Y(n)=nx(n) is												
Option A:	Linear												
Option B:	Non-linear												
Option C:	Time invariant												
Option D:	Non causal												
15.	Compute the convolution of y(n)=x(n) * h(n) where x(n)={1,1,0,1,1} h(n)={1,-2,-3,4}												
Option A:	{1,-1,-5,2,3,-5,1,4,0}												
Option B:	{1,-1,-5,2,3,-6,1,4,0}												
Option C:	{1,-1,-5,2,3,-5,1,4,0}												
Option D:	{2,-1,-5,2,3,-5,1,4,0}												
16.	X(n)={1,2,3,4} find x(-n)												
Option A:	X(-n)={-1,-2,-3,-4}												
Option B:	X(-n)={4,3,2,1}												
Option C:	X(-n)={0,1,0,2,0,3,0,4}												
Option D:	X(-n)={-1,-2,-3,-4}												
17.	Perform circular convolution of two periodic signal x1(n)={1,2,3,4} x2(n)={4,1,1,2}												
Option A:	{25,19,23,22}												
Option B:	{15,19,20,23}												
Option C:	{15,9,23,23}												
Option D:	{15,19,23,23}												
18.	In uniform PDF, the expansion of PDF is _____												
Option A:	Portable Document Format												
Option B:	Post Derivation Function												
Option C:	Previously Derived Function												
Option D:	Probability Density Function												
19.	1/16	<table><tr><td>1</td><td>2</td><td>1</td></tr><tr><td>2</td><td>4</td><td>2</td></tr><tr><td>1</td><td>2</td><td>1</td></tr></table>	1	2	1	2	4	2	1	2	1		
1	2	1											
2	4	2											
1	2	1											
Option A:	Mean filter												
Option B:	Weighted average filter												

Option C:	Average filter
Option D:	Median filter
20.	Histogram of image is defined as
Option A:	Total pixel graph
Option B:	Total frequency graph
Option C:	Graph to plot occurrences of each GL in image
Option D:	To plot spatial resolution

Q2																											
A	Solve any Two 5 marks each																										
i.	$f(x)=\{0,1,2,3,4,5,6,7\}$ find $F(u)$ using butterfly diagram.																										
ii.	What are the different fundamental steps in Image processing?																										
iii.	Explain different classification of signal.																										
B	Solve any One 10marks each																										
i.	Find DFT of given Image $f(x,y)$. <table><tr><td>0</td><td>1</td><td>2</td><td>1</td></tr><tr><td>1</td><td>2</td><td>3</td><td>2</td></tr><tr><td>2</td><td>3</td><td>4</td><td>3</td></tr><tr><td>1</td><td>2</td><td>3</td><td>2</td></tr></table>									0	1	2	1	1	2	3	2	2	3	4	3	1	2	3	2		
0	1	2	1																								
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1	2	3	2																								
ii.	Equalize the given Histogram A and plot all histograms. Histogram A <table><tr><td>GL</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr><tr><td>No of pixels</td><td>70</td><td>100</td><td>40</td><td>60</td><td>10</td><td>70</td><td>10</td><td>40</td></tr></table>									GL	0	1	2	3	4	5	6	7	No of pixels	70	100	40	60	10	70	10	40
GL	0	1	2	3	4	5	6	7																			
No of pixels	70	100	40	60	10	70	10	40																			
Q3.																											
A	Solve any Two 5 marks each																										
i.	What happens if we reduce the Tonal and Spatial resolutions?																										
ii.	Explain how low pass averaging filter is used to remove Gaussian noise, not salt and pepper noise with example.																										
iii.	Find given system are casual ,Linear, time variant 1. $x(2n)$ 2. $x(n-3)+2x(n+1)$																										
B	Solve any One 10marks each																										
i.	Explain edge detection using Roberts, Prewitts, and Sobel operators																										
ii.	Explain all DFT properties.																										

