Prepp

Your Personal Exams Guide

NDA	CDS	SSC CGL	CBSE UGC NET
IAS	SSC CHSL	CTET	MPSC
AFCAT	CSIR UDC NET	IBPS PO	UP POLICE
SSC MTS	SBI PO	BPSC	UPTET
IBPS RRB	IBPS CLERK	IES	UPSC CAPF
SSC Stenogr..	RRB NTPC	SSC GD	RBI GRADE B
RBI Assistant	DSSSB		

SSC GD Constable 2022 (English) Prev. Year Paper (16-Jan-2023) (Shift 1)

Total Time: 1 Hour   **Total Marks:** 160

Instructions

SI No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks
1	General Intelligence and Reasoning	20	40	0.5	2
2	General Knowledge and General Awareness	20	40	0.5	2
3	Elementary Mathematics	20	40	0.5	2
4	English	20	40	0.5	2

1.) A total of 60 minutes is allotted for the examination.

2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.

3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

General Intelligence and Reasoning

1. Three statements are given followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements. **(+2, -0.5)**

   Statements:

   All stems are leaves.

   All fruits are leaves.

   All leaves are trunks.

   Conclusions:

   I. All fruits are trunks.

   II. All trunks are stems.

   III. Some trunks are fruits.

   a. Only conclusions II and III follow

   b. Only conclusions I and II follow

   c. Only conclusions I and III follow

   d. All conclusions follow

---

2. Which of the following terms will replace the question mark (?) in the given series? **(+2, -0.5)**

   BGR, CIV, ELZ, HPD, LUH, ?

   a. QBL

b. QAK

c. QBK

d. QAL

---

3. Select the option that is related to the fifth letter-cluster in the same way as   (+2, -0.5)
the second letter-cluster is related to the first letter-cluster and the fourth
letter-cluster is related to the third letter-cluster.

QPON : RRRR :: IJGK : JLJO :: PKON : ?

a. QMRR

b. RQRM

c. MQRR

d. RRMQ

---

4. Select the correct mirror image of the given figure when the mirror is   (+2, -0.5)
placed at MN as shown below.

a.

b.

c.

d.

---

5. Select the number from among the given options that can replace the question mark (?) in the following series. (+2, -0.5)

83, 299, 424, 488, ?

a. 415

b. 515

c. 625

d. 589

---

6. Select the option that is related to the fifth term in the same way as the second term is related to the first term and the fourth term is related to the third term. (+2, -0.5)

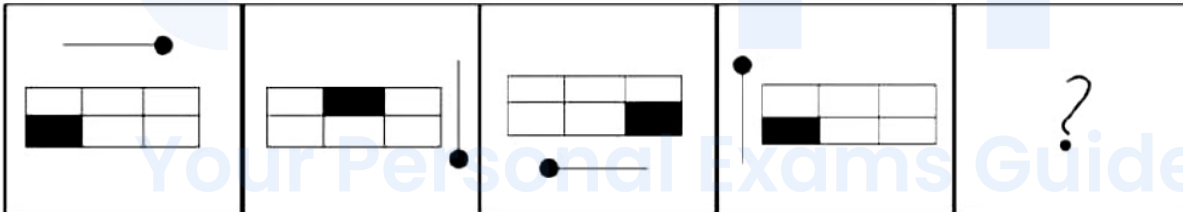BIND : FFKH :: ROMP : VLJT :: SPUN : ?
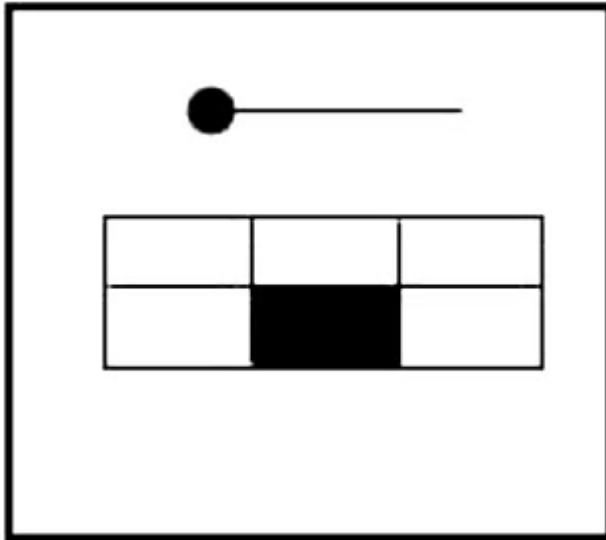
a. WMRR

b. VLRS

c. VLQR

d. WMQS

---

7. Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.   (+2, -0.5)
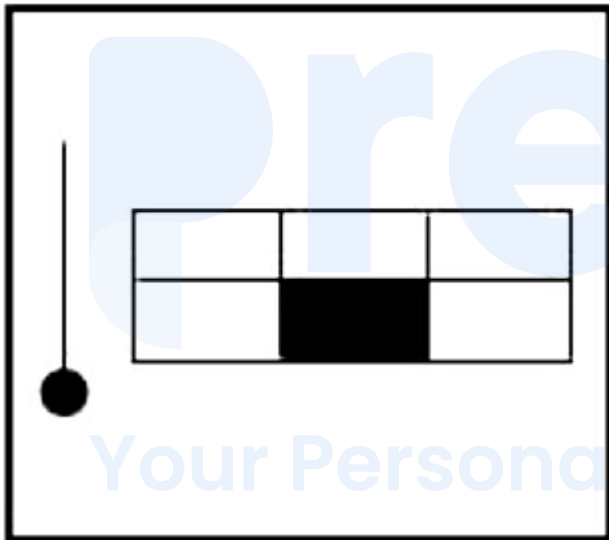
11 * 10 * 10 * 240 * 2

