

Computer Based Examination System

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Title *	Question Paper Answer Key
OES Exam *	GPSC05202332 / Assistant Professors in Government College in Computer Science/ Completed / 2023-09-02

1

Question Description

Consider a software project with the following information domain characteristic for calculation of function point metric.

Number of external inputs (I) = 30

Number of external output (O) = 60

Number of external inquiries (E) = 23

Number of files (F) = 08

Number of external interfaces (N) = 02

It is given that the complexity weighting factors for I, O, E, F and N are 4, 5, 4, 10 and 7, respectively. It is also given that, out of fourteen value adjustment factors that influence the development effort, four factors are not applicable, each of the other four factors have value 3, and each of the remaining factors have value 4. The computed value of function point metric is _____.

A 306.03

B 212.06

C 465.35

D 612.06

E None of the above

Correct Answer D

Marks 1

2	Question Description	A table is in 3NF if it is in 2NF and if it has no _____
	A	Functional Dependencies
	B	Transitive Dependencies
	C	Trivial Functional Dependency
	D	Multivalued Dependencies
	E	None of the above
	Correct Answer	B
	Marks	1

3	Question Description	The minimum number of comparisons required to find the minimum and the maximum of 100 numbers is
	A	100
	B	150
	C	197
	D	147
	E	None of the above
	Correct Answer	D
	Marks	1

4

Question Description

Consider a hard disk with 16 recording surfaces (0-15) having 16384 cylinders (0-16383) and each cylinder contains 64 sectors (0-63). Data storage capacity in each sector is 512 bytes. Data are organized cylinder-wise and the addressing format is . A file of size 42797 KB is stored in the disk and the starting disk location of the file is <1200, 9, 40>. What is the cylinder number of the last sector of the file, if it is stored in a contiguous manner?

A

1282

B

1283

C

1284

D

1286

E

None of the above

Correct Answer

C

Marks

1

5	Question Description	In a room containing 28 people, there are 18 people who speak English, 15 people who speak Hindi and 22 people who speak Kannada. 9 persons speak both English and Hindi, 11 persons speak both Hindi and Kannada whereas 13 persons speak both Kannada and English. How many people speak all the three languages?
	A	12
	B	10
	C	8
	D	6
	E	None of the above
	Correct Answer	D
	Marks	1
6	Question Description	If several elements are competing for the same bucket in the hash table, what is it called?
	A	Diffusion
	B	Replication
	C	Collision
	D	Duplication
	E	None of the above
	Correct Answer	C
	Marks	1

7

Question Description	How many 3-to-8 line decoders with an enable input are needed to construct a 6-to-64 line decoder without using any other logic gates?
A	6
B	7
C	8
D	9
E	None of the above
Correct Answer	D
Marks	1

8

Question Description	A 1Mbps satellite link connects two ground stations. The altitude of the satellite is 36,504 km and speed of the signal is 3×10^8 m/s. What should be the packet size for a channel utilization of 25% for a satellite link using go-back-127 sliding window protocol? Assume that the acknowledgment packets are negligible in size and that there are no errors during communication.
A	30 bytes
B	60 bytes
C	120 bytes
D	240 bytes
E	None of the above
Correct Answer	C
Marks	1

9

Question Description

The order of a leaf node in a tree B + ? is the maximum number of (value, data record pointer) pairs it can hold. Given that the block size is 1K bytes, data record pointer is 7 bytes long, the value field is 9 bytes long and a block pointer is 6 bytes long, what is the order of the leaf node?