University of Mumbai

Examinations Commencing from 7th January 2021 to 20th January 2021

Program: **Computer Engineering**

Curriculum Scheme: Rev2019/

Examination: BESemesterVII

Course Code: CSC702 and Course Name: Mobile Communication and Computing

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Which of the following is not benefit of using spread spectrum technology
Option A:	Resistance to Interference and Antijamming Effects
Option B:	Resistance to Interception
Option C:	Resistance to fading
Option D:	Restricts multiple access
2.	Which of these statements is true about VLR (Visitor Location Register)
Option A:	VLR is always integrated with MSC
Option B:	VLR is always integrated with BSC
Option C:	VLR is always integrated with Mobile Station
Option D:	VLR is always integrated with a PSTN Network
3.	The gateway GPRS support node (GGSN) is the interworking unit between
Option A:	The GPRS network and external packet data networks (PDN)
Option B:	The GPRS network and GSM network.
Option C:	SGSN in GPRS network and MSC in GSM network
Option D:	BSC and MSC in GSM network
4.	The type of access method used in GSM technology is
Option A:	FDMA/TDMA
Option B:	CDMA
Option C:	OFDMA
Option D:	Only FDMA
5.	----- stores all the user-related data that is relevant for the GSM system.
Option A:	SIM
Option B:	HLR
Option C:	ELR
Option D:	VLR
6.	Demand Assigned Multiple Access (DAMA) is also called
Option A:	Pure ALOHA

Option B:	Reservation ALOHA
Option C:	Slotted ALOHA
Option D:	Classical ALOHA
7.	Multiple Access with collision avoidance (MACA)
Option A:	Solves the Hidden Terminal Problem
Option B:	Solves the Near-and -Far Terminal Problem
Option C:	Facilitates Frequency Division Duplexing
Option D:	Facilitates Time Division Duplexing
8.	The foreign agent buffers all packets with destination mobile host and additionally 'snoops' the packet flow in both directions to recognize acknowledgements, in
Option A:	Indirect TCP
Option B:	Mobile TCP
Option C:	Snooping TCP
Option D:	Transaction-Oriented TCP
9.	Which of the following is not a disadvantage of I-TCP
Option A:	The loss of the end-to-end semantics of TCP might cause problems if the foreign agent partitioning the TCP connection crashes.
Option B:	Increased handover latency
Option C:	Transmission errors on the wireless link do not propagate into the fixed network
Option D:	Foreign Agent must be a trusted entity, end-to-end encryption impossible.
10.	To save battery power, a Bluetooth device does not go into one of following states
Option A:	Sniff State
Option B:	Page State
Option C:	Hold State
Option D:	Park State
11.	Bluetooth uses ----- for separation of uplink and downlink
Option A:	Orthogonal Frequency Division Multiplexing
Option B:	Frequency Division Duplexing
Option C:	Code Division Multiplexing
Option D:	Time Division Duplexing
12.	A Home Agent (HA) can be
Option A:	Implemented on a router that is responsible for the home network.
Option B:	Implemented on an arbitrary node in the subnet, if changing the router's software is not possible.
Option C:	Implemented on a router that is responsible for the subnet, the mobile node visits.
Option D:	Implemented on a 'router' which only acts as a manager for MNs belonging to a virtual home network.

13.	WEP stands for
Option A:	Wired Equivalent Privacy
Option B:	Wired encryption protocol
Option C:	Wireless encryption protocol
Option D:	Wireless equivalent privacy
14.	A Home eNodeB is also known as
Option A:	Micro Enb
Option B:	Pico Enb
Option C:	Macro Enb
Option D:	femtocell
15.	An LTE interface
Option A:	S3
Option B:	G _n
Option C:	A
Option D:	Abis
16.	Which of the following is not a characteristic feature of 3G network?
Option A:	Increased bandwidth and data transfer rates
Option B:	Large network capacities and broadband capabilities
Option C:	Long Term Evolution based network
Option D:	Rich Multimedia Service with Audio Video streaming.
17.	CSMA stands for _____
Option A:	Carrier sense multiple access
Option B:	Code sense multiple access
Option C:	Carrier sense modulation access
Option D:	Carrier sense Mobile access
18.	Which of the following is not a subsystem of GSM system
Option A:	RSS
Option B:	NSS
Option C:	OSS
Option D:	IBSS
19.	In wireless LAN, the solution to the Hidden Terminal problem is
Option A:	Ready-to-send/Clear- to -send mechanism
Option B:	Request-to-send/Clear- to -send mechanism
Option C:	Reduced Signal strength
Option D:	Load Balancing.