a. ×, ÷ , =, +

b. ×, +, =, ÷

c. =, +, ÷, ×

d. ÷, ×, =, +

---

8. Select the figure that will come in place of the question mark (?) in the following figure series.   (+2, -0.5)
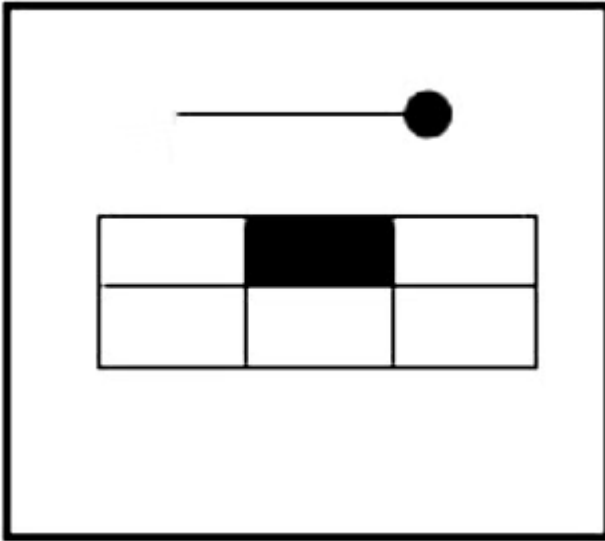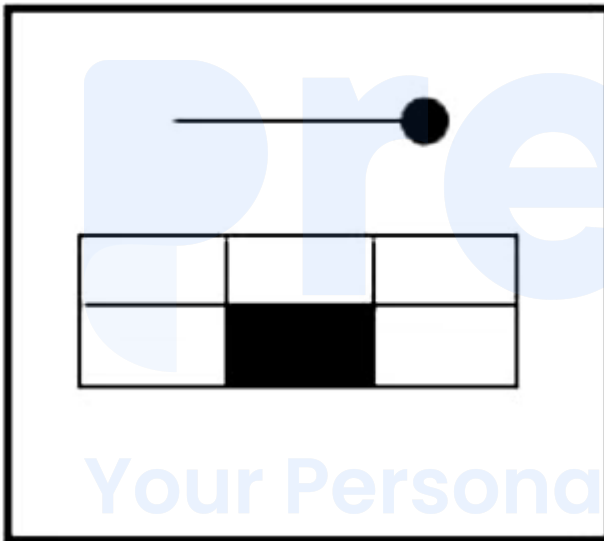
a.

b.

c.

d.

---

9. Seven people, A, B, C, D, E, F and G are sitting in a straight row, facing north. **(+2, -0.5)** A sits second from the left. Only two people sit between A and C. Only three people sit between D and F and D is an immediate neighbour of A. B is an immediate neighbour of D and E is not an immediate neighbour of C. Who sits to the extreme left?

a. G

b. E

    c. D

    d. F

---

10. In a certain code language, 'grasshopper ant' is coded as 'ja do', 'seed blade' is coded as 'ju fo', 'blade ant' is coded as 'fo do', and 'grasshopper seed' is coded as 'ja ju'. What is the code for 'blade'? **(+2, -0.5)**

    a. fo

    b. zu

    c. ja

    d. do

---

11. Which two signs should be interchanged to make the below equation mathematically correct? **(+2, -0.5)**

48 + 36 − 81 × 9 ÷ 2 = 66

    a. + and −

    b. × and +

    c. ÷ and ×

    d. ÷ and −

---

12. Which of the following letter-clusters will replace the question mark (?) in the given series? **(+2, -0.5)**

DHVY, GKSV, ?, MQMP, PTJM

a. JNPS

b. JPMR

c. KNPR

d. JNQS

---

13. Six students are sitting around a circular table facing the centre. F is an immediate neighbour of A. D sits second to the right of E. B is an immediate neighbour of E and sits second to the right of C. F sits second to the right of D. A is not an immediate neighbour of E. Who sits to the immediate left of E?   (+2, -0.5)
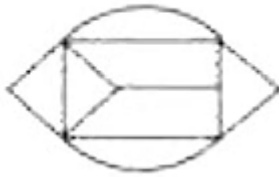
a. C

b. F

c. A

d. B

---

14. Select the option figure in which the given figure is embedded. (Rotation is NOT allowed).   (+2, -0.5)
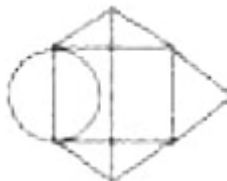
a.

b.
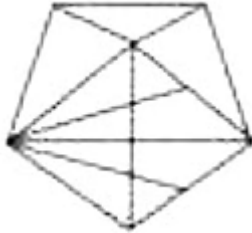
c.
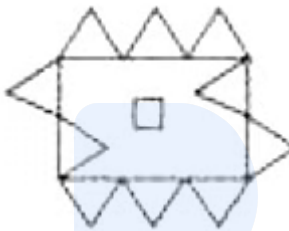
d.

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15. Looking at a photograph, Anjali said, "He is the only son of my father." How is the man in the photograph related to Anjali?   **(+2, -0.5)**

   a. Brother

   b. Father's father

   c. Son

   d. Mother's father

---

16. Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.   **(+2, -0.5)**

   13 : 225 :: 16 : ? :: 17 : 361

---

a. 376

b. 324

c. 345

d. 328

---

17. Which of the following numbers will replace the question mark (?) in the given series? **(+2, -0.5)**

10, 11, 15, 42, 58, 183, ?

a. 218

b. 217

c. 220

d. 219

---

18. A paper is folded and cut as shown below. How will it appear when unfolded? **(+2, -0.5)**

a.

b.

