## Computer Based Examination System

| Exported On * | $2022 / 11 / 21$ 16:46:18 |
| :--- | :--- |
| Title * | Question Paper Answer Key |
| OES Exam * | GPSC06202201 / Assistant Professors in Government College in Computer Science/ Completed / 2022-11-19 |

1

Table A
Id Name Age

12 Arun 60
15 Shreya 24
99 Rohit 11

Table B
Id Name Age

15 Shreya 24
25 Hari 40
98 Rohit 20
99 Rohit 11

Table C
Id Phone Area

10220002
99210001
Consider the above tables A, B and C. How many tuples does the result of the following SQL query contains?

## SELECT A.id

## FROM A

WHERE A.age > ALL (SELECT B.age
FROM B
WHERE B. name = "arun")

Correct Answer
Marks

Question Description

A

B

C

D

E

Correct Answer

## Marks

DML is provided for

Description of the logical structure of a database.

The addition of new structures in the database system.

Manipulation \& processing of the database.
Definition of a physical structure of the database system.
None of the above

C
1

```
What will be the output of the following program?
# include
void fun (int, int);
int main()
{
int i= 5, j = 2;
fun (i, j);
printf ("%d %d\n", i, j);
return 0;
}
void fun (int i, int j)
{
i= i * i;
j= j*j;
}
52
254
garbage
compile time error
None of the above
1
```

Correct Answer A
Marks

| Question Description | Which of the join operations do not preserve non matched tuples? |
| :--- | :--- | :--- |
| A | Left outer join |
| B | Right outer join |
| D | Nner join |
| E | None of the above join |
| Correct Answer | C |
| Marks | Which one of the following statements about normal forms is FALSE? |
| Question Description | BCNF is stricter than 3NF |
| A | Any relation with two attributes is in BCNF |
| B | Lossless, dependency-preserving decomposition into 3NF is always possible |
| C | Lossless, dependency-preserving decomposition into BCNF is always possible |
| D | None of the above |
| E | D |
| Marks |  |

The result evaluating the postfix expression $105+606 / * 8$ - is

A

B

C

D

## Correct Answer

Marks

284

213

142

71

None of the above
C
1


| 8 | Question Description |
| :--- | :--- |
| A |  |
| B |  |
| C |  |
| D |  |
| E |  |
| Correct Answer |  |
| Marks |  |


|  | 0 |
| :--- | :--- |
|  | A |
| A | 1 |
| B | 1 |
| C | 2 |
| D | 2 |
| E | N |
| Correct Answer | C |
| Marks | 1 |


| Question Description | Consider a uniprocessor system executing three tasks T1, T2 and T3, each of which is composed of an infinite <br> sequence of jobs (or instances) which arrive periodically at intervals of 3,7 and 20 milliseconds, respectively. The <br> priority of each task is the inverse of its period and the available tasks are scheduled in order of priority, with the <br> highest priority task scheduled first. Each instance of T1, T2 and T3 requires an execution time of 1,2 and 4 <br> milliseconds, respectively. Given that all tasks initially arrive at the beginning of the 1 st milliseconds and task pre- <br> emption are allowed, the first instance of T3 completes its execution at the end of __ milliseconds. |
| :--- | :--- |
| A | 10 |
| B | 12 |
| C | 14 |
| D | 16 |
| Correct Answer | None of the above |
| Marks | 1 |


|  | first accesses 100 distinct pages in some order and then accesses the same 100 pages but now in the reverse order. How <br> many page faults will occur? |
| :--- | :--- | :--- |
| A | 196 |
| B | 192 |
| C | 197 |
| D | 195 |
| E | None of the above |
| Correct Answer | 1 |


| Question Description | Consider the following program in C language: ```#include <stdio.h> main() { int i; int *pi = &i; scanf("%d", pi); printf("%d\n", i+5); }``` <br> Which one of the following statements is TRUE? |
| :---: | :---: |
| A | Compilation fails. |
| B | Execution results in a run-time error. |
| C | On execution, the value printed is 5 more than the address of variable i. |
| D | On execution, the value printed is 5 more than the integer value entered. |
| E | None of the above |
| Correct Answer | D |
| Marks | $1$ |


| 13 Question Description | The number of processes in memory is called |
| :--- | :--- | :--- |
| A | Degree of parallel processing |
| C | Degree of multiprocessing |
| D | Degree of multitasking |
| E | Degree of multithreading |
| Correct Answer | None of the above |
| Marks | 1 |
| Auestion Description | In the slow start phase of the TCP congestion control algorithm, the size of the congestion window |
| B | Constant |
| C | Increases linearly |
| Marks | Increases exponentially |

## Correct Answer

Marks

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 $\qquad$ -.

