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Computer Based Examination System

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| Exported On * | 2023/11/27 10:55:03 |
| Title * | Question Paper Answer Key |
| OES Exam * | GPSC06202317 / Statistical Officer / Completed / 2023-11-26 |

| | |
|-----------------------|--|
| 1 | Question Description In a single throw of two fair dice, the chance of getting a sum of 8 is A. $\frac{1}{12}$ B. $\frac{1}{18}$ C. $\frac{5}{36}$ D. $\frac{4}{36}$ |
| A | A |
| B | B |
| C | C |
| D | D |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

2

Question Description

If an Exponential random variable has mean 1 unit, then the parameter of the distribution has value

- A. $\frac{1}{2}$
- B. e
- C. 1
- D. $\frac{e}{2}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

1

Marks

1

3

Question Description

If the probability distribution shown below, then the value of mean is

| | | | | |
|--------|-----|-----|-----|-----|
| x | 1 | 2 | 3 | 4 |
| $p(x)$ | 0.4 | 0.3 | 0.2 | 0.1 |

- A. 2
- B. 3
- C. 1
- D. 0

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

A

Marks

1

4

Question Description

If inter-arrival time between two successive customers in a hotel follows an exponential distribution with probability function with mean 3 minutes, then the probability that the inter-arrival time is more than 4 minutes is

- A. $\frac{3}{4}$
- B. $\frac{e^4}{3}$
- C. $\frac{e^{-4}}{3}$
- D. $e^{-4/3}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

D

Marks

1

5

| | |
|-----------------------------|---|
| Question Description | If the kurtosis of a distribution is more than 3 , then the distribution is |
| A | Mesokurtic |
| B | Leptokurtic |
| C | Platykurtic |
| D | Skewed |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

6

| | |
|-----------------------------|--|
| Question Description | Mr. Abhishek gets success in 60% cases and Mr. Ketan in 70% cases. Percentage of cases they are likely to contradict each other in an Examination is |
| A | 100 |
| B | 46 |
| C | 88 |
| D | 42 |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

7

Question Description

If mean and standard deviation of a Binomial distribution are 1 and $\frac{2}{\sqrt{5}}$ respectively, then the probability of failure is

- A. $\frac{1}{5}$
- B. $\frac{4}{5}$
- C. $\frac{2}{5}$
- D. $\frac{2}{\sqrt{5}}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

B

Marks

1

8

| | |
|-----------------------------|--|
| Question Description | If the random variable is the number of successes of getting a number 4 when a fair dice is rolled twice, then the values taken by the random variable are |
| A | 5,6 |
| B | 4,5,6 |
| C | 0,1,2 |
| D | 1,2 |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

9

Question Description

Which of the following statement/s is/are false.

- a. Mean and standard deviation of Poisson variate are equal
- b. Mean and variance of Poisson variate are equal
- c. In Binomial distribution, Mean is more than or equal to the variance
- d. In Binomial distribution, Mean is less than the variance

A

a and c

B

b and d

C

b and c

D

a and d

E

None of the above

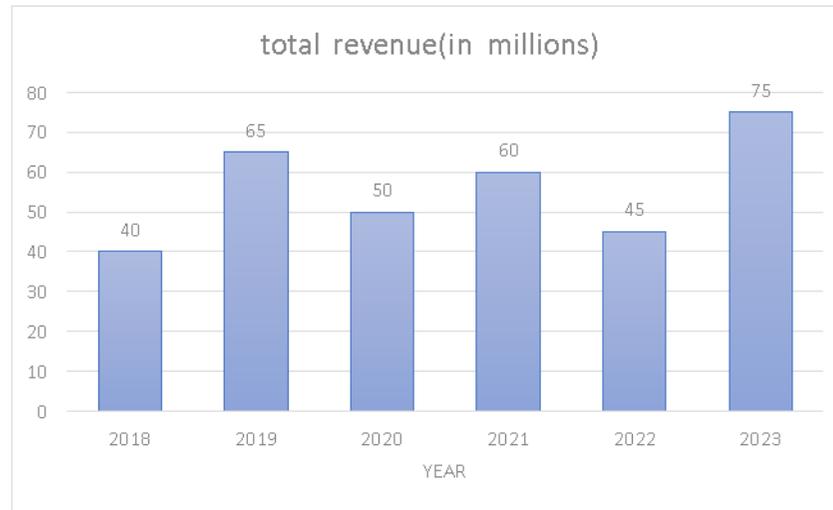
Correct Answer

D

Marks

1

10

Question Description

With reference to the above bar diagram, the percentage drop in the revenue from 2021 to 2022 is