c.
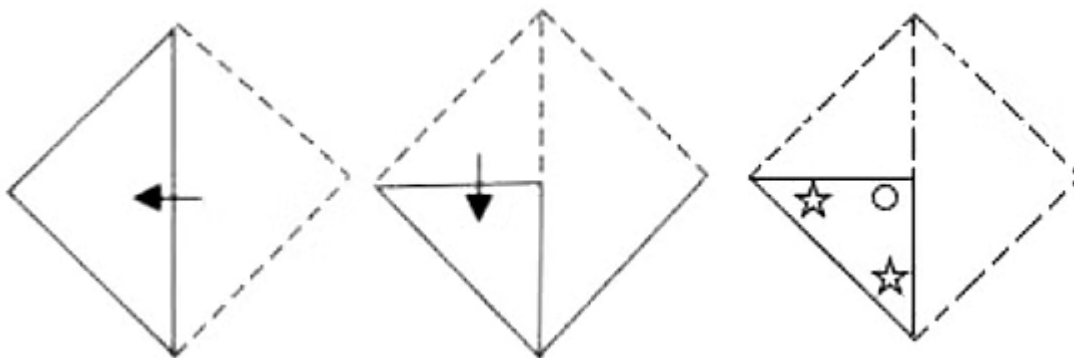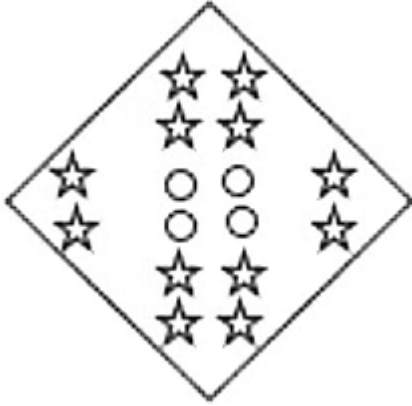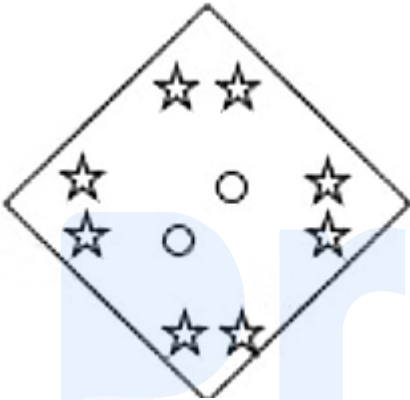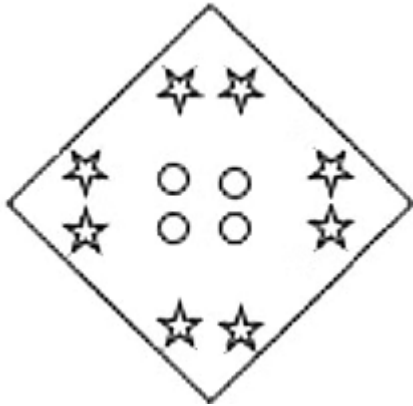
d.

---

19. In a certain code the word 'BARK' is numerically coded as 5132 . The word   **(+2, -0.5)**
'BEND' is numerically coded as 5749 . How is the word 'BEARD' numerically
coded in the same code?

   a. 57123

   b. 51739

   c. 57132

   d. 57139

---

20. Which of the following options represents the correct order of the given   **(+2, -0.5)**
words as they would appear in the English dictionary?

   1. Glob

   2. Globule

   3. Global

   4. Globe

   5. Gloom

   a. 3, 4, 2, 1, 5

b. 1, 3, 4, 2, 5

c. 1, 3, 4, 5, 2

d. 1, 2, 4, 3, 5

General Knowledge and General Awareness

21. The World Chess Champion Vishwanathan Anand belongs to which Country? **(+2, -0.5)**

   a. India

   b. Sri Lanka

   c. Nepal

   d. Bangladesh

---

22. As of 10 April 2022, how many general elections have been held to the Lok Sabha? **(+2, -0.5)**

   a. 19

   b. 15

   c. 21

   d. 17

---

23. Plastids containing _ _ _ _ _ _ _ _ _ pigment chlorophyll are called chloroplasts. **(+2, -0.5)**

   a. brown

   b. yellow

   c. green

   d. colourless

24. Who among the following was awarded the Sangeet Natak Akademi Award in 2001?   (+2, -0.5)

    a. Sonal Mansingh

    b. Anuradha Pandey

    c. M.R Krishnamurthy

    d. Alarmel Valli

25. _____, who lived in the court of Kanishka, composed a biography of the Buddha, the Buddhacharita.   (+2, -0.5)

    a. Mathara

    b. Nagarjuna

    c. Ashvaghosha

    d. Samgharaksha

26. _____ restrict/s imports and help/s domestic producers from foreign competition.   (+2, -0.5)

    (A) Tariffs

    (B) Quotas

    a. Neither A nor B

    b. Both A and B

    c. Only A

d. Only B

---

27. Which industry does aluminium smelting belong to? (+2, -0.5)

a. textile Industry

b. chemical industry

c. sugar Industry

d. metallurgical industry

---

28. Which of the following is an outer planet of the solar system? (+2, -0.5)

a. Venus

b. Earth

c. Mercury

d. Saturn

---

29. Which of the following dance forms is associated with Sikkim? (+2, -0.5)

a. Tashi Sabdo

b. Munari

c. Bhangra

d. Kolattam

---

30. The Goods and Services Tax, Act commenced from _____. (+2, -0.5)

a. 1 July 2017

b. 1 April 2018

c. 1 July 2016

d. 1 April 2016

---

31. How many elements were known when Mendeleev started his work?   (+2, -0.5)

a. 63

b. 73

c. 93

d. 53

---

32. Which neighbouring country of India is NOT a part of Commonwealth   (+2, -0.5)
Games?

a. China

b. Bangladesh

c. Pakistan

d. Sri Lanka

---

33. Which of the following harvest festivals is primarily celebrated by the   (+2, -0.5)
people of western Odisha?

a. Onam

b. Gudi Padwa

c. Wangala

d. Nuakhai

---

34. Which of the following is a stroke use in swimming? **(+2, -0.5)**

a. Shark

b. Butterfly

c. Lion

d. Dog

---

35. The 42nd Amendment Act in 1976 inserted which new Part in the Indian Constitution? **(+2, -0.5)**

a. Part II A

b. Part I A

c. Part IV A

d. Part III A

---

36. Which political leader won the bypoll election from Gola Gokarannath constituency in Uttar Pradesh, in November 2022? **(+2, -0.5)**