28

## 175

56

84

None of the above

A
1

|  | off to 3 decimal places) that their 4-bit (unsigned) binary representations have the same most significant bit is |
| :--- | :--- |
| A | 0.5029 |
| B | 0.538 |
| C | 0.461 |
| D | 0.248 |
| E | None of the above |
| Correct Answer | A |
| Marks | 1 |


| Question Description | A company maintains records of sales made by its salespersons and pays them commission based on each individual's total sales made in a year. This data is maintained in a table with following schema: <br> salesinfo $=$ (salespersonid, totalsales, commission) <br> In a certain year, due to better business results, the company decides to further reward its salespersons by enhancing the commission paid to them as per the following formula: <br> If commission $<=50000$, enhance it by $2 \%$ <br> If $50000<$ commission $<=100000$, enhance it by $4 \%$ <br> If commission $>100000$, enhance it by $6 \%$ <br> The IT staff has written three different SQL scripts to calculate enhancement for each slab, each of these scripts is to run as a separate transaction as follows: <br> T1 <br> Update salesinfo <br> Set commission $=$ commission * 1.02 <br> Where commission $<=50000$; <br> T2 <br> Update salesinfo <br> Set commission $=$ commission * 1.04 <br> Where commission $>50000$ and commission is $<=100000$; <br> T3 <br> Update salesinfo <br> Set commission $=$ commission * 1.06 <br> Where commission > 100000; <br> Which of the following options of running these transactions will update the commission of all salespersons correctly: |
| :---: | :---: |
| A | Execute T1 followed by T2 followed by T3 |
| B | Execute T2 followed by T1 followed by T3 |

## Correct Answer <br> D

Marks

```
1 0
```

11
12
13

1

Consider a double hashing scheme in which the primary hash function is $\mathrm{h} 1(\mathrm{k})=\mathrm{k} \bmod 23$, and the secondary hash function is $\mathrm{h} 2(\mathrm{k})=1+(\mathrm{k}$ mod 19).Assume that the table size is 23 . Then the address returned by probe 1 in the probe sequence (assume that the probe sequence begins at probe 0 ) for key value $\mathrm{k}=90$ is:

None of the above

Correct Answer
Marks
Consider the following two statements:
I. If all states of an NFA are accepting states then the language accepted by the NFA is $\Sigma^{*}$.
II. There exists a regular language A such that for all languages $\mathrm{B}, \mathrm{A} \cap \mathrm{B}$ is regular.

Which one of the following is CORRECT?

I is true

II is true

Both I and II are true

Neither I and II are true

None of the above

B
Marks 1

| Question Description | Consider the following two statements. <br> S1: If a candidate is known to be corrupt, then he will not be elected. <br> S2: If a candidate is kind, he will be elected. <br> Which one of the following statements follows from S1 and S2 as per sound inference rules of logic? |
| :---: | :---: |
| A | If a person is known to be corrupt, he is kind |
| B | If a person is not known to be corrupt, he is not kind |
| C | If a person is kind, he is not known to be corrupt |
| D | If a person is not kind, he is not known to be corrupt |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

A B

C

D

## Correct Answer

Marks

The number of arrangements of six identical balls in three identical bins is

36

21

12

7

None of the above
D
1

|  | Let be an arbitrary graph on vertices with edges. Consider the following statements: <br> I) There is a vertex of degree smaller than in. <br> II)There is a vertex such that there are less than vertices at a distance exactly from it. <br> Which of the following is true? |
| :--- | :--- | :--- | :--- |
| A | I only |
| B | II only |
| C | Both I and II |
| D | Neither I and II |
| E | None of the above |
| Correct Answer | A |
| Marks |  |

## Question Description

A

B

C

D

E

## Correct Answer

Marks

If a class B network on the Internet has a subnet mask of 255.255 .248 .0 , what is the maximum number of hosts per subnet?