- A 33.3%
- B 75%
- C 25%
- D 35%
- E None of the above

Correct Answer C

Marks 1

11

Question Description

The value of mode of a standard Normal distribution is

- A. 0
- B. 1
- C. $\sqrt{2\pi}$
- D. $\frac{1}{\sqrt{2\pi}}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

A

Marks

1

| | | |
|----|-----------------------------|--|
| 12 | Question Description | Normal distribution is symmetrical about |
| | A | Mean |
| | B | Variance |
| | C | Mean Deviation |
| | D | Standard deviation |
| | E | None of the above |
| | Correct Answer | A |
| | Marks | 1 |

| | | |
|----|-----------------------------|--|
| 13 | Question Description | The standard normal curve is symmetric about |
| | A | 0.5 |
| | B | 1 |
| | C | 0 |
| | D | Cannot conclude |
| | E | None of the above |
| | Correct Answer | C |
| | Marks | 1 |

14

Question DescriptionIf X is a random variable such that $E(2X+4)=6$; $\text{Var}(2X+4)=4$, then $E(X^2)=?$ **A**

1

B

2

C

3

D

0

E

None of the above

Correct Answer

B

Marks

1

15

Question Description

Variance of the 50 observations with each value 2 is

- A. 100
- B. $\sqrt{2}$
- C. 10
- D. 0

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

D

Marks

1

16

Question Description

If mean of the Gamma distribution is $\frac{2}{3}$, then the variance is

- A. $\frac{2}{3}$
- B. $\frac{4}{3}$
- C. $\frac{4}{9}$
- D. $\frac{2}{9}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

D

Marks

1

17

Question DescriptionCoefficient of dispersion based on quartiles Q_1, Q_2 and Q_3 is

- A. $\frac{Q_3 - Q_2}{Q_3 + Q_2}$
B. $\frac{Q_3 + Q_2}{Q_3 - Q_2}$
C. $\frac{Q_3 - Q_1}{Q_3 + Q_1}$
D. $\frac{Q_3 + Q_1}{Q_3 - Q_1}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

C

Marks

1

18

| | |
|-----------------------------|--|
| Question Description | If there is equal likelihood for a patient to lose his/her weight between 2 <i>kgs.</i> and 4 <i>kgs.</i> then the average amount the patient is expected to lose is |
| A | 3 <i>kgs.</i> |
| B | 2 <i>kgs.</i> |
| C | 3.5 <i>kgs.</i> |
| D | 2.5 <i>kgs.</i> |
| E | None of the above |
| Correct Answer | A |
| Marks | 1 |

19

Question Description

The expression for the angle θ , between the two regression lines with standard deviations σ_X, σ_Y , correlation coefficient between X and Y , r is

A. $\theta = \tan^{-1} \left[\frac{1+r^2}{r} \frac{\sigma_X \sigma_Y}{\sigma_X^2 + \sigma_Y^2} \right]$

B. $\theta = \tan^{-1} \left[\frac{1+r^2}{r} \frac{\sigma_X \sigma_Y}{\sigma_X^2 - \sigma_Y^2} \right]$

C. $\theta = \tan^{-1} \left[\frac{1-r^2}{r} \frac{\sigma_X \sigma_Y}{\sigma_X^2 + \sigma_Y^2} \right]$

D. $\theta = \tan^{-1} \left[\frac{1-r^2}{r} \frac{\sigma_X \sigma_Y}{\sigma_X^2 - \sigma_Y^2} \right]$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

C

Marks

1

20

Question Description

If equations of regression lines are $5x - 2y = 17$ and $4x - 3y = 8$, then means of X and Y are respectively

- A. 5, 4
- B. 0, 0
- C. 4, 5
- D. Insufficient information

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

A

Marks

1

21

Question Description

If a batsman hits the boundaries 4 times in 20 balls, then the probability that he did not hit the boundaries is

- A. $\frac{1}{5}$
- B. $\frac{2}{5}$
- C. $\frac{3}{5}$
- D. $\frac{4}{5}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

D

Marks

1

22

| | |
|-----------------------------|---|
| Question Description | In a frequency curve, if the mode is found to be higher than the mean, then the distribution is |
| A | Negatively skewed |
| B | Positively skewed |
| C | Symmetrical |
| D | Cannot conclude |
| E | None of the above |
| Correct Answer | A |
| Marks | 1 |

23

Question Description

If X and Y are random variables with standard deviations 2, 3 respectively with correlation coefficient between X and Y , $r = \frac{1}{2}$ then $var(X - Y + 1) =$

- A. -1
- B. 0
- C. 5
- D. 7

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

D

Marks

1

24

| | |
|-----------------------------|---|
| Question Description | In a symmetrical distribution, the coefficient of skewness is |
| A | less than 3 |
| B | more than 3 |
| C | equal to 3 |
| D | zero |
| E | None of the above |
| Correct Answer | D |
| Marks | 1 |