20.	In IEEE 802.11, a BSS without an Access point is called
Option A:	An Ad-hoc architecture
Option B:	An infrastructure architecture
Option C:	A Homogenous Architecture
Option D:	A Heterogenous Architecture

Q2	
A	Solve any Two 5 marks each
i.	<i>Explain Hidden Terminal and Exposed Terminal Problem with example.</i>
ii.	<i>Explain UMTS Architecture with different interfaces</i>
iii.	<i>What are the different types of handover in GSM.</i>
B	Solve any One 10 marks each
i.	<i>List the entities of Mobile IP and describe data transfer from a mobile node to a fixed node and vice versa. Why and where is encapsulation needed.</i>
ii.	<i>Explain different multiple Access technique with their advantages and disadvantages</i>
Q3.	
A	Solve any Two 5 marks each
i.	<i>Write a short note on cell and cell geometry</i>
ii.	<i>Describe Bluetooth Protocol Stack</i>
iii.	<i>Compare IEEE802.11, HIPERLAN1, HIPERLAN2.</i>
B	Solve any One 10 marks each
i.	<i>Explain the various spread spectrum techniques.</i>
ii.	<i>Write a short note on SON-LTE.</i>

University of Mumbai

Examinations Commencing from 7th January 2021 to 20th January 2021

Curriculum Scheme: Rev2016

Examination: BE Semester VII

Course Code: **CSC703** and Course Name: **Artificial Intelligence & Soft Computing**

Time: 2 hour

Max. Marks: 80

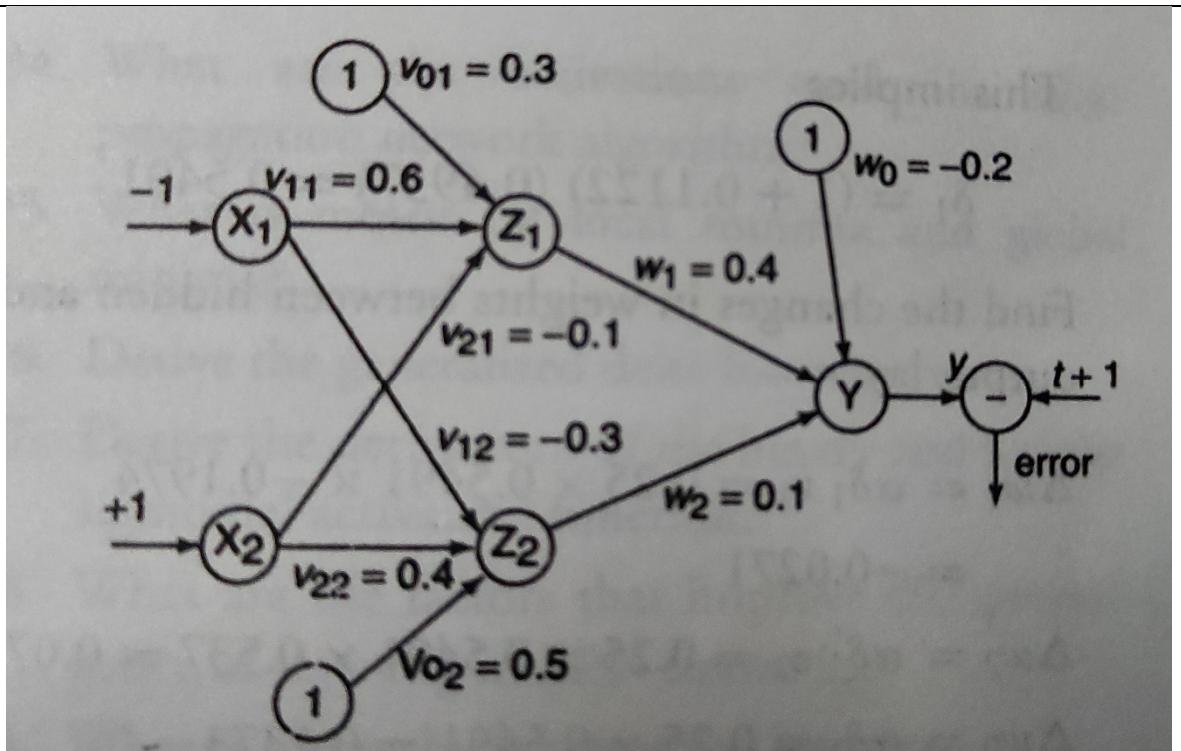
Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Agents behavior can be described by
Option A:	Perception Sequence
Option B:	Sensors and Actuators
Option C:	Environment in which agent is performing
Option D:	Agent function
2.	Who is the father of Artificial Intelligence?
Option A:	William S.
Option B:	Doug Cutting
Option C:	John McCarthy
Option D:	Rasmus Lerdorf
3.	The Set of actions for a problem in a state space is formulated by a _____
Option A:	Intermediate states
Option B:	Successor function, which takes current action and returns next immediate state
Option C:	Initial state
Option D:	Problem generator
4.	Which Heuristic function is used in A* Algorithm?
Option A:	$f(n)=h(n)$
Option B:	$f(n)=g(n)$
Option C:	$f(n)=g(n)+h(n)$
Option D:	$f(n)=x(n)$
5.	Though local search algorithms are not systematic, key advantages would include _____
Option A:	Less memory & Finds a solution in large infinite space
Option B:	Finds a solution in large infinite space
Option C:	More time
Option D:	Less memory
6.	When will Hill-Climbing algorithm terminate?
Option A:	No neighbour has higher value
Option B:	Stopping criterion met