A

60

B

61

C

62

D

63

E

None of the above

Correct Answer

D

Marks

1

10

Question Description	Consider a software program that is artificially seeded with 100 faults. While testing this program, 159 faults are detected, out of which 75 faults are from those artificially seeded faults. Assuming that both real and seeded faults are of same nature and have same distribution, the estimated number of undetected real faults is _____.
A	28
B	112
C	55
D	85
E	None of the above
Correct Answer	A
Marks	1

11

Question Description

A file system with 300 GByte disk uses a file descriptor with 8 direct block addresses, 1 indirect block address and 1 doubly indirect block address. The size of each disk block is 128 Bytes and the size of each disk block address is 8 Bytes. The maximum possible file size in this file system is

A

272 Bytes

B

35 KB

C

33 kB

D

Dependent on the size of the disk

E

None of the above

Correct Answer

B

Marks

1

12

Question Description	A FAT (file allocation table) based file system is being used and the total overhead of each entry in the FAT is 4 bytes in size. Given a 100 x 106 bytes disk on which the file system is stored and data block size is 103 bytes, the maximum size of a file that can be stored on this disk in units of 106 bytes is _____.
A	100.2 to 101.1
B	97.8 to 98.2
C	99.55 to 99.65
D	89.2 to 91.0
E	None of the above
Correct Answer	C
Marks	1

13

Question Description

Let M and N be two entities in an E-R diagram with simple single value attributes. R1 and R2 are two relationship between M and N, where as R1 is one-to-many and R2 is many-to-many. The minimum number of tables required to represent M, N, R1 and R2 in the relational model are _____.

A

2

B

3

C

4

D

5

E

None of the above

Correct Answer

B

Marks

1

14

Question Description	A B-tree of order 4 is built from scratch by 10 successive insertions. What is the maximum number of node splitting operations that may take place?
A	4
B	6
C	9
D	5
E	None of the above
Correct Answer	D
Marks	1

15

Question Description

Consider a simple checkpointing protocol and the following set of operations in the log.

(start, T4); (write, T4, y, 2, 3); (start, T1); (commit, T4); (write, T1, z, 5, 7);
(checkpoint);
(start, T2); (write, T2, x, 1, 9); (commit, T2); (start, T3); (write, T3, z, 7, 2);

If a crash happens now and the system tries to recover using both undo and redo operations, what are the contents of the undo list and the redo list

A

Undo: T3, T1; Redo: T2

B

Undo: T2, T1; Redo: T3, T4

C

Undo: T3, T1, T4; Redo: T2

D

Undo: none; Redo: T2, T4, T3; T1

E

None of the above

Correct Answer

A

Marks

1

16

Question Description	A stage in which individual components are integrated and ensured that they are error-free to meet customer requirements.
A	Coding
B	Testing
C	Design
D	Implementation
E	None of the above
Correct Answer	B
Marks	1

17

Question Description	Consider a disk pack with 16 surfaces, 128 tracks per surface and 256 sectors per track. 512 bytes of data are stores in a bit serial manner in a sector. The capacity of the disk pack and the number of bits required to specify a particular sector in the disk are respectively
A	256 Mbyte, 20 Bits
B	256 Mbyte, 28 Bits
C	256 Mbyte, 19 Bits
D	512 Mbyte, 20 Bits
E	None of the above
Correct Answer	C
Marks	1

18

Question Description	Let G be an arbitrary graph with n nodes and k components. If a vertex is removed from G , the number of components in the resultant graph must necessarily lie down between
A	$k - 1$ and $n - 1$
B	$k - 1$ and $n + 1$
C	$k + 1$ and $n - 1$
D	$k + 1$ and $n + 1$
E	None of the above
Correct Answer	A
Marks	1

19	Question Description	The maximum number of superkeys for the relation schema R(E,F,G,H) with E as the key is
	A	2
	B	4
	C	8
	D	16
	E	None of the above
	Correct Answer	C
	Marks	1

20	Question Description	The noise margin of a TTL gate is about
	A	0.2V
	B	0.4V
	C	0.8V
	D	0.16V
	E	None of the above
	Correct Answer	B
	Marks	1

21

Question Description	Methodology in which project management processes were step-by-step.
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A	Incremental
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B	Waterfall
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C	Spiral
----------	--------

D	Prototyping
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E	None of the above
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Correct Answer	B
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Marks	1
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22

Question Description

Consider the data of previous question. Suppose that the sliding window protocol is used with the sender window size of 2^i where i is the number of bits identified in the previous question and acknowledgments are always piggybacked. After sending 2^i frames, what is the minimum time the sender will have to wait before starting transmission of the next frame? (Identify the closest choice ignoring the frame processing time.)