1024

2000
2046

2048

None of the above
c
1

| 24 | Question Description | Which of the following is finally produced by Hierarchical Clustering? |
| :---: | :---: | :---: |
|  | A | final estimate of cluster centroids |
|  | B | tree showing how close things are to each other |
|  | C | assignment of each point to clusters |
|  | D | all of the mentioned |
|  | E | None of the above |
|  | Correct Answer | B |
|  | Marks | 1 |
| 25 | Question Description | Which of the following is required by K-means clustering? |
|  | A | defined distance metric |
|  | B | number of clusters |
|  | C | initial guess as to cluster centroids |
|  | D | all of the mentioned |
|  | E | None of the above |
|  | Correct Answer | D |
|  | Marks | 1 |


| Question Description | Using public key cryptography, X adds a digital signature to message M, encrypts <M, $\sigma>$, and sends it to <br> Y, where it is decrypted. Which one of the following sequences of keys is used for the operations? |
| :--- | :--- |
| A Encryption: X's private key followed by Y's private key; Decryption: X's public key followed by Y's public key |  |
| B | Encryption: X's private key followed by Y's public key; Decryption: Y's private key followed by X's public key |
| C | Encryption: X's private key followed by Y's public key; Decryption: X's public key followed by Y's private key |
| D | Encryption: X's public key followed by Y's private key; Decryption: Y's public key followed by X's private key |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

\#include < stdio.h>
int main () \{
int $\mathrm{a}[4][5]=\{\{1,2,3,4,5\}$,
$\{6,7,8,9,10\}$,
$\{11,12,13,14,15\}$,
$\{16,17,18,19,20\}\}$;
$\operatorname{printf(}(" \% \mathrm{~d} \backslash n ", *(*(a+* * a+2)+3))$;
return(0);
\}

The output of the program is $\qquad$ .

None of the above

## Correct Answer

Marks 1

| Question Description | Station A needs to send a message consisting of 9 packets to Station B using a sliding window (window size <br> $3)$ and go-back-n error control strategy. All packets are ready and immediately available for transmission. If <br> every $5^{\text {th }}$ packet that A transmits gets lost (but no acks from B ever get lost), then what is the number of <br> packets that A will transmit for sending the message to B? |
| :--- | :--- |
| A | 20 |
| B | 18 |
| C | 16 |
| D | 14 |
| E | None of the above |
| Correct Answer | 1 |

Which of the following are introduced to reduce the overheads caused by the log-based recovery?

A B

## Correct Answer

Marks

## Checkpoints

Indices

Deadlocks

## Locks

None of the above
A
1

## Correct Answer

Marks
Define the connective * for the Boolean variables X and Y as: $\mathrm{X} * \mathrm{Y}=\mathrm{XY}+\mathrm{X}^{\prime} \mathrm{Y}^{\prime} . \operatorname{Let} \mathrm{Z}=\mathrm{X} * \mathrm{Y}$.
Consider the following expressions $\mathrm{P}, \mathrm{Q}$ and R .
P: $X=Y \star Z$
$\mathrm{Q}: \mathrm{Y}=\mathrm{X} \star \mathrm{Z}$
$R: X \star Y \star Z=1$
Which of the following is TRUE?
$P$ and $R$ are valid
$P$ and $Q$ are valid
$Q$ and $R$ are valid
$P, Q, R$ are valid

None of the above

D
1

| 31 | Question Description | The ___ of a counting semaphore indicates the number of processes in the blocked state. |
| :---: | :---: | :---: |
|  | A | Positive value |
|  | B | Negative value |
|  | C | The magnitude of negative value |
|  | D | The sign (+/-) of value |
|  | E | None of the above |
|  | Correct Answer | B |
|  | Marks | 1 |
| 32 | Question Description | What is the main disadvantage of spinlocks? |
|  | A | they are not sufficient for many process |
|  | B | they require busy waiting |
|  | C | they are unreliable sometimes |
|  | D | they are too complex for programmers |
|  | E | None of the above |
|  | Correct Answer | B |
|  | Marks | 1 |

None of the above

| Correct Answer | C |
| :--- | :--- |
| Marks | 1 |


| Question Description | What will be the output of the following program? ```# include int main() { float a = 13.5; float *b, *c; b = &a; /* suppose address of a is 1006 */ c = b; printf (%u %u %f %f %f \n", b+2, c, *&a, *b, *c+2); return 0; }``` |
| :---: | :---: |
| A | 1008100613.500000013 .50000015 .500000 |
| B | 1014100613.500000013 .50000015 .500000 |
| C | 1014100613.513 .515 .5 |
| D | 1008100613.500000013 .500000 garbage |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |


| Question Description | The following program is to be tested for statement coverage: <br> begin <br> if $(\mathrm{a}==\mathrm{b})\{\mathrm{S} 1$; exit; $\}$ <br> else if (c==d) \{S2;] <br> else $\{\mathrm{S} 3$; exit; $\}$ <br> S4; <br> end <br> The test cases T1, T2, T3 and T4 given below are expressed in terms of the properties satisfied by the values of variables $\mathrm{a}, \mathrm{b}, \mathrm{c}$ and d . The exact values are not given. <br> T1 : a, b, c and d are all equal <br> T 2 : $\mathrm{a}, \mathrm{b}, \mathrm{c}$ and d are all distinct <br> T3 : $\mathrm{a}=\mathrm{b}$ and $\mathrm{c}!=\mathrm{d}$ <br> $\mathrm{T} 4: \mathrm{a}!=\mathrm{b}$ and $\mathrm{c}=\mathrm{d}$ <br> Which of the test suites given below ensures coverage of statements S1, S2, S3 and S4? |
| :---: | :---: |
| A | T1, T2, T3 |
| B | T2, T4 |
| C | T3, T4 |
| D | T1, T2, T4 |
| E | None of the above |
| Correct Answer | D |
| Marks | 1 |


| Question Description | Consider the following C program <br> void f(int, short); <br> void main() <br> \{ <br> int $\mathrm{i}=100$; <br> short $\mathrm{s}=12$; <br> short *p = \&s; $\qquad$ ; // call to f() <br> \} <br> Which one of the following expressions, when placed in the blank above, will NOT result in a type checking error? |
| :---: | :---: |
| A | $F\left(i,{ }^{*} p\right)$ |
| B | $F(i, * s)$ |
| C | $\mathrm{i}=\mathrm{F}(\mathrm{i}, \mathrm{s})$ |
| D | $F\left(s, s^{*}\right)$ |
| E | None of the above |
| Correct Answer | A |
| Marks | 1 |

## Correct Answer

Marks

Which one of the following enables us to use the entire bandwidth simultaneously?

TDMA

CDMA

FDMA

## All of the above

None of the above

B

1

| Question Description | Consider the following relation <br> Cinema (theater, address, capacity) <br> Which of the following options will be needed at the end of the SQL query: <br> SELECT P1. address <br> FROM Cinema P1 <br> Such that it always finds the addresses of theatre's with maximum capacity? |
| :--- | :--- |
| A | WHERE P1. Capacity> = Any (select P2. Capacity from Cinema P2) |
| C WHERE P1. Capacity> = All (select P2. Capacity from Cinema P2) |  |


| 39 | Question Description | Let X and Y be finite sets and $\mathrm{f}: \mathrm{X}->\mathrm{Y}$ be a function. Which one of the following statements is TRUE? |
| :---: | :---: | :---: |
|  | A | For any subsets $A$ and $B$ of $X,\|f(A \cup B)\|=\|f(A)\|+\|f(B)\|$ |
|  | B | For any subsets $A$ and $B$ of $X,\|f(A \cap B)\|=\min \{\|f(A)\|, f\|(B)\|\}$ |
|  | C | For any subsets $S$ and $T$ of $Y, f-1(S \cap T)=f-1(S) \cap f-1(T)$ |
|  | D | For any subsets $A$ and $B$ of $X, f(A \cap B)=f(A) \cap f(B)$ |
|  | E | None of the above |
|  | Correct Answer | C |
|  | Marks | 1 |
| 40 | Question Description | The interval between the time of submission and completion of the job is called |
|  | A | Turnaround time |
|  | B | Waiting time |
|  | C | Throughput |
|  | D | Response time |
|  | E | None of the above |
|  | Correct Answer | A |
|  | Marks | 1 |

## Correct Answer

Marks
In a software project, COCOMO (Constructive Cost Model) is used to estimate
effort and duration based on the size of the software
size and duration based on the effort of the software
effort and cost based on the duration of the software
size, effort and duration based on the cost of the software

None of the above
A
1

| 42 | Question Description | Which is the desirable property of decomposition? |
| :---: | :---: | :---: |
|  | A | Partition constraint |
|  | B | Dependency preservation |
|  | c | Redundancy |
|  | D | Security |
|  | E | None of the above |
|  | Correct Answer | B |
|  | Marks | 1 |
| 43 | Question Description | is transmitted with the call initiation request during a mobile call. |
|  | A | MIN |
|  | B | SCM |
|  | c | ESN |
|  | D | All of the above |
|  | E | None of the above |
|  | Correct Answer | D |
|  | Marks | 1 |