a. Piyush Goyal

b. Vikram Singh Saini

c. Azam Khan

d. Aman Giri

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37. Who has been appointed as the Governor of West Bengal in November 2022?   (+2, -0.5)

   a. Jagdeep Dhankhar

   b. C. V. Ananda Bose

   c. La. Ganesan

   d. D.Y. Patil

---

38. Jallianwala Bagh massacre happened in 1919. Where is Jallianwala Bagh located?   (+2, -0.5)

   a. Haryana

   b. Uttar Pradesh

   c. Madhya Pradesh

   d. Punjab

---

39. The interest rate at which the Reserve Bank absorbs liquidity from banks against the collateral of eligible government securities under the LAF is called the _____.   (+2, -0.5)

   a. Rent rate

   b. Statutory rate

c. Repo rate

d. Reverse repo rate

---

40. The utilization of industrial waste and the discarded agricultural wastes of modern enterprises are led to _____.   (+2, -0.5)

a. highest level

b. High level

c. Low level

d. optimum level

Elementary Mathematics

41. S buys sugar for Rs. 40 per kg and sells at Rs. x per kg. Due to a fault in the weighing machine, it shows 1 kg when the actual weight is 800 gm. What is the value of x per kg if his profit percentage is 30%?   (+2, -0.5)

    a. 48.6

    b. 46.1

    c. 41.6

    d. 52.1

---

42. The difference in compound interest, under annual compounding, and simple interest on a certain sum at the same rate of interest in 2 years is 144% of the sum. Find the rate of interest per annum.   (+2, -0.5)

    a. 100%

    b. 120%

    c. 20%

    d. 15%

---

43. What is the height of a solid cylinder whose radius is 7 cm and total surface area is 1144 cm^2?   (+2, -0.5)

    $\left(\text{Use } \pi = \frac{22}{7}\right)$

    a. 19 cm

    b. 22 cm

c. 12 cm

d. 18 cm

---

44. A man rows upstream 15 km and downstream 18 km, he takes 3 hours each time. The speed of the current is: **(+2, -0.5)**

a. $\frac{1}{2}$ km /h

b. $\frac{3}{2}$ km /h

c. 1 km /h

d. 2 km /h

---

45. The radius of a hemisphere is 21 cm. Its volume (in cm^3) will be: **(+2, -0.5)**

(Use π = 22/7)

a. 19404

b. 20112

c. 21109

d. 22101

---

46. M can do a piece of work in 12 days and N in 24 days. They begin together, but M leaves the work 6 days before the completion of the work. Find the total number of days to complete the entire work. **(+2, -0.5)**

a. 10 days

b. 12 days

c. 7 days

d. 6 days

---

47. The population of a village is 24000 . If it is expected to decrease by 4   **(+2, -0.5)** percent the next year, then what will be the population of the village next year?

   a. 23520

   b. 22080

   c. 22560

   d. 23040

---

48. Find the LCM of $\frac{2}{5}$, $\frac{4}{15}$ and $\frac{6}{25}$.   **(+2, -0.5)**

   a. $\frac{12}{7}$

   b. $\frac{11}{5}$

   c. $\frac{12}{5}$

   d. $\frac{5}{12}$

---

49. Ravi can decorate a wall in 6 hours, while Ankita can decorate the same   **(+2, -0.5)** wall in 10 hours. In how many hours will they decorate the wall working simultaneously?

   a. 4.75 hours

   b. 4 hours

c. 3 hours

d. 3.75 hours

---

50. A dealer marked the price of an item 45% more than its cost price and sold it by allowing a discount of 20%. Find his profit percentage. **(+2, -0.5)**

   a. 30%

   b. 25%

   c. 20%

   d. 16%

---

51. In a bag of rice of Rs. 70 per kg, two different types are mixed. First type of rice is 8 kg in quantity of Rs.60 per kg, while the second type of rice is 4 kg in quantity. What is the price per kg of the second type of rice? **(+2, -0.5)**

   a. Rs. 75

   b. Rs. 65

   c. Rs. 80

   d. Rs. 90

---

52. If the length of a rectangle is reduced by 15% and breadth is increased by 10%, what is the percentage change in the area of the rectangle? **(+2, -0.5)**

   a. 5.6% decrement

   b. 5.6% increment

c. 6.5% decrement

d. 6.5% increment

---

53. A store announces the following three schemes to sell its articles. Which of these gives the maximum discount to the buyer? **(+2, -0.5)**

A. Two successive discounts of 20% and 24%

B. Buy 5 get 3 free

C. Buy 13 get 7 free

a. All are equal

b. B

c. C

d. A

---

54. Rani goes to school from home at a certain speed and returns to home at the speed of 50 km/h. If the distance between her home and school is 20 km and the average speed of the whole journey is 37.5 km /h, then what is her speed from home to school? **(+2, -0.5)**

a. 35 km /h

b. 40 km /h

c. 30 km /h

d. 45 km /h

55. What principal will amount to Rs.5,324 in 2 years, when the interest is compounded at 10% per annum, compounding annually? (+2, -0.5)

a. Rs. 4,400

b. Rs. 4,324

c. Rs. 4,420

d. Rs. 4,440

56. A bike takes 3 hours to cover a distance of 162 km. What distance will it cover in 5 hours? (+2, -0.5)

a. 240 km

b. 292 km

c. 301 km

d. 270 km

57. A dishonest merchant uses a false weight of 200 gm instead of 250 gm. What is his profit percentage? (+2, -0.5)

a. 15%

b. 25%

c. 20%

d. 10%

58. A boat covers a distance of 375 metres in upstream in 30 min, and returns   **(+2, -0.5)**
back to the starting point in 18 min. Find the ratio of the speed of the boat
in still water and the speed of the stream.