Option C:	Global Min/Max is achieved
Option D:	If neighbor has same value
7.	algorithm examines all the neighboring nodes of the current state and selects one neighbor node which is closest to the goal state.
Option A:	Greedy best first Search
Option B:	Stochastic hill climbing
Option C:	Steepest-Ascent hill climbing
Option D:	Simple Hill Climbing
8.	Wumpus World is a classic problem, best example of _____
Option A:	Single player Game
Option B:	Reasoning with Knowledge
Option C:	Two player Game
Option D:	Knowledge based Game
9.	The process by which the brain incrementally orders actions needed to complete a specific task is referred as _____
Option A:	Total order planning
Option B:	Planning problem
Option C:	Conditional Order
Option D:	Partial order planning
10.	A knowledge-based agent can be viewed atlevels
Option A:	Knowledge level, Logical level and Implementation level
Option B:	Knowledge level, procedural level and Implementation level
Option C:	Knowledge level, Logical level and Testing level
Option D:	Sequential , Selection and Implementation
11.	 is a type of knowledge which is responsible for knowing how to do something.
Option A:	Procedural knowledge
Option B:	Heuristic knowledge
Option C:	Structural knowledge
Option D:	Meta-knowledge
12.	What is the form of Fuzzy logic?
Option A:	Many-valued logic
Option B:	Two-valued logic
Option C:	Binary set logic
Option D:	Crisp set logic
13.	Three main basic features involved in characterizing membership functions are...
Option A:	Fuzzy Algorithm, Neural Network, Genetic Algorithm
Option B:	Core, Support ,Boundary
Option C:	Intuition ,Inference,Rank ordering

Option D:	Weighted Average , Cener of Sums,Median
14.	 is a inference procedure that derives conclusions from a set of fuzzy if-then rules andknown facts.
Option A:	Fuzzy Set
Option B:	Fuzzy reasoning
Option C:	Fuzzy relation
Option D:	Fuzzy logic
15.	Fuzzy Logic can be implemented in?
Option A:	Hardware
Option B:	Software
Option C:	Both Hardware and Software
Option D:	Firmware
16.	How many level of fuzzifier is there?
Option A:	4
Option B:	5
Option C:	6
Option D:	7
17.	What is auto-association task in neural networks?
Option A:	predicting the future inputs
Option B:	Related to memory
Option C:	find relation between 2 consecutive inputs
Option D:	related to storage & recall task
18.	The fundamental unit of network is
Option A:	neuron
Option B:	brain
Option C:	Nucleus
Option D:	axon
19.	What is hebb's rule of learning
Option A:	the strength of neural connection get modified accordingly
Option B:	the system learns from its past mistakes
Option C:	the system recalls previous reference inputs & respective ideal outputs
Option D:	the system learns from its prior knowledge
20.	Who developed the first learning machine in which connection strengths could be adapted automatically?
Option A:	Marvin Minsky
Option B:	McCulloch-pitts
Option C:	Hopfield
Option D:	Rosenblatt.