25

Question Description

Given two events of drawing a King from a pack of 52 cards and an Ace from another well-shuffled pack of 52 cards, probability of drawing a King from the first pack but not an Ace from second pack is

- A. $\frac{192}{52^2}$
- B. $\frac{48^2}{52^2}$
- C. $\frac{48}{52}$
- D. $\frac{19}{52}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

A

Marks

1

26

Question Description

Quartile deviation of the observations 4, 2, 4, 5, 6, 8, 7 is

- A. 3
- B. 1.5
- C. $\frac{3}{5}$
- D. $\frac{3}{11}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

B

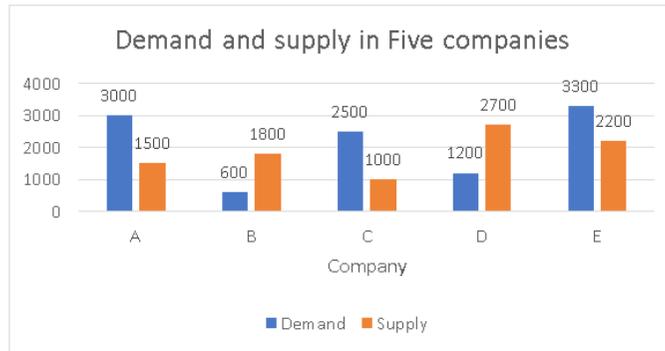
Marks

1

27

Question Description

Following diagram gives information on Demand and supply of a commodity in Five companies.



Demand of Company B is percentage of company A.

- | | |
|---|-------------------|
| A | 15% |
| B | 20% |
| C | 10% |
| D | 25% |
| E | None of the above |

Correct Answer B

Marks 1

Question Description

Which of the following statements are true?

- If random variables X and Y are independent, then $Cov(X, Y) = 0$.
- If $Cov(X, Y) = 0$, then random variables X and Y are independent.
- When random variables X and Y are uncorrelated, then the regression lines are parallel to each other.
- When random variables X and Y are uncorrelated, then the regression lines are perpendicular to each other.

When random variables X and Y are perfectly correlated, then the regression lines coincide

A a, d, e

B b, d, e

C b, c, e

D a, d

E None of the above

Correct Answer A

Marks 1

29

| | |
|-----------------------------|--|
| Question Description | If the sum of the mean and the variance of a Binomial distribution for 5 trials is 1.8, then probability of success is |
| A | 0.8 |
| B | 1.8 |
| C | 0.2 |
| D | 0.36 |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

30

Question Description

If $U = \frac{X-3}{2}$, $V = \frac{Y+5}{3}$ where X and Y are random variables, then correlation coefficient between U and V , $r(U, V) =$

- A. $\frac{r(X, Y)}{6}$
B. $\frac{r(X-3, Y+5)}{6}$
C. $r(X, Y)$
D. $\frac{r(X, Y)}{5}$

A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

C

Marks

1

31

Comprehension

Read the following passage and answer the questions below:

The two systems suggest that the teachers felt that their pupils had to be either compelled or bribed to learn. In the nineteenth century, however, there sprung up a different type of teacher, passionately convinced that learning was worthwhile for its own sake, and that the young learner's principal stimulus should be neither to avoid a penalty nor ambition to win a reward, but sheer desire to learn. These teachers used their best endeavours to render the process of learning pleasant and where this was not possible, to show that hard plodding would yield results of practical value to the learner. Interest, direct, or indirect, became the key of instruction and so it has remained.

Question Description

Identify from the passage the main stimuli offered to the learners over the centuries.

A

penalty, reward and interest

B

practical value, direct interest and bribe

C

compulsion, bribe and penalty

D

pleasant learning, plodding and practical value

E

None of the above

Correct Answer

A

Marks

1

Comprehension

Read the following passage and answer the questions below:

The two systems suggest that the teachers felt that their pupils had to be either compelled or bribed to learn. In the nineteenth century, however, there sprung up a different type of teacher, passionately convinced that learning was worthwhile for its own sake, and that the young learner's principal stimulus should be neither to avoid a penalty nor ambition to win a reward, but sheer desire to learn. These teachers used their best endeavours to render the process of learning pleasant and where this was not possible, to show that hard plodding would yield results of practical value to the learner. Interest, direct, or indirect, became the key of instruction and so it has remained.