A

16ms

B

32ms

C

8ms

D

20ms

E

None of the above

Correct Answer

D

Marks

1

23

Question Description	A modulus -12 ring counter requires a minimum of
A	14 flip-flops
B	12 flip-flops
C	10 flip-flops
D	8 flip-flops
E	None of the above
Correct Answer	B
Marks	1

24

Question Description

A company needs to develop digital signal processing software for one of its newest inventions. The software is expected to have 40000 lines of code. The company needs to determine the effort in person-months needed to develop this software using the basic COCOMO model. The multiplicative factor for this model is given as 2.8 for the software development on embedded systems, while the exponentiation factor is given as 1.20. What is the estimated effort in person-months?

A

128.75

B

284.80

C

534.40

D

234.25

E

None of the above

Correct Answer

D

Marks

1

25

Question Description	Which layer is responsible for process to process delivery in a general network model?
A	network layer
B	transport layer
C	session layer
D	data link layer
E	None of the above
Correct Answer	B
Marks	1

26

Question Description	A Priority-Queue is implemented as a Max-Heap. Initially, it has 5 elements. The level-order traversal of the heap is given below: 10, 8, 5, 3, 2 Two new elements '1' and '7' are inserted in the heap in that order. The level-order traversal of the heap after the insertion of the elements is:
A	10, 8, 7, 3, 2, 1, 5
B	10, 8, 5, 7, 3, 2, 1
C	10, 8, 7, 5, 3, 2, 1
D	10, 8, 5, 3, 7, 2, 1
E	None of the above
Correct Answer	A
Marks	1

27

Question Description

A 3-ary max heap is like a binary max heap, but instead of 2 children, nodes have 3 children. A 3-ary heap can be represented by an array as follows: The root is stored in the first location, $a[0]$, nodes in the next level, from left to right, is stored from $a[1]$ to $a[3]$. The nodes from the second level of the tree from left to right are stored from $a[4]$ location onward. An item x can be inserted into a 3-ary heap containing n items by placing x in the location $a[n]$ and pushing it up the tree to satisfy the heap property. Which one of the following is a valid sequence of elements in an array representing 3-ary max heap?

A 6, 9, 8, 3, 5, 1**B** 5, 6, 1, 9, 8, 3**C** 9, 5, 6, 8, 3, 1**D** 8, 9, 3, 5, 1, 6**E** None of the above**Correct Answer** C**Marks** 1

28

Question Description	A software was tested using the error seeding strategy in which 20 errors were seeded in the code. When the code was tested using the complete test suite, 16 of the seeded errors were detected. The same test suite also detected 200 non-seeded errors. What is the estimated number of undetected errors in the code after this testing?
A	5
B	50
C	150
D	250
E	None of the above
Correct Answer	B
Marks	1

29

Question Description

Consider a database table T containing two columns X and Y each of type integer. After the creation of the table, one record (X=1, Y=1) is inserted in the table. Let MX and MY denote the respective maximum values of X and Y among all records in the table at any point in time. Using MX and MY, new records are inserted in the table 128 times with X and Y values being MX+1, 2*MY+1 respectively. It may be noted that each time after the insertion, values of MX and MY change. What will be the output of the following SQL query after the steps mentioned above are carried out?