Correct Answer

## Marks

There are $n$ stations in a slotted LAN. Each station attempts to transmit with a probability $p$ in each time slot. What is the probability that ONLY one station transmits in a given time slot?
$n p(1-p)^{n-1}$
$(1-p)^{n-1}$
$p(1-p)^{n-1}$
$1-(1-p)^{n-1}$
None of the above

A
1
A I only

I and III only
II and III only
I, II and III
None of the above

Correct Answer D
Marks 1

Correct Answer
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?
234.25
932.50
287.80
122.40

None of the above
Marks 1

| Question Description | Consider the following transactions with data items P and Q initialized to zero: ```T1: read (P) ; read (Q); if }\textrm{P}=0\mathrm{ then }\textrm{Q}:=\textrm{Q}+1\mathrm{ ; write (Q) ; T2: read (Q) ; read (P); if Q = 0 then P:= P+1; write (P) ;``` Any non-serial interleaving of T 1 and T 2 for concurrent execution leads to |
| :---: | :---: |
| A | A serializable schedule |
| B | A schedule that is not conflict serializable |
| c | A conflict serializable schedule |
| D | A schedule for which a precedence graph cannot be drawn |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

## Correct Answer

Marks

49 Question Description

A

B

C

D

E

## Correct Answer

Marks

In case of any shut down during transaction before commit which of the following statement is done automatically?

View

Commit

Rollback

Flashback

None of the above
C
1

Which one of the following is NOT a valid identity?
$(x \oplus y) \oplus z=x \oplus(y \oplus z)$
$(x+y) \oplus z=x \oplus(y+z)$
$x \oplus y=x+y$, if $x y=0$
$x \oplus y=\left(x y+x^{\prime} y^{\prime}\right)^{\prime}$
None of the above

B

1

## Correct Answer

Marks

Which one of the following is NOT desired in a good Software Requirement Specifications (SRS) document? Functional Requirements

Non-Functional Requirements

Goals of Implementation

Algorithms for Software Implementation
None of the above

D
1

| Comprehension | The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it. |
| :---: | :---: |
| Question Description | Read the following statements and arrange them in logical sequence <br> (i) The bifurcation in command thus caused much inconvenience <br> (ii) The control of navigation was handed over to the Master. <br> (iii) Line of demarcation of authority, however, could not be precisely drawn. <br> (iv) The captain treated the Master with highhanded contempt. |
| A | (ii)-(i)-(iv)-(iii) |
| B | (ii)-(iv)-(iii)-(i) |
| C | (ii)-(i)-(iii)-(iv) |
| D | (iv)-(iii)-(ii)-(i) |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

Comprehension

| The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority |
| :--- |
| produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was |
| therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The |
| Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it |
| was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were |
| those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it. |

Question Description

| Read the following statements and state whether they are true or false |
| :--- | :--- |
| (i) The chief was as contemptuous of the Master to a degree comparable with his ignorance of his own job as a captain |
| (ii) Aware of the risk of not obliging the powerful, the Master yielded too often but not without a struggle. |

A

C | C | (i) is true; (ii) is false |
| :--- | :--- |
| D | (i) and (ii) are both false |
| Correct Answer | (i) and (ii) are both true |

Marks false; (ii) is true

| Comprehension | The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority <br> produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was <br> therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The <br> Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it <br> was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were <br> those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it. |
| :--- | :--- |
| Question Description | As per the passage, the handing over the direction of navigation to the Master meant |
| A | innumerable inconveniences |
| B partition of authority |  |
| C | vague demarcation of authority |
| D | line of demarcation |
| E None of the above |  |
| Correct Answer | Barks 1 |


| Comprehension | The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it. |
| :---: | :---: |
| Question Description | In the passage the phrase "line of demarcation", vis-à-vis the Captain and the Master, implies |
| A | partition of authority |
| B | boundary between the two |
| C | conceptual separation of power |
| D | delimiting the authority of each |
| E | None of the above |
| Correct Answer | D |
| Marks | 1 |


| Comprehension | The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it. |
| :---: | :---: |
| Question Description | Identify the obvious figures of speech in the following sentence: "The captain, confident in proportion to his ignorance, treated the Master with lordly contempt." |
| A | irony and sarcasm |
| B | satire and hyperbole |
| C | sarcasm and metaphor |
| D | paradox and personification |
| E | None of the above |
| Correct Answer | A |
| Marks | 1 |


| 56 | Question Description | When is the annual Indian Foreign Service (IFS) Day observed? |
| :---: | :---: | :---: |
|  | A | October 08 |
|  | B | October 09 |
|  | C | October 07 |
|  | D | October 06 |
|  | E | None of the above |
|  | Correct Answer | B |
|  | Marks | 1 |
| 57 | Question Description | Which of the following has been declared a National Monument very recently ? |
|  | A | Mangarh Dham |
|  | B | Lascar War Memorial |
|  | C | Balidan Stambh |
|  | D | Jharkhand War Memorial |
|  | E | None of the above |
|  | Correct Answer | A |
|  | Marks | 1 |


| Question Description | Which Solar-Powered Village become India's 1st Net-Zero Energy Community? |
| :--- | :--- |
| A | Baripatha |
| B | Modhera |
| D | Dharnai |
| E Kannauj |  |
| Correct Answer | None of the above |
| Marks | B |