Question Description

The passage implies that the teacher in the nineteenth century was different from his

A

contemporaries

B

successors

C

forerunners

D

ancestors

E

None of the above

Correct Answer

C

Marks

1

Comprehension

Read the following passage and answer the questions below:

The two systems suggest that the teachers felt that their pupils had to be either compelled or bribed to learn. In the nineteenth century, however, there sprung up a different type of teacher, passionately convinced that learning was worthwhile for its own sake, and that the young learner's principal stimulus should be neither to avoid a penalty nor ambition to win a reward, but sheer desire to learn. These teachers used their best endeavours to render the process of learning pleasant and where this was not possible, to show that hard plodding would yield results of practical value to the learner. Interest, direct, or indirect, became the key of instruction and so it has remained.

Question Description

Select from the options provided below, the antonym of "stimulus" in the sense used in the passage

A

incentive

B

dampener

C

plodding

D

endeavour

E

None of the above

Correct Answer

B

Marks

1

| | |
|-----------------------------|--|
| Comprehension | <p>Read the following passage and answer the questions below:</p> <p>The two systems suggest that the teachers felt that their pupils had to be either compelled or bribed to learn. In the nineteenth century, however, there sprung up a different type of teacher, passionately convinced that learning was worthwhile for its own sake, and that the young learner's principal stimulus should be neither to avoid a penalty nor ambition to win a reward, but sheer desire to learn. These teachers used their best endeavours to render the process of learning pleasant and where this was not possible, to show that hard plodding would yield results of practical value to the learner. Interest, direct, or indirect, became the key of instruction and so it has remained.</p> |
| Question Description | Identify from the statements given below, the one that is borne out by the passage |
| A | Traditionally, teachers used to depend on punishment or incentive to enhance learning; subsequently, the focus shifted to diminished interest in learning |
| B | Traditionally, teachers depended on penalty or reward to enhance learning; subsequently, the teaching focus shifted to exclusive generation of pleasure in learning |
| C | Traditionally, teachers used to depend on punishment or incentive to enhance learning; subsequently, the focus shifted to generating hard plodding towards learning |
| D | Traditionally, teachers used to depend on punishment or incentive to enhance learning; subsequently, the focus shifted to generating direct or indirect interest in learning |
| E | None of the above |
| Correct Answer | D |
| Marks | 1 |

35

Comprehension

Read the following passage and answer the questions below:

The two systems suggest that the teachers felt that their pupils had to be either compelled or bribed to learn. In the nineteenth century, however, there sprung up a different type of teacher, passionately convinced that learning was worthwhile for its own sake, and that the young learner's principal stimulus should be neither to avoid a penalty nor ambition to win a reward, but sheer desire to learn. These teachers used their best endeavours to render the process of learning pleasant and where this was not possible, to show that hard plodding would yield results of practical value to the learner. Interest, direct, or indirect, became the key of instruction and so it has remained.

Question Description

In the statement "hard plodding would yield results of practical value to the learner" means that the learner benefits from

A

Hard work results in enhanced worldly worth to the learner

B

Hard work results in increasing the practical price to the learner

C

Hard work results in diminished actual worth to the learner

D

Hard work is the outcome of practical value to the learner

E

None of the above

Correct Answer

A

Marks

1

Comprehension

Read the passage below and answer the questions:

Innovations, new product development, extending the lines and expanding the markets of existing products by adding new features, styles, packaging, pricing, all these inexorably belong to the arsenal of devices by which a modern company competes. Innovation is an abundant commodity in our society. But probably it is less abundant than many of us assume. We often mistake innovation for what is imitation, the large and visible outpouring of an imitative product that was genuinely new several years previously when a single innovator launched it. Simple arithmetic tells us that there is more imitation than innovation. At the beginning a genuinely new product, process or service generally has only one innovator. But later there are hordes of imitators. No single company can be, or can prudently afford to be, as constant an innovator as it is compelled to be an imitator.

Question Description

As per the passage, with regard to the abundance of innovation, it is

A

less than what is adequate for our society

B

more than what is expected of the companies

C

less than what it is assumed to be innovation

D

more than what is adequate imitation

E

None of the above

Correct Answer

C

Marks

1

37 **Comprehension** Read the passage below and answer the questions:

Innovations, new product development, extending the lines and expanding the markets of existing products by adding new features, styles, packaging, pricing, all these inexorably belong to the arsenal of devices by which a modern company competes. Innovation is an abundant commodity in our society. But probably it is less abundant than many of us assume. We often mistake innovation for what is imitation, the large and visible outpouring of an imitative product that was genuinely new several years previously when a single innovator launched it. Simple arithmetic tells us that there is more imitation than innovation. At the beginning a genuinely new product, process or service generally has only one innovator. But later there are hordes of imitators. No single company can be, or can prudently afford to be, as constant an innovator as it is compelled to be an imitator.