A

127

B

128

C

129

D

Empty set

E

None of the above

Correct Answer

A

Marks

1

30

Question Description	Which of the following best describes Amdahl's Law in the context of parallel computing?
A	It states that the performance improvement achieved by parallelizing a program is directly proportional to the number of cores used.
B	It emphasizes the importance of balanced hardware resources for efficient parallel execution.
C	It predicts the speedup that can be achieved by parallelizing a program based on the portion of the code that can't be parallelized.
D	It defines the maximum number of processors that can be efficiently used for a given parallel algorithm.
E	None of the above
Correct Answer	C
Marks	1

31	Question Description	Consider three CPU intensive processes P1, P2, P3 which require 20, 10 and 30 units of time, arrive at times 1, 3 and 7 respectively. Suppose operating system is implementing Shortest Remaining Time first (preemptive scheduling) algorithm, then ____ context switches are required (suppose context switch at the beginning of Ready queue and at the end of Ready queue are not counted).
	A	1
	B	2
	C	3
	D	4
	E	None of the above
	Correct Answer	C
	Marks	1

32	Question Description	The system must create a query ____ plan before it can fully evaluate a query.
	A	Optimization
	B	Parser
	C	Translation
	D	Evaluation
	E	None of the above
	Correct Answer	D
	Marks	1

33	Question Description	What is the chromatic number of an n-vertex simple connected graph which does not contain any odd length cycle? Assume $n \geq 2$.
	A	2
	B	4
	C	$n - 2$
	D	$n - 2$
	E	None of the above
	Correct Answer	A
	Marks	1

34	Question Description	What is the availability of a software with the following reliability figures? Mean Time Between Failure (MTBF) = 25 days Mean Time To Repair (MTTR) = 6 hours
	A	9%
	B	99.9%
	C	99.09%
	D	99.009%
	E	None of the above
	Correct Answer	D
	Marks	1

35	Question Description	How many different non-isomorphic Abelian groups of order 4 are there
	A	1
	B	2
	C	3
	D	4
	E	None of the above
	Correct Answer	B
	Marks	1

36	Question Description	A CPU generates 32-bit virtual addresses. The page size is 4 KB. The processor has a translation look-aside buffer (TLB) which can hold a total of 128 page table entries and is 4-way set associative. The minimum size of the TLB tag is:
	A	20 bits
	B	5 bits
	C	7 bits
	D	15 bits
	E	None of the above
	Correct Answer	D
	Marks	1

37	Question Description	Identify the minimal key for relational scheme R(A, B, C, D, E) with functional dependencies F = {A → B, B → C, AC → D}
	A	A
	B	AE
	C	BE
	D	CE
	E	None of the above
	Correct Answer	B
	Marks	1

38	Question Description	Determine the maximum length of the cable (in km) for transmitting data at a rate of 500 Mbps in an Ethernet LAN with frames of size 10,000 bits. Assume the signal speed in the cable to be 2,00,000 km/s.
	A	0.5km
	B	1km
	C	1.5km
	D	2km
	E	None of the above
	Correct Answer	D
	Marks	1

39

Question Description

Which of the following are NOT considered when computing function points for a software project?

(O1) External inputs and outputs

(O2) Programming language to be used for the implementation

(O3) User interactions

(O4) External interfaces

(O5) Number of programmers in the software project

(O6) Files used by the system

A

O1, O2

B

O1, O5

C

O2, O5

D

O2, O4

E

None of the above

Correct Answer

C

Marks

1

40

Question Description

In a RSA cryptosystem, a participant A uses two prime numbers $p=13$ and $q=11$ to generate his public and private keys. If the public key of A is 37, then the private key of A is _____.

A

11

B

13

C

17

D

27

E

None of the above

Correct Answer

B

Marks

1

41

Question Description

The seven elements A, B, C, D, E, F and G are pushed onto a stack in reverse order, i.e., starting from G. The stack is popped five times and each element is inserted into a queue. Two elements are deleted from the queue and pushed back onto the stack. Now, one element is popped from the stack. The popped item is _____.

A

B

B

C

C

A

D

G

E

None of the above

Correct Answer

A

Marks

1

42

Question Description When we execute a C program, the CPU runs in ____ mode.