Q2	Solve any Two Questions out of Three 10 marks each
A	Convert following sentences into First Order Logic. i) Ravi likes all kind of food. ii) Apple and Chicken are food. iii) Anything anyone eats and is not killed is food. iv) Ajay eats peanuts and still alive v) Rita eats that Ajay eats.
B	Consider the following facts i) It is crime for an American to sell weapons to the enemy of America ii) Country Nono is the enemy of America iii) Nono has some missiles iv) All the missiles were sold to Nono by Colonel v) Missiles is a weapon vi) Colonel is American prove that Colonel is Criminal.(using forward chaining)
C	Explain Mamdani Fuzzy Inference System with the help of diagram . What are the applications of Fuzzy Inference system

Q3	Solve any Two Questions out of Three 10 marks each
A	Find the new weights , using back propagation network for the network shown in figure below. The network is presented with the input pattern $[-1,1]$ and the target output is $+1$. Use Learning rate of $\alpha = 0.25$ and bipolar sigmoid activation function.

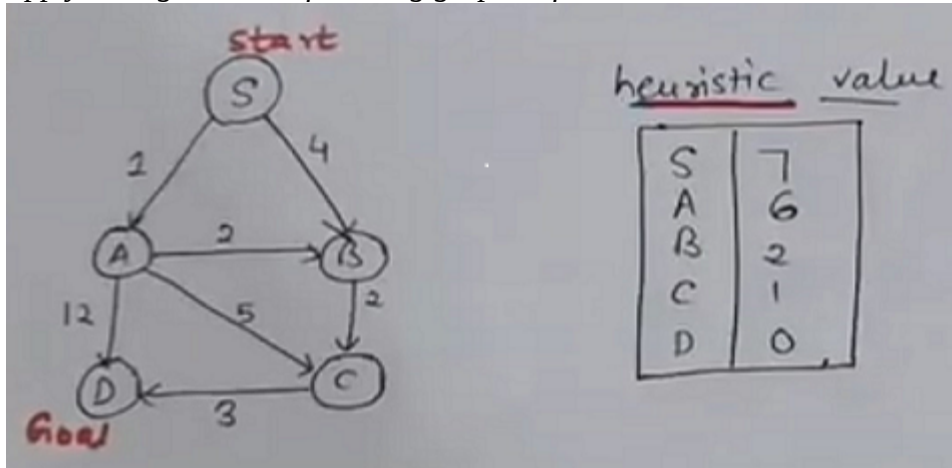


B

Explain any four Defuzzification methods.

C

Apply A* algorithm on following graph to find out shortest distance between S and D.



University of Mumbai

Examinations Commencing from 7th January 2021 to 20th January 2021

Program: **Computer Engineering**

Curriculum Scheme: Rev2016

Examination: BE Semester VII

Course Code: **CSDLO7032** and Course Name: Big Data And Analysis

Time: 2 hour

Max. Marks: 80

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Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Following is not characteristics of Big Data
Option A:	Volume
Option B:	Variety
Option C:	Velocity
Option D:	Viscosity
2.	Following is not advantage of Big Data
Option A:	Latest Software Updates
Option B:	Improved customer service
Option C:	better operational efficiency
Option D:	Better Decision Making
3.	Big Data does not deals with
Option A:	Extremely High Velocity of Data
Option B:	Extremely Large Volumes of Data
Option C:	Extremely Exchanged Data
Option D:	Extremely Wide Variety of Data
4.	Data Source in Traditional data and big data is ... and
Option A:	RDBMS, NoSQL
Option B:	Oracle, MySQL
Option C:	ODBMS,RDBMS
Option D:	RDBMS,ODBMS
5.	_____ is a platform for constructing data flows for extract, transform, and load (ETL) processing and analysis of large datasets.
Option A:	Pig Latin
Option B:	Oozie
Option C:	Pig
Option D:	Hive
6.	_____ maps input key/value pairs to a set of intermediate key/value pairs.
Option A:	Mapper