Question Description Identify from the following options, the meaning of the phrase “arsenal of devices” as implied in the passage -----

A the collection of weaponry

B an array of resources or techniques

C storage of weapons and war equipment

D the strategic place of planning

E None of the above

Correct Answer B

Marks 1

38

Comprehension

Read the passage below and answer the questions:

Innovations, new product development, extending the lines and expanding the markets of existing products by adding new features, styles, packaging, pricing, all these inexorably belong to the arsenal of devices by which a modern company competes. Innovation is an abundant commodity in our society. But probably it is less abundant than many of us assume. We often mistake innovation for what is imitation, the large and visible outpouring of an imitative product that was genuinely new several years previously when a single innovator launched it. Simple arithmetic tells us that there is more imitation than innovation. At the beginning a genuinely new product, process or service generally has only one innovator. But later there are hordes of imitators. No single company can be, or can prudently afford to be, as constant an innovator as it is compelled to be an imitator.

Question Description

Organize the following statements in a logical sequence in tune with the sense of the above passage

- (i) There is abundant innovation taking place in our society.
- (ii) As such, there are large number of imitators for every genuine innovation.
- (iii) In fact, no company can afford to remain exclusively dedicated to innovation.
- (iv) But what is seen as innovation is many a time just imitation.

A

(i), (ii), (iii) and (iv)

B

(i), (iv), (iii) and (ii)

C

(iii), (iv), (i) and (ii)

D

(iii), (iv), (ii) and (i)

E

None of the above

Correct Answer

B

Marks

1

39

Comprehension

Read the passage below and answer the questions:

Innovations, new product development, extending the lines and expanding the markets of existing products by adding new features, styles, packaging, pricing, all these inexorably belong to the arsenal of devices by which a modern company competes. Innovation is an abundant commodity in our society. But probably it is less abundant than many of us assume. We often mistake innovation for what is imitation, the large and visible outpouring of an imitative product that was genuinely new several years previously when a single innovator launched it. Simple arithmetic tells us that there is more imitation than innovation. At the beginning a genuinely new product, process or service generally has only one innovator. But later there are hordes of imitators. No single company can be, or can prudently afford to be, as constant an innovator as it is compelled to be an imitator.

Question Description

From the options given below, identify the one nearest in meaning to “inexorably” as it is used in the above passage

A

unstoppably

B

relentlessly

C

unbendingly

D

unavoidably

E

None of the above

Correct Answer

D

Marks

1

40

Comprehension

Read the passage below and answer the questions:

Innovations, new product development, extending the lines and expanding the markets of existing products by adding new features, styles, packaging, pricing, all these inexorably belong to the arsenal of devices by which a modern company competes. Innovation is an abundant commodity in our society. But probably it is less abundant than many of us assume. We often mistake innovation for what is imitation, the large and visible outpouring of an imitative product that was genuinely new several years previously when a single innovator launched it. Simple arithmetic tells us that there is more imitation than innovation. At the beginning a genuinely new product, process or service generally has only one innovator. But later there are hordes of imitators. No single company can be, or can prudently afford to be, as constant an innovator as it is compelled to be an imitator.

Question Description

Read the following statement and from the options provided below it, identify the one that closely represents its meaning

“No single company can be, or can prudently afford to be, as constant an innovator as it is compelled to be an imitator”.

A

It not possible for a single company to be always an innovator because it is compelled by other companies to be an imitator

B

It is impossible for a single company not to be an imitator because it is compelled by other innovators to be an imitator

C

It is neither possible nor financially wise for a single company to always remain an innovator as the circumstances compel it to be an imitator

D

It is not at all possible for a single company not to be a wise innovator because business situations compel it to be an imitator

E

None of the above

Correct Answer

C

Marks

1

41

Question Description

Who is the highest wicket-taker for India in ODI World Cup history?

A

Zaheer Khan

B

Javagal Srinath

C

Mohammed Shami

D

Kapil Dev

E

None of the above

Correct Answer

C

Marks

1

| | | |
|----|-----------------------------|--|
| 42 | Question Description | On which date is World Radiography Day observed each year? |
| | A | 8th November |
| | B | 9th November |
| | C | 2nd December |
| | D | 5th February |
| | E | None of the above |
| | Correct Answer | A |
| | Marks | 1 |

| | | |
|----|-----------------------------|---|
| 43 | Question Description | Which company partnered with Nokia to launch India's first WiFi6-ready broadband network? |
| | A | TATA Play Fiber |
| | B | JioFiber |
| | C | Airtel Fiber |
| | D | BSNL Fiber |
| | E | None of the above |
| | Correct Answer | A |
| | Marks | 1 |

| | | |
|----|-----------------------------|---|
| 44 | Question Description | Who inaugurated the 71st Foundation Day of the Employees' Provident Fund Organization (EPFO)? |
| | A | Narendra Modi |
| | B | Bhupender Yadav |
| | C | Amit Shah |
| | D | Nirmala Sitharaman |
| | E | None of the above |
| | Correct Answer | B |
| | Marks | 1 |