   a. 5 : 6

   b. 7 : 13

   c. 13 : 7

   d. 4 : 1

---

59. If a : b = 2 : 7 and 343 is the third proportional to a and b, then the value of   **(+2, -0.5)**
b – a is:

   a. 98

   b. 70

   c. 49

   d. 126

---

60. Evaluate $65 \div 13 \times 4 + (35 \div 7 \times 9)^2 + 100 \div 5$ of 4×80 **(+2, -0.5)**

   a. 2045

   b. 2445

   c. 2345

   d. 2545

61. Select the most appropriate option that can substitute the underlined segment in the given sentence. **(+2, -0.5)**

    <u>If we have to sending a mail today,</u> we shall get a reply in two days.

    a. If we would send a mail today

    b. If we send a mail today

    c. If we will send a mail today

    d. If we have sending a mail today

---

62. Select the option that expresses the given sentence in past tense form. **(+2, -0.5)**

    The home nurse is expecting a salary hike from the relatives of the new family.

    a. The home nurse will be expecting a salary hike from the relatives of the new family.

    b. The home nurse expects a salary hike from the relatives of the new family.

    c. The home nurse was expecting a salary hike from the relatives of the new family.

    d. The home nurse has been expecting a salary hike from the relatives of the new family.

---

63. Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully. **(+2, -0.5)**

The thief who (have taken the pony) was found guilty by the jury.

a. has took the pony

b. had taken the pony

c. have took the pony

d. has taken the pony

---

64. Select the MISSPELT word. (+2, -0.5)

a. Extrime

b. Eccentricity

c. Electricity

d. Excite

---

65. Select the most appropriate meaning of the given idiom. (+2, -0.5)

To be in the doldrums

a. To be in high energy and happiness

b. To be in utter confusion

c. To be in low and dull spirits

d. To be in helpless condition

---

66. Select the most appropriate option to fill in the blank. (+2, -0.5)

I am born and _ _ _ _ _ _ _ _ in a cultured family.

a. bare

b. bread

c. bred

d. beard

---

67. Select the most appropriate ANTONYM of the given word.   (+2, -0.5)

Cease

a. Terminate

b. Stop

c. Commence

d. Quit

---

68. Select the most appropriate option that can substitute the underlined   (+2, -0.5)
segment in the given sentence.

There is a <u>few rice left in</u> the cooker.

a. fewest rice left in

b. little rice left in

c. less rice left on

d. any rice left in

---

69. Select the most appropriate meaning of the given idiom.   (+2, -0.5)

The best thing since sliced bread

    a. A really good invention

    b. A thoroughly examined food

    c. An openly performed confession

    d. A sincerely made apology

---

70. **Direction: Select the most appropriate option to fill in the blank.**   **(+2, -0.5)**

Mechanical Engineering students from IIT, Madras, have developed an unnamed sailing boat that can reach any given destination _____.

    a. highly

    b. autonomously

    c. verbally

    d. collaboratively

---

71. Select the most appropriate synonym of the word given in the brackets to fill in the blank.   **(+2, -0.5)**

Consuming coffee every day can have _____ (negative) effects on one's health.

    a. hospitable

    b. adverse

    c. despairing

    d. arbitrary

72. Select the most appropriate synonym of the underlined word in the given sentence. **(+2, -0.5)**

    Instead of studying rules and definitions, Helen <u>acquired</u> language through experience and habit.

    a. Obtained

    b. Forfeited

    c. Admired

    d. Awarded

73. Select the most appropriate ANTONYM of the word given in the bracket to fill in the blank. **(+2, -0.5)**

    She was too (feeble) _ _ _ _ _ _ _ to leave her room.

    a. wimpy

    b. effete

    c. strong

    d. asthenic

74. Identify the INCORRECT spelling from the given sentence and select its correct spelling. **(+2, -0.5)**

    Voting allows every citezen to have a say in choosing who should run the government.

    a. allouse

b. chosing

c. goverment

d. citizen

---

75. Select the most appropriate synonym of the given word.   **(+2, -0.5)**

Contagion

a. Grandeur

b. Illusion

c. Transfusion

d. Transmission

---

76. In the following passage some words have been deleted. Fill in the blanks   **(+2, -0.5)**
with the help of the alternatives given. Select the most appropriate option
for each number.

low-pressure area characterised by rapid and frequently damaging air
circulation is what (1)_____ cyclones. Storms and (2)_____ weather
are frequently present during cyclones. In the Northern hemisphere, the
air moves counter clockwise, (3)_____ in the Southern hemisphere, it
moves clockwise. Extratropical cyclones, sometimes known as temperate
cyclones, and tropical cyclones are the two (4)_____ under which
cyclones fall. The name 'Cyclone' comes from the Greek word 'Cyclos'
which means a snake's coils. Henry Paddington came up with the term
because tropical storms in the Arabian Sea and Bay of Bengal
(5)_____ coiled sea serpents.

Select the most appropriate answer for blank 1.

a. inspires

b. spawns

c. destroys

d. generates

---

77. In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each number.

(+2, -0.5)

low-pressure area characterised by rapid and frequently damaging air circulation is what (1)_____ cyclones. Storms and (2)_____ weather are frequently present during cyclones. In the Northern hemisphere, the air moves counter clockwise, (3)_____ in the Southern hemisphere, it moves clockwise. Extratropical cyclones, sometimes known as temperate cyclones, and tropical cyclones are the two (4)_____ under which cyclones fall. The name 'Cyclone' comes from the Greek word 'Cyclos' which means a snake's coils. Henry Paddington came up with the term because tropical storms in the Arabian Sea and Bay of Bengal (5)_____ coiled sea serpents.