59 Question Description
Which actor will be the first to film in space?

Tom Cruise

Val Kilmer

Dwayne Johnson

Johnny Depp

None of the above

A
Correct Answer
Marks

60 Question Description
A
B
C
D
E

Correct Answer D
Marks

61 Question Description

A
B
C
D
E

Correct Answer
Marks
1

A

1

## Scientists have found a new ecosystem 'The Trapping Zone' in which country?

Thailand

Japan
Australia
Maldives
None of the above

President Draupadi Murmu has launched 'PARAM KAMRUPA' Supercomputer facility in which IIT?

IIT Guwahati
IIT Bombay
IIT Delhi
IIT BHU
None of the above

## Question Description

Which state has announced India's first 'Kadavur Slender Loris Sanctuary'?

A

B

## C

D

E

## Correct Answer D

Marks

Which Indian city has won World Green City Award 2022?

Pune
Hyderabad

Indore

Bhopal

None of the above

Correct Answer B
Marks
1

1
Himachal Pradesh

Uttarakhand

## Madhya Pradesh

Tamil Nadu

None of the above

64 Question Description
A
B
C
D
E

Correct Answer A
Marks

65

## Question Description

Correct Answer

A
B
C
D

E

Marks

## Who has become the first Indian Wrestler to win Gold Medal at U-23 World Wrestling Championships?

Aman Sehrawat

Sajan Bhanwala

Vikas
Nitesh

None of the above

1

World Statistics Day is being observed on which date?
October 22

October 19

October 20

October 21

None of the above

C
1

Find the Missing Number?

$$
7, \quad 9, \quad 12, \quad 48, \quad ?, \quad 890
$$

## Correct Answer

Marks 1

| 67 Question Description |  |
| :--- | :--- |
| A | 41 |
| B | 32 |
| C | 40 |
| D | None of the above |
| E | A |
| Correct Answer | 1 |
| Marks |  |

Which one will replace the question mark ?


115

130

135

140

None of the above

B
1

| Question Description | In each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. |
| :---: | :---: |
|  | Is the average age of the students of a school less than 17 years? |
|  | Statement I : The strength of the class VIII is less than $25 \%$ of the strength of the school. |
|  | Statement II : The average age of the students of class VIII of the school is 18 years and that of the remaining classes is 16 years. |
| A | If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question |
| B | If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question |
| C | If the data either in statement I alone or in statement II alone is sufficient to answer the question |
| D | If the data in both statements I and II together are necessary to answer the question |
| E | None of the above |
| Correct Answer | D |
| Marks | 1 |



A
A

B
B

C

D

None of the above

Correct Answer
C

## Marks

A

B

## C

D

## E

## Correct Answer

Marks

A train started from point A at a speed of $60 \mathrm{~km} / \mathrm{hr}$ and after 2 hours another train of same length started from A at a speed of 80 $\mathrm{km} / \mathrm{hr}$ in the same direction as the first one. After how much time the second train will meet the first train?

5 hours

3 hours

6 hours
8 hours

None of the above

C

1
A Brother

## Correct Answer

Marks

Father

Uncle

Grandfather

None of the above

C
1

Pointing to a man, Rohan said, "His only brother is the father of my daughter's father." How is the Rohan related to the man?

## Father

Grandson

Uncle

Nephew

None of the above

Correct Answer
D
Marks
1

|  | Find the Missing Number? |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| A | 47 | 58 | 71 | 79 |$\quad 95 \quad ?$

Which one will replace the question mark ?

| $A_{2}$ | $C_{4}$ | $E_{6}$ |
| :---: | :---: | :---: |
| $G_{3}$ | $I_{5}$ | $?$ |
| $M_{5}$ | $O_{9}$ | $Q_{14}$ |

A

B

C

D

E

| Correct Answer | D |
| :--- | :--- |
| Marks | 1 |