| | | |
|----|-----------------------------|--|
| 45 | Question Description | On which date is National Unity Day celebrated in India? |
| | A | October 30 |
| | B | October 31 |
| | C | November 1 |
| | D | November 2 |
| | E | None of the above |
| | Correct Answer | B |
| | Marks | 1 |

| | | |
|----|-----------------------------|--|
| 46 | Question Description | Which of the following organizations is set to launch its "One Nation, One Registration platform"? |
| | A | Election Commission of India |
| | B | National Medical Commission |
| | C | Reserve Bank of India |
| | D | National Human Rights Commission |
| | E | None of the above |
| | Correct Answer | B |
| | Marks | 1 |

| | | |
|----|-----------------------------|---|
| 47 | Question Description | What is the name of the world's first Artificial Intelligence Safety agreement? |
| | A | Bletchley Declaration |
| | B | Frontier Declaration |
| | C | Global AI Safety Declaration |
| | D | Universal AI Safety Agreement |
| | E | None of the above |
| | Correct Answer | A |
| | Marks | 1 |

| | | |
|----|-----------------------------|--|
| 48 | Question Description | The term "Kavach" often seen in the news refers to _____. |
| | A | The indigenously developed train collision avoidance system |
| | B | A new type of armour developed for the Indian Army |
| | C | An anti-missile system developed by the Defence Research and Development Organisation (DRDO) |
| | D | The satellite was developed by the Indian Space Research Organisation (ISRO) |
| | E | None of the above |
| | Correct Answer | A |
| | Marks | 1 |

| | | |
|----|-----------------------------|---|
| 49 | Question Description | Which city in Gujarat is the first to have an Indian Navy warship named after it? |
| | A | Ahmedabad |
| | B | Rajkot |
| | C | Vadodara |
| | D | Surat |
| | E | None of the above |
| | Correct Answer | D |
| | Marks | 1 |

50

| | |
|-----------------------------|--|
| Question Description | Which country announced visa-free entry for Indian citizens from November 10, 2023, to May 10, 2024, to boost tourism? |
| A | India |
| B | Thailand |
| C | Taiwan |
| D | Sri Lanka |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

51

| | |
|-----------------------------|---|
| Question Description | A tank is filled by three pipes with uniform flow. The first two pipes operating simultaneously fill the tank in the same time during which the tank is filled by the third pipe alone. The second pipe fills the tank 5 hours faster than the first pipe and 4 hours slower than the third pipe. The time required by the first pipe is: |
| A | 6 hours |
| B | 10 hours |
| C | 15 hours |
| D | 30 hours |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

52

| | |
|-----------------------------|--|
| Question Description | If a bus travels 160 km in 4 hours and a train travels 320 km in 5 hours at uniform speeds, then what is the ratio of the distances travelled by them in one hour? |
| A | 8 : 5 |
| B | 5 : 8 |
| C | 4 : 5 |
| D | 1 : 2 |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

53

Question Description

Choose the correct water image of the given figure (X) from amongst the four alternatives.



(X)



(1)



(2)



(3)



(4)

A

1

B

2

C

3

D

4

E

None of the above

Correct Answer

D

Marks

1

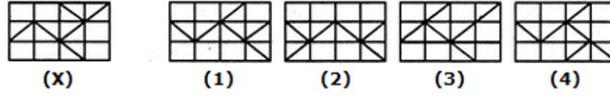
54

| | |
|-----------------------------|--|
| Question Description | For each of the words below, a contextual usage is provided. Pick the word from the alternatives given that is closest in the given context. ACCOMPLICE - The international community has learnt that it is more important to stop the accomplices who abet crime than the terrorists themselves. |
| A | Informers |
| B | Bootleggers |
| C | Partners in crime |
| D | Secret services |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

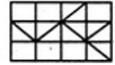
55

Question Description

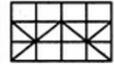
Choose the correct water image of the given figure (X) from amongst the four alternatives.



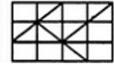
(X)



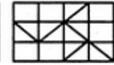
(1)



(2)



(3)



(4)

A

1

B

2

C

3

D

4

E

None of the above

Correct Answer

D

Marks

1

56

Question Description

Chaupat, Popat and Sarpat participate in a race of 'x' m. Chaupat finishes 18 m ahead of Popat and 24 m ahead of Sarpat. Popat finishes 8 m ahead of Sarpat. If none of the three changes his running speed during the race, then what is the value of x?