Select the most appropriate answer for blank 2.

a. unfavourable

b. accustomed

c. advantageous

d. unaccepted

---

78. In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each number.

(+2, -0.5)

low-pressure area characterised by rapid and frequently damaging air circulation is what (1)_____ cyclones. Storms and (2)_____ weather are frequently present during cyclones. In the Northern hemisphere, the air moves counter clockwise, (3)_____ in the Southern hemisphere, it moves clockwise. Extratropical cyclones, sometimes known as temperate cyclones, and tropical cyclones are the two (4)_____ under which cyclones fall. The name 'Cyclone' comes from the Greek word 'Cyclos' which means a snake's coils. Henry Paddington came up with the term because tropical storms in the Arabian Sea and Bay of Bengal (5)_____ coiled sea serpents.

Select the most appropriate answer for blank 3.

a. whereas

b. because

c. or

d. unless

---

79. In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each number.   (+2, -0.5)

low-pressure area characterised by rapid and frequently damaging air circulation is what (1)_____ cyclones. Storms and (2)_____ weather are frequently present during cyclones. In the Northern hemisphere, the air moves counter clockwise, (3)_____ in the Southern hemisphere, it moves clockwise. Extratropical cyclones, sometimes known as temperate cyclones, and tropical cyclones are the two (4)_____ under which cyclones fall. The name 'Cyclone' comes from the Greek word 'Cyclos' which means a snake's coils. Henry Paddington came up with the term because tropical storms in the Arabian Sea and Bay of Bengal (5)_____ coiled sea serpents.

Select the most appropriate answer for blank 4.

a. ranks

b. statuses

c. categories

d. species

---

80. In the following passage some words have been deleted. Fill in the blanks **(+2, -0.5)** with the help of the alternatives given. Select the most appropriate option for each number.

low-pressure area characterised by rapid and frequently damaging air circulation is what (1)_____ cyclones. Storms and (2)_____ weather are frequently present during cyclones. In the Northern hemisphere, the air moves counter clockwise, (3)_____ in the Southern hemisphere, it moves clockwise. Extratropical cyclones, sometimes known as temperate cyclones, and tropical cyclones are the two (4)_____ under which cyclones fall. The name 'Cyclone' comes from the Greek word 'Cyclos' which means a snake's coils. Henry Paddington came up with the term because tropical storms in the Arabian Sea and Bay of Bengal (5)_____ coiled sea serpents.
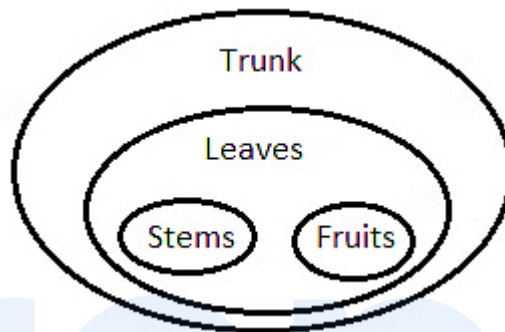
Select the most appropriate answer for blank 5.

a. collect

b. negate

c. mimic

d. resemble

Answers

1. **Answer: c**

   Explanation:

   The least possible Venn diagram for the given statement is:

   Conclusions:

   I. All fruits are trunks → **Follow** (As, all fruits are leaves and all leaves are trunks. So, as whole fruits comes in leaves which whole comes in trunk, therefore it is definitely true.)

   II. All trunks are stems → Does not **Follow** (As, all stems are leaves and a ll leaves are trunks. So, it is possible but not definitely true.)

   III. Some trunks are fruits → **Follow** (As whole fruits comes in leaves which whole comes in trunk, therefore it is definitely true.)

   So, Only conclusions I and III follow.

   Hence, the correct answer is **"Only conclusions I and III follow "**.

---

2. **Answer: d**

   Explanation:

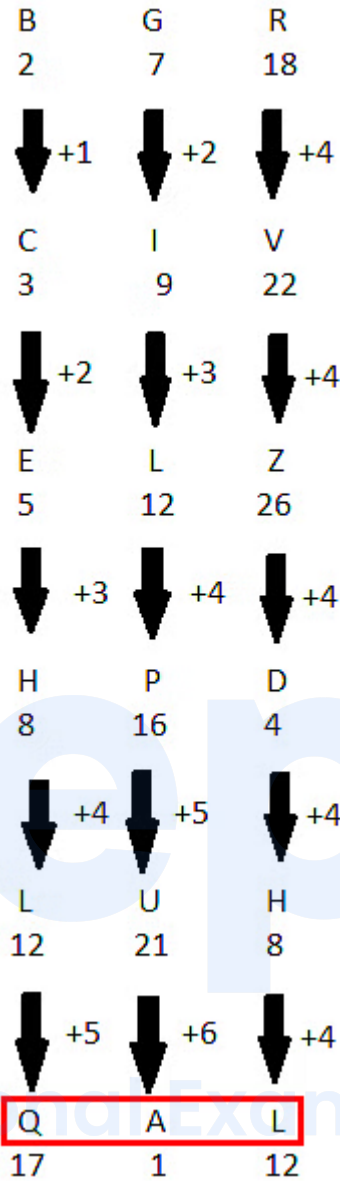| Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

Logic :

- First letter → Number series starting with (1) is added to the position value according to English alphabetic series.
- Second letter → Number series starting with (2) is added to the position value according to English alphabetic series.
- Third letter → (4) is added to the position value according to English alphabetic series.

So,

B	G	R
2	7	18

↓ +1   ↓ +2   ↓ +4

C	I	V
3	9	22

↓ +2   ↓ +3   ↓ +4

E	L	Z
5	12	26

↓ +3   ↓ +4   ↓ +4

H	P	D
8	16	4

↓ +4   ↓ +5   ↓ +4

L	U	H
12	21	8

↓ +5   ↓ +6   ↓ +4

Q	A	L
17	1	12

Hence, **"QAL "** is the correct answer.