A user

B kernel

C supervisory

D system

E None of the above

Correct Answer A

Marks 1

43

Question Description

Consider an instance of TCP's Additive Increase Multiplicative Decrease (AIMD) algorithm where the window size at the start of the slow start phase is 2 MSS and the threshold at the start of the first transmission is 8 MSS. Assume that a timeout occurs during the fifth transmission. Find the congestion window size at the end of the tenth transmission.

A

6 MSS

B

7 MSS

C

12 MSS

D

14 MSS

E

None of the above

Correct Answer

B

Marks

1

44

Question Description

While opening a TCP connection, the initial sequence number is to be derived using a time-of-day(ToD) clock that keeps running even when the host is down. The low order 32 bits of the counter of the ToD clock is to be used for the initial sequence numbers. The clock counter increments once per millisecond. The maximum packet lifetime is given to be 64s. Which one of the choices given below is closest to the minimum permissible rate at which sequence numbers used for packets of a connection can increase?

A

0.125/s

B

0.025/s

C

0.015/s

D

0.005/d

E

None of the above

Correct Answer

C

Marks

1

45

Question Description

The availability of a complex software is 90%. Its Mean Time Between Failure (MTBF) is 200 days. Because of the critical nature of the usage, the organization deploying the software further enhanced it to obtain an availability of 95%. In the process, the Mean Time To Repair (MTTR) increased by 5 days. What is the MTBF of the enhanced software

A

250

B

500

C

750

D

125

E

None of the above

Correct Answer

B

Marks

1

46	Question Description	If a Company require 60 hosts then What is the best possible subnet mask?
	A	225.225.225.128
	B	225.225.225.192
	C	225.225.225.252
	D	225.225.225.248
	E	None of the above
	Correct Answer	B
	Marks	1

47	Question Description	What is the probability that divisor of 1099 is a multiple of 1096?
	A	6 / 625
	B	9 / 625
	C	1 / 625
	D	12 / 625
	E	None of the above
	Correct Answer	C
	Marks	1

48

Question Description	Which of the following stable sorting algorithm takes the least time when applied to an almost sorted array?
A	Quick sort
B	Insertion sort
C	Selection sort
D	Merge sort
E	None of the above
Correct Answer	D
Marks	1

49

Question Description

Relation R has eight attributes ABCDEFGH. Fields of R contain only atomic values. $F = \{CH \rightarrow G, A \rightarrow BC, B \rightarrow CFH, E \rightarrow A, F \rightarrow EG\}$ is a set of functional dependencies (FDs) so that F^+ is exactly the set of FDs that hold for R. How many candidate keys does the relation R have?

A

2

B

3

C

4

D

5

E

None of the above

Correct Answer

C

Marks

1

50

Question Description

A shared variable x , initialized to zero, is operated on by four concurrent processes W, X, Y, Z as follows. Each of the processes W and X reads x from memory, increments by one, stores it to memory, and then terminates. Each of the processes Y and Z reads x from memory, decrements by two, stores it to memory, and then terminates. Each process before reading x invokes the P operation (i.e., wait) on a counting semaphore S and invokes the V operation (i.e., signal) on the semaphore S after storing x to memory. Semaphore S is initialized to two. What is the maximum possible value of x after all processes complete execution?