A

54

B

48

C

90

D

72

E

None of the above

Correct Answer

D

Marks

1

57

Question Description

The words in the bottom row are related in the same way as the words in the top row. For each item, find the word that completes the bottom row of words.

daisy flower plant

bungalow house ?

A

building

B

cottage

C

apartment

D

city

E

None of the above

Correct Answer

A

Marks

1

58

| | |
|-----------------------------|---|
| Question Description | The sum of their (father, mother and son) ages is 70. The father is 6 times as old as the son. When the sum of their ages is twice 70, the father will be twice as old as the son. How old is the mother? |
| A | 30 years and 5 months old |
| B | 28 years and 4 months old |
| C | 29 years and 2 months old |
| D | 25 years and 4 months old |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

59

Question Description

Choose the statement that is best supported by the information given

If you're a fitness walker, there is no need for a commute to a health club. Your neighborhood can be your health club. You don't need a lot of fancy equipment to get a good workout either. All you need is a well-designed pair of athletic shoes.

This paragraph best supports the statement that

A fitness walking is a better form of exercise than weight lifting.

B a membership in a health club is a poor investment.

C walking outdoors provides a better workout than walking indoors.

D fitness walking is a convenient and valuable form of exercise.

E None of the above

Correct Answer

D

Marks

1

60

| | |
|-----------------------------|---|
| Question Description | There are 100 students in a particular class. 60% students play cricket, 30% student play football and 10% student play both the games. What is the number of students who play neither cricket nor football? |
| A | 25 |
| B | 20 |
| C | 18 |
| D | 15 |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

61

Question Description

Mrs. Jansen recently moved to Arizona. She wants to fill her new backyard with flowering plants. Although she is an experienced gardener, she isn't very well-versed in what plants will do well in the Arizona climate. Also, there is a big tree in her backyard making for shady conditions and she isn't sure what plants will thrive without much direct sunlight. Her favorite gardening catalog offers several backyard seed packages. Which one should Mrs. Jansen choose?

A

The Rainbow Collection is ideal for North-east gardens. It includes a variety of colorful perennials that thrive in cool, moist conditions.

B

The Greenhouse Collection will blossom year after year if planted in brightly lit locations and watered regularly

C

The Treehouse Collection will provide lush green plants with delicate colorful flowers that thrive in shady and partially shady locations

D

The Oasis Collection includes a variety of perennials that thrive in dry climates and bright sunlight

E

None of the above

Correct Answer**C****Marks****1**

Question Description

Five persons - Pavan, Ravi, Sravan, Uday and Vikram got top five ranks in two subjects Maths and Physics, not necessarily in the given order. No two persons got the same rank in any subject and no person got the same rank in both the subjects. We have the following additional information.

- i. The number of persons who got a better rank than Uday in Maths is the same as the number of persons who got a better rank than Vikram in Physics.
- ii. Pavan got a better rank than Sravan in at least one of the subjects.
- iii. Ravi's rank in Maths is better than his rank in Physics.
- iv. In Physics, Vikram got a better rank than Uday.
- v. The sum of the ranks of Sravan is 4 and the sum of the ranks of any other person is not 4.
- vi. The rank of Ravi in one of the subjects is the same as the rank of Uday in the other subject.

Who got the fifth rank in maths?

A

Pavan

B

Ravi

C

Uday

D

Vikram

E

None of the above

Correct Answer

A

Marks

1

Question Description

Read the below passage carefully and answer the questions:

Some groups want to outlaw burning the flag. They say that people have fought and died for the flag and that citizens of the United States ought to respect that. But I say that respect cannot be legislated. Also, most citizens who have served in the military did not fight for the flag, they fought for what the flag represents. Among the things the flag represents is freedom of speech, which includes, I believe, the right for a citizen to express displeasure with the government by burning the flag in protest.

Which of the following is similar to the argument made by the speaker?

| | |
|-----------------------|--|
| A | The rich should not be allowed to "buy" politicians, so the Congress should enact campaign finance reform. |
| B | The idea of freedom of religion also means the right not to participate in religion, so mandated school prayer violates freedom of religion. |
| C | The Constitution guarantees freedom to own property, so taxes should be illegal. |
| D | Convicted felons should not have their convictions overturned on a technicality. |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

64

| | |
|-----------------------------|--|
| Question Description | Find the odd man out. 835, 734, 642, 751, 853, 981, 532 |
| A | 751 |
| B | 853 |
| C | 981 |
| D | 532 |
| E | None of the above |
| Correct Answer | A |
| Marks | 1 |

65

Question Description

The words in the bottom row are related in the same way as the words in the top row. For each item, find the word that completes the bottom row of words.

rule command dictate

doze sleep ?