Option B:	Reducer
Option C:	Both Mapper and Reducer
Option D:	MapoRedo
7.	The number of maps is usually driven by the total size of _____
Option A:	Inputs
Option B:	outputs
Option C:	Tasks
Option D:	Loads
8.	Running a _____ program involves running mapping tasks on many or all of the nodes in our cluster.
Option A:	MapReduce
Option B:	Map
Option C:	Reducer
Option D:	Hive
9.	A _____ serves as the master and there is only one NameNode per cluster.
Option A:	Data Node
Option B:	NameNode
Option C:	Data block
Option D:	Replication
10.	_____ NameNode is used when the Primary NameNode goes down.
Option A:	Rack
Option B:	Data
Option C:	Secondary
Option D:	Third Party
11.	Point out the wrong statement.
Option A:	Replication Factor can be configured at a cluster level (Default is set to 3) and also at a file level
Option B:	Block Report from each DataNode contains a list of all the blocks that are stored on that DataNode
Option C:	User data is stored on the local file system of DataNodes
Option D:	DataNode is aware of the files to which the blocks stored on it belong to
12.	HDFS is implemented in _____ programming language
Option A:	C++
Option B:	Java
Option C:	Scala
Option D:	python
13.	Which of the following are the simplest NoSQL databases?
Option A:	Key-value

Option B:	Wide-column
Option C:	Document
Option D:	Multimedia
14.	_____ stores are used to store information about networks, such as social connections.
Option A:	Key-value
Option B:	Wide-column
Option C:	Document
Option D:	Graph
15.	NoSQL databases is used mainly for handling large volumes of _____ data.
Option A:	unstructured
Option B:	structured
Option C:	semi-structured
Option D:	homogenous
16.	What is the interactive shell for MongoDB called?
Option A:	mongo
Option B:	mongodb
Option C:	dbmong
Option D:	Mango
17.	The MongoDB is written in language.
Option A:	C++
Option B:	Javascript
Option C:	C
Option D:	C++,JavaScript,C
18.	Following is not example of sources of stream data.
Option A:	Sensor data
Option B:	Image data
Option C:	Internet and web traffic
Option D:	microdata
19.	For building a one-pass synopsis of a data set in a streaming environment, following is used.
Option A:	Passing
Option B:	Modeling
Option C:	Mixing
Option D:	Sampling
20.	In which of the following cases will the edit distance between two strings be zero?

Option A:	a) When one string is a substring of another
Option B:	b) When the lengths of the two strings are equal
Option C:	c) When the two strings are equal
Option D:	d) The edit distance can never be zero

Please use either of the 3 option given below while setting up the subjective/descriptive questions

Q2	Solve any Four out of Six	5 marks each
A	Explain MapReduce and HDFS with diagram.	
B	What are merits and demerits of NoSQL database.	
C	Which are data sampling techniques in stream.	
D	What do you mean by filtering streams?	
E	Explain CURE algorithm	
F	What is Content based recommendation ?	

Q3.	Solve any Two Questions out of Three	10 marks each
A	Explain Euclidean Distances, Jaccard Distance, Cosine Distance, Edit Distance, Hamming Distance.	
B	Illustrate DGIM algorithm with example and diagram.	
C	Explain different types of NoSQL database categories.	

University of Mumbai

Examination 2020

Curriculum Scheme: Rev2016

Examination: BE Semester VII

Course Code: ILO 7017 and Course Name: _Disaster Management and

Mitigation Measures

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	When Hazard is present but can cause no harm to people or property then it is said to be ____.
Option A:	Armed
Option B:	Active
Option C:	Dormant
Option D:	Dominant
2.	Hold, Drop, cover is do's during
Option A:	Earthquake
Option B:	Cyclone
Option C:	Flood
Option D:	Fire
3.	Which of the following does not come under Civil Defense
Option A:	Home Guard
Option B:	NCC
Option C:	NSS
Option D:	Police
4.	The Sub-Committee of the National Executive Committee (S.C- N.E.C) is constitutes under which legal framework
Option A:	Section 12 of DM Act 2000
Option B:	Section 46 of DM Act 2005
Option C:	Section 8 of DM Act 2008
Option D:	Section 8 of DM Act 2005
5.	Which of the following are crucial to prevent an outbreak of epidemics 1) Post-disaster management of health, 2) sanitation 3) hygiene services
Option A:	1 and 2
Option B:	1,2,3
Option C:	2,3