A

0

B

2

C

-2

D

-4

E

None of the above

Correct Answer

B

Marks

1

51

Comprehension

Read the following passage and answer the questions given below: -

The examination system is both an opiate and a poison. It is an opiate because it lulls us into believing that all is well when most is ill. 'Look,' the public says, 'at this list of scholarships; see how many children have got their School Certificates: something is happening; the school is doing its job.' Something no doubt is happening; but it may not be education: it may be the administration of a poison which paralyses or at least slows down the natural activities of the healthy mind. The healthy human being finding himself a creature of unknown capacities in an unknown world, wants to learn what the world is like, and what he should be and do in. To help him in answering these questions is the one and only purpose of education

Question Description

As an opiate and a poison, the examination system respectively

A

paralyses or slows down natural activities and lulls the healthy mind

B

lulls the healthy mind and paralyses or slows down its physical activities

C

paralyses or slows down natural activities and lulls the mind

D

lulls the healthy mind and paralyses or slows down its natural activities

E

None of the above

Correct Answer

D

Marks

1

Comprehension

Read the following passage and answer the questions given below: -

The examination system is both an opiate and a poison. It is an opiate because it lulls us into believing that all is well when most is ill. 'Look,' the public says, 'at this list of scholarships; see how many children have got their School Certificates: something is happening; the school is doing its job.' Something no doubt is happening; but it may not be education: it may be the administration of a poison which paralyses or at least slows down the natural activities of the healthy mind. The healthy human being finding himself a creature of unknown capacities in an unknown world, wants to learn what the world is like, and what he should be and do in. To help him in answering these questions is the one and only purpose of education

Question Description

Complete the following statement using a suitable option from among those provided below:

The overall passage implies that the public is impressed with the misconception

A

created by the list of scholarships

B

that the school is doing its job

C

that the school is doing its job

D

that something is happening

E

None of the above

Correct Answer

C

Marks

1

Comprehension

Read the following passage and answer the questions given below: -

The examination system is both an opiate and a poison. It is an opiate because it lulls us into believing that all is well when most is ill. 'Look,' the public says, 'at this list of scholarships; see how many children have got their School Certificates: something is happening; the school is doing its job.' Something no doubt is happening; but it may not be education: it may be the administration of a poison which paralyses or at least slows down the natural activities of the healthy mind. The healthy human being finding himself a creature of unknown capacities in an unknown world, wants to learn what the world is like, and what he should be and do in. To help him in answering these questions is the one and only purpose of education

Question Description

The statement "The examination system lulls us into believing that all is well when most is ill" implies that it makes us falsely confident and relaxed that

A all is not well with it, some is ill.

B nothing is ill in it, when most is.

C most is well with it, when some is ill.

D most is ill with it, some is well.

E None of the above

Correct Answer

B

Marks

1

54

Comprehension

Read the following passage and answer the questions given below: -

The examination system is both an opiate and a poison. It is an opiate because it lulls us into believing that all is well when most is ill. 'Look,' the public says, 'at this list of scholarships; see how many children have got their School Certificates: something is happening; the school is doing its job.' Something no doubt is happening; but it may not be education: it may be the administration of a poison which paralyses or at least slows down the natural activities of the healthy mind. The healthy human being finding himself a creature of unknown capacities in an unknown world, wants to learn what the world is like, and what he should be and do in. To help him in answering these questions is the one and only purpose of education

Question Description

The term 'opiate' is used in the passage to suggest its ----- effect.

A

narcotic

B

addictive

C

analgesic

D

social

E

None of the above

Correct Answer

A

Marks

1

Comprehension

Read the following passage and answer the questions given below: -

The examination system is both an opiate and a poison. It is an opiate because it lulls us into believing that all is well when most is ill. 'Look,' the public says, 'at this list of scholarships; see how many children have got their School Certificates: something is happening; the school is doing its job.' Something no doubt is happening; but it may not be education: it may be the administration of a poison which paralyses or at least slows down the natural activities of the healthy mind. The healthy human being finding himself a creature of unknown capacities in an unknown world, wants to learn what the world is like, and what he should be and do in. To help him in answering these questions is the one and only purpose of education

Question Description

As per the passage, the sole objective of education is to help an individual

A

find himself in the unknown world and enjoy it well.

B

know the world, himself and live ideally well in the world.

C

know the world, his ideal potential and function in the world.

D

reveal his unknown capacities in an unknown world.