A

snore

B

govern

C

awaken

D

hibernate

E

None of the above

Correct Answer

D

Marks

1

66

Question Description

Champak takes a test called RAT which comprises 28 questions. In RAT three marks are awarded for each correct response, one mark is deducted for each incorrect response and there are no marks for unattempted questions. If he scores more than 22 marks in RAT, then what is the maximum possible number of incorrect responses that he could have marked?

A

14

B

15

C

16

D

17

E

None of the above

Correct Answer

B

Marks

1

| | | |
|----|-----------------------------|---|
| 67 | Question Description | It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010? |
| | A | Sunday |
| | B | Saturday |
| | C | Friday |
| | D | Wednesday |
| | E | None of the above |
| | Correct Answer | C |
| | Marks | 1 |

| | | |
|----|-----------------------------|--|
| 68 | Question Description | 4, 20, 120, 840, ?, 6720 . Identify the number on the place of ‘?’ |
| | A | 5880 |
| | B | 5040 |
| | C | 6720 |
| | D | 7560 |
| | E | None of the above |
| | Correct Answer | C |
| | Marks | 1 |

69

Question Description

Here are some words translated from an artificial language.

migenlasan means cupboard

lasanpoen means boardwalk

cuopdansa means pullman

Which word could mean "walkway"?

A

poenmigen

B

lasandansa

C

cuopeisel

D

poenforc

E

None of the above

Correct Answer

D

Marks

1

70

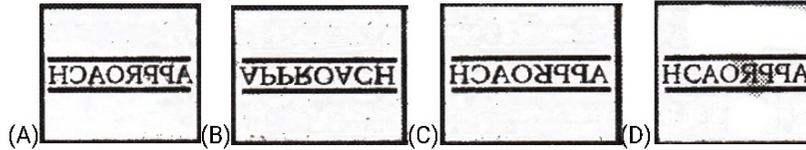
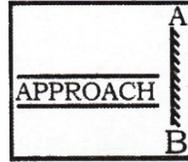
| | |
|-----------------------------|--|
| Question Description | Find missing number 3, 7, 6, 5, 9, 3, 12, 1, 15, (....) |
| A | 18 |
| B | 13 |
| C | -1 |
| D | 3 |
| E | None of the above |
| Correct Answer | C |
| Marks | 1 |

71

Question Description

Which of the given answer figures will be the correct image of the question figure it will be water image or mirror image?

Question Figure



A

A

B

B

C

C

D

D

E

None of the above

Correct Answer

A

Marks

1

72

| | |
|-----------------------------|---|
| Question Description | A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day? |
| A | 12 days |
| B | 15 days |
| C | 16 days |
| D | 18 days |
| E | None of the above |
| Correct Answer | B |
| Marks | 1 |

73

| | |
|-----------------------------|---|
| Question Description | If 'P X Q' means 'P is the mother of Q', 'P + Q' means 'Q is the sister of P' and 'P - Q' means 'P is the daughter of Q', then how will 'A is the aunt of B' be denoted? (Take A, B and C as three variables) |
| A | $B + A - C$ |
| B | $A \times C - B$ |
| C | $C - B + A$ |
| D | $B - C + A$ |
| E | None of the above |
| Correct Answer | D |
| Marks | 1 |

Question Description

Answer the questions based on the information given below.

In a small island, inhabited by a tribe, after every five years, on January 1 elections take place to elect the leader of the tribe. A person of age 20 years or more is eligible to cast his/her vote. In every election, every person who is eligible to vote casts his/her vote. The following table gives the number of people of different age groups, who have cast their votes in the five elections from 1989 through 2009.

| | 1989 | 1994 | 1999 | 2004 | 2009 |
|---------------------------|------|------|------|------|------|
| Age < 40 years | 219 | 190 | 192 | 220 | 225 |
| $40 \leq \text{Age} < 60$ | 236 | 250 | 200 | 220 | 216 |
| $60 \leq \text{Age}$ | 205 | 200 | 250 | 220 | 230 |

A What is the least possible number of people who died between 1989 and 2009?

B 211

C 50

D 214

E None of the above

Correct Answer C

Marks 1

75

Question Description

Each question presents a situation and asks you to make a judgment regarding that particular circumstance. Choose an answer based on given information.

The school principal has received complaints from parents about bullying in the school yard during recess. He wants to investigate and end this situation as soon as possible, so he has asked the recess aides to watch closely. Which situation should the recess aides report to the principal?

A A girl is sitting glumly on a bench reading a book and not interacting with her peers.

B Four girls are surrounding another girl and seem to have possession of her backpack.

C Two boys are playing a one-on-one game of basketball and are arguing over the last basket scored.

D Three boys are huddled over a handheld video game, which isn't supposed to be on school grounds.

E None of the above

Correct Answer B

Marks 1