---

3. **Answer: a**

    Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

The logic followed here is :

- First letter ⇒ (1) is added to the position value according English alphabetic series.
- Second letter ⇒ (2) is added to the position value according English alphabetic series.
- Third letter ⇒ (3) is added to the position value according English alphabetic series.
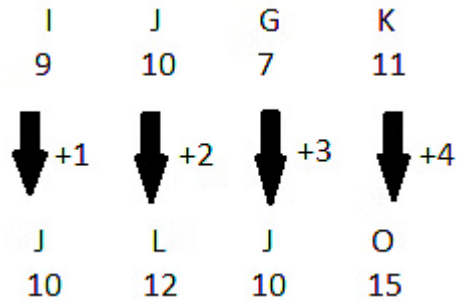- Fourth letter ⇒ (4) is added to the position value according English alphabetic series.

So,

- QPON : RRRR

And,
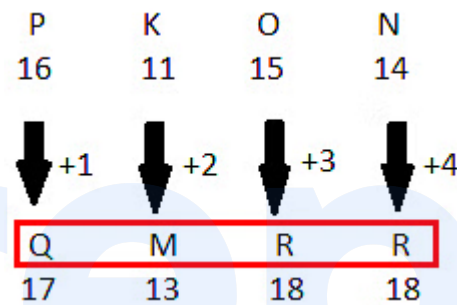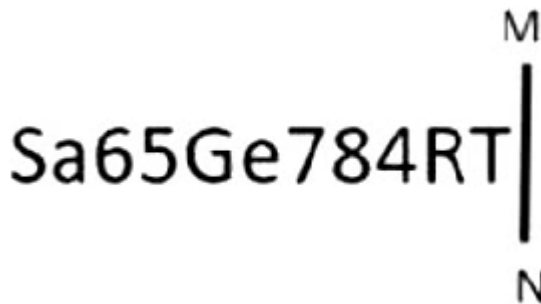
- IJGK : JLJO

I	J	G	K
9	10	7	11

↓ +1   ↓ +2   ↓ +3   ↓ +4

J	L	J	O
10	12	10	15

Similarly,

- PKON : ?

P	K	O	N
16	11	15	14

↓ +1   ↓ +2   ↓ +3   ↓ +4
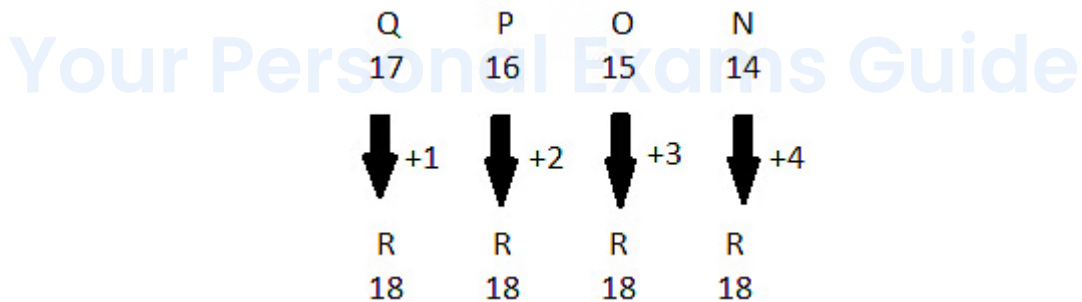
Q	M	R	R
17	13	18	18

Hence, **"QMRR "** is the correct answer.

---

4. **Answer: d**

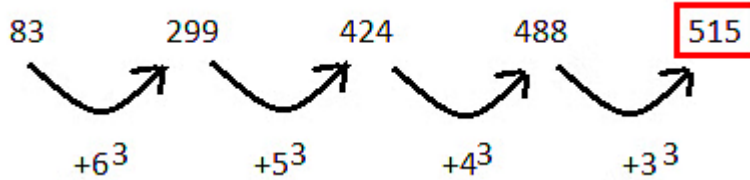**Explanation:**

M

Sa65Ge784RT|

N

TЯА8ГꝰꝲƧ∂6Ƨ

Hence, the correct answer is option 4.

5. Answer: b

Explanation:

Logic : Cube of decreasing number series is added to each number subsequently.

Hence, **"515"** is the correct answer.

6. Answer: a

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

The logic followed here is :

- First and fourth letters ⇒ (4) is added to the position value according English alphabetic series.
- Second and third letters ⇒ (3) is subtracted from the position value according English alphabetic series.

So,

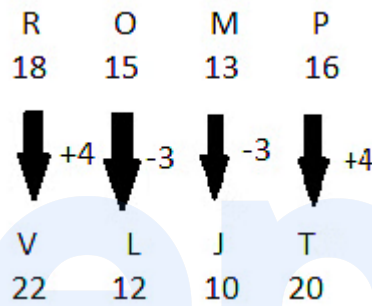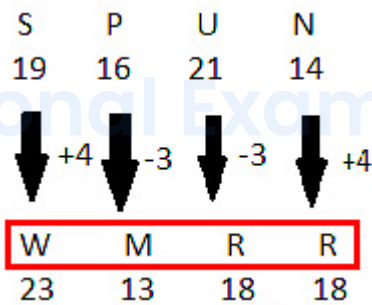- BIND : FFKH

B	I	N	D
2	9	14	4

↓ +4 ↓ -3 ↓ -3 ↓ +4

F	F	K	H
6	6	11	8

And,

- ROMP : VLJT

R	O	M	P
18	15	13	16

↓ +4 ↓ -3 ↓ -3 ↓ +4

V	L	J	T
22	12	10	20

Similarly,

- SPUN : ?

S	P	U	N
19	16	21	14

↓ +4 ↓ -3 ↓ -3 ↓ +4

W	M	R	R
23	13	18	18

Hence, **"WMRR "** is the correct answer.