E

None of the above

Correct Answer

C

Marks

1

56	Question Description	Which Indian state is setting up India's first Atal Incubation Centre in fisheries?
	A	Maharashtra
	B	Kerala
	C	Tamil Nadu
	D	Andhra Pradesh
	E	None of the above
	Correct Answer	B
	Marks	1

57	Question Description	Who conceptualized the 'Mera Bill Mera Adhikar' scheme?
	A	Indian Parliament
	B	Reserve Bank of India (RBI)
	C	Central Board of Indirect Taxes and Customs (CBIC)
	D	Ministry of Finance
	E	None of the above
	Correct Answer	C
	Marks	1

58	Question Description	Which state government has decided to permit all restaurants across the state to operate 24×7?
	A	Jharkhand
	B	Rajasthan
	C	Haryana
	D	Punjab
	E	None of the above
	Correct Answer	C
	Marks	1

59	Question Description	When is World Sports Journalist Day observed?
	A	May 02
	B	June 02
	C	July 02
	D	August 02
	E	None of the above
	Correct Answer	C
	Marks	1

60	Question Description	From which state is External Affairs Minister S. Jaishankar filing his nomination for Rajya Sabha?
	A	Gujarat
	B	Sikkim
	C	Bihar
	D	Andhra pradesh
	E	None of the above
	Correct Answer	A
	Marks	1

61	Question Description	Which country recently handed over 105 antiquities to India?
	A	USA
	B	Bhutan
	C	China
	D	Cuba
	E	None of the above
	Correct Answer	A
	Marks	1

62	Question Description	Where has Amazon India opened its first-ever floating store?
	A	Gulab lake
	B	Sita lake
	C	Dal Lake
	D	Champaran lake
	E	None of the above
	Correct Answer	C
	Marks	1

63	Question Description	On which date is National Mango Day celebrated?
	A	July 20
	B	July 21
	C	July 22
	D	July 23
	E	None of the above
	Correct Answer	C
	Marks	1

64	Question Description	Which country received the torch of Startup 20 from India?
	A	Cyprus
	B	Brazil
	C	New Zealand
	D	Netherlands
	E	None of the above
	Correct Answer	B
	Marks	1

65	Question Description	What is the name of the world's largest private communications satellite recently launched by SpaceX?
	A	Jupiter 1
	B	Jupiter 2
	C	Jupiter 3
	D	MarsSat
	E	None of the above
	Correct Answer	C
	Marks	1

66

Question Description	Select the related word/letters/number from the given alternatives. ACD : ZWX :: FHJ : ?
A	QSU
B	UQS
C	SQU
D	USQ
E	None of the above
Correct Answer	B
Marks	1

67

Question Description

Directions : In question, some statements are given, followed by two conclusions I and II. You have to consider the statements to be true, even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements. Indicate your answer.

Statements:

All pens are pencils

No pencil is an eraser

Conclusions:

I. No eraser is a pen

II. No pencil is an eraser

A

If only conclusion I follow

B

If only conclusion II follow

C

If neither conclusion I nor conclusion II follows

D

If both the conclusions follow

E

None of the above

Correct Answer

D

Marks

1

68

Question Description

Directions: Read the given information carefully and answer the questions given beside:

In a family of some persons Sushant says that Manu is the daughter of my sister Rhea, who is the only daughter of Tahir. Arun is the child of Tahir and Ileana, who is the grandmother of Kiara. Roma is the mother of Trisha, who is the only sister of Kiara. Arun is unmarried.

How is Arun related to Kiara?

A Maternal Uncle

B Maternal Aunt

C Paternal Uncle

D Paternal Aunt

E None of the above

Correct Answer C

Marks 1

69

Question Description

Directions: Read the following information carefully and answer the questions given beside.

Certain number of persons (that does not exceed 15) are standing in a straight linear row facing towards the north. 5 persons stand between B and E, who is third to the left of A. U is to the right of A. Not more than 3 persons stand between U and T. B is third to the left of U. I is fifth to the right of T. 2 persons stand between E and F, who is sitting at the extreme left end of the row.. Three persons stand between A and L, who is towards the right of E.