Option D:	3
6.	Capacity Building is primarily the responsibility of
Option A:	NIDM
Option B:	NDMA
Option C:	SDRF
Option D:	NDRF
7.	Which of the following minimises loss of life and property?
Option A:	Prompt and effective response
Option B:	Resource Allocation
Option C:	Planning
Option D:	Financing
8.	The National Disaster Response Force is not responsible for
Option A:	Recommending provision of funds for the purpose of mitigation;
Option B:	Specialized response during disasters.
Option C:	Proactive deployment during impending disaster situations.
Option D:	Acquire and continually upgrade its own training and skills
9.	The paradigm shift in the disaster management policy incorporated all of these EXCEPT
Option A:	Response Centric to a Holistic and Integrated Approach
Option B:	Relief to Recovery
Option C:	Ad-hoc to Organized
Option D:	Single Hazard to Multi hazard
10.	Which of these was constituted under Section 48 (1) (a) of the Disaster Management Act, 2005?
Option A:	PMNRF
Option B:	SEC
Option C:	SDRF
Option D:	DDMA
11.	Of the following, which is not a natural disaster
Option A:	Nuclear explosion
Option B:	Deforestation
Option C:	Forest fire
Option D:	Lightning
12.	.Effective hazard management largely relies on
Option A:	Government agencies
Option B:	Volunteers
Option C:	Pre disaster planning
Option D:	Emergency agencies
13.	Which of the following is not the part of Disaster Mitigation Planning?

Option A:	Emergency Communication
Option B:	Disaster warning system
Option C:	Risk and vulnerability analysis
Option D:	Insurance requirements
14.	The cycle of disaster consists of the following components:
Option A:	Mitigation, Preparedness, Response, Recovery
Option B:	Preparedness, vulnerability assessment, risk assessment, recovery
Option C:	Mitigation, Risk assessment, Response and Recovery
Option D:	Mitigation, vulnerability assessment, Response and Recovery
15.	Ensuring safe construction of new buildings and retrofitting of selected lifeline buildings during earthquake is specified in by:
Option A:	State Authorities
Option B:	Local Authorities
Option C:	National Building Code
Option D:	NDMA
16.	A hazard is a situation where there is Threat for consequences of disaster d. All of the above
Option A:	Threat of natural calamity
Option B:	Threat to property and lives from calamities
Option C:	Threat of consequences of disaster
Option D:	Threat to institutions of disaster management
17.	Mount Kilimanjaro is the best example of
Option A:	Active Volcano
Option B:	Dormant Volcano
Option C:	Reactive Volcano
Option D:	Extinct Volcano
18.	What is the rank of India in the world for natural disasters after China as per UNISDR?
Option A:	Third
Option B:	Second
Option C:	Seventh
Option D:	Eighth
19.	Urbanization usually results in an increase in flood frequency because
Option A:	Less water is able to runoff in streams
Option B:	Less water is able to infiltrate into the ground, so instead is discharged rapidly into streams
Option C:	More water is used by humans and then discharged to streams
Option D:	Rainfall is greater in urban areas than in rural areas
20.	Which of the following component of EMS does not add a value to disaster management?

Option A:	Emergency medical services
Option B:	Hazardous Materials Management
Option C:	Prevention of disaster
Option D:	Response and Recovery

Q2	Solve any Four out of Six 5 marks each
A	Briefly discuss the importance of public awareness and public education in disaster management.
B	Write a short note on direct impact of disasters.
C	Discuss the different ways in which finance can be raised for relief expenditure.
D	Distinguish between natural and man made disasters.
E	What is the role of remote sensing and GIS in disaster management.
F	What are structural and nonstructural measures?

Q3.	Solve any Two Questions out of Three 10 marks each
A	Discuss the various mitigation measures for Tsunami
B	State the do's and don'ts in case of some disasters.
C	What is NDMA? Discuss its composition and role in disaster management?