How many persons stand between the one who is second from right end and A?

A 3**B** 6**C** 2**D** 5**E** None of the above**Correct Answer** D**Marks** 1

Question Description

If + stands for division; \times stands for addition; – stands for multiplication; \div stands for subtraction, which of the following is correct?

1. $15 \div 5 \times 2 - 6 + 3 = 28$

2. $15 \times 5 + 2 - 6 \div 3 = 56.5$

3. $15 + 5 - 2 \div 6 \times 3 = 3$

4. $15 - 5 + 2 \times 6 \div 3 = 41$

A

3

B

1

C

2

D

4

E

None of the above

Correct Answer

A

Marks

1

71

Question Description

Find the number of triangles in the given figure.

**A**

27

B

25

C

23

D

21

E

None of the above

Correct Answer

A

Marks

1

Question Description

Directions: The below mentioned question is to be answered using the statements I and II given below. You have to determine the statement(s) which is/are sufficient to answer the question and mark the option accordingly.

8 persons viz. B,D,K,F,H,J,L and N are standing in a linear row facing towards the north. What is the position of H from the right end, if number of persons between H and E are 2?

Statement I : F is second to the left of G, who is on the immediate right of H. No person stands between J and B. B is second to the left of E.

Statement II : E is third to the right of B. J is not an immediate neighbor of L. F and L are not adjacent. H is on the immediate right of F.

A	If the data in statement I alone is sufficient to answer the question
B	If the data in statement II alone is sufficient to answer the question
C	If the data in statements I and II is necessary to answer the question
D	If the data in statements I and II is not sufficient to answer the question
E	None of the above
Correct Answer	D
Marks	1

73

Question Description

Directions: Read the following information carefully and answer the questions given beside.

A shuttle was carrying seven passengers viz. J,K,L,M,N,O and P. It is to be noted that only one passenger can exit from the shuttle at a time. M exited before P. No passenger was left in the shuttle after K's exit. Only one passenger takes an exit between K and J. L exited just after O. N exited before P but after M.

If M and O took an exit on consecutive turns then who among the following exited just after L?

A

P

B

J

C

N

D

K

E

None of the above

Correct Answer

C

Marks

1

74	Question Description	In a 500 m race, the ratio of the speeds of two contestants A and B is 3 : 4. A has a start of 140 m. Then, A wins by:
	A	60 m
	B	40 m
	C	20 m
	D	10 m
	E	None of the above
	Correct Answer	C
	Marks	1

75	Question Description	<p>Kindly study the paragraph given below and answer the question that follows.</p> <p>Recently, the Sensex 30 hurtled past 36,000 and the Nifty50 scaled 11000, voices of caution were drowned out by those celebrating the fastest 1000-point gain in the Sensex. Domestic market players continue to conjure up a variety of justifications for these gains — IMF’s bullish forecast, earnings revival, budget reforms, the January effect and surging domestic flows. But Indian investors still have the most to worry about a possible melt-up scenario, because with the Sensex 30 is one of the most expensive markets in the world and at the current levels, allows little margin of safety for disappointments. Inveterate bulls argue that this time it’s different because India’s stock rally in the last three years has been powered more by sticky domestic retail money, than fickle foreign flows.</p> <p>Which of the following weakens the claim that the stock rally would be a sustained one this time?</p> <p>I. Market intermediaries and funds have everything to gain from ballooning assets.</p> <p>II. The Sensex 30’s price-earnings ratio is at 25.2 times and is at a very steep valuation already.</p> <p>III. Most of the domestic money flooding into equities now is not from patient or informed investors.</p>
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A	Only III
B	Only I and II
C	Only II and III
D	Only I and III
E	None of the above
Correct Answer	A
Marks	1