---

7. **Answer: b**

Explanation:

B	Brackets in order (),{},[]	ब्रैकेट (),{},[] क्रम में
O	of	का
D	Division (÷)	विभाजन (÷)
M	Multiplication (×)	गुणा (×)
A	Addition (+)	जोड़े (+)
S	Subtraction (-)	घटाव (-)

Given statement : 11 * 10 * 10 * 240 * 2

According to the question, **after replacing the * signs** :

So,

- Option – (1) : ×, ÷ , =, +

11 * 10 * 10 * 240 * 2 ⇒ 11 × <u>10 ÷ 10</u> = <u>240 + 2</u>

<u>11 × 1</u> = 242

11 ≠ 242 (LHS ≠ RHS)

- Option – (2) : ×, +, =, ÷

11 * 10 * 10 * 240 * 2 ⇒ <u>11 × 10</u> + 10 = <u>240 ÷ 2</u>

<u>110 + 10</u> = 120

120 = 120 (LHS = RHS)

- Option – (3) : =, +, ÷, ×

11 * 10 * 10 * 240 * 2 ⇒ 11 = 10 + <u>10 ÷ 240</u> × 2

11 = 10 + <u>0.041 × 2</u>

11 ≠ 10.082 (LHS ≠ RHS)

- Option – (4) : ÷, ×, =, +

11 * 10 * 10 * 240 * 2 ⇒ **11 ÷ 10** × 10 = **240 + 2**

1.1 × 10 = 242

11 ≠ 242 (LHS ≠ RHS)

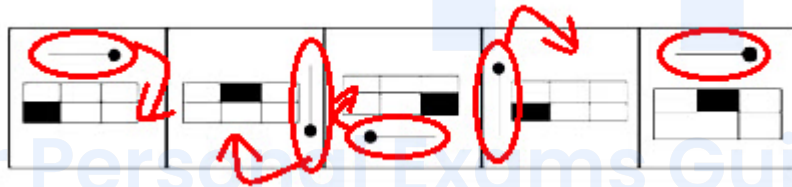Hence, "Option - (2)" is the correct answer.

---

8. **Answer: c**

Explanation:

The figure that will replace the question mark (?) in the following figure series is shown below:

1) For '
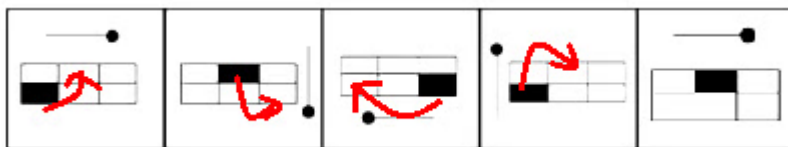

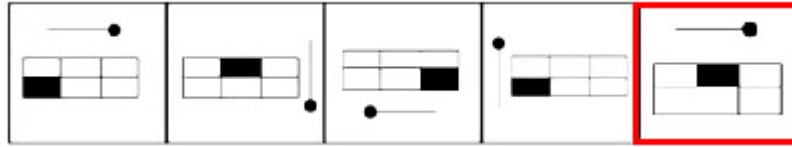' element → Shifting and rotating in the clockwise direction.

2) For '

' element → → Shaded area is shifting diagonally in the clockwise direction.

Final series is
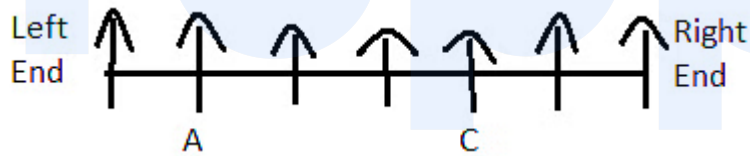
Hence, **'option - (3)'** is the correct answer.

---

9. Answer: b

Explanation:

Given : Seven people, A, B, C, D, E, F and G are sitting in a straight row, facing north.

Explanation :

1) A sits second from the left.
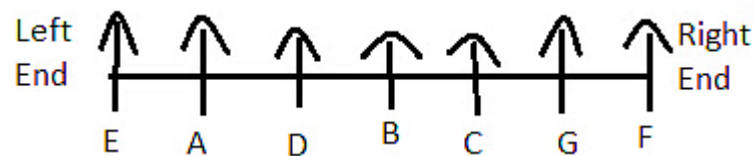
2) Only two people sit between A and C.

3) Only three people sit between D and F and D is an immediate neighbour of A.

4) B is an immediate neighbour of D and E is not an immediate neighbour of C.

After positioning E and B only one position is left which will be occupied by the only person left i.e G.

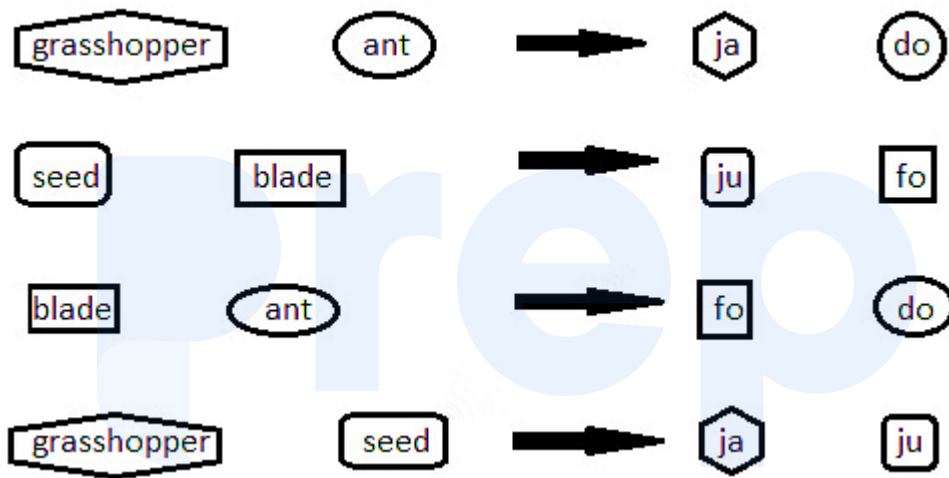Thus, according to the final arrangement E sits to the extreme left.

Hence, **"E"** is the correct answer.

---

10. **Answer: a**

Explanation:

The pattern followed here is :

Word	grasshopper	ant	seed	blade
Code	ja	do	ju	fo

Thus, code for blade is 'fo'.

Hence, **"fo"** is the correct answer.

---

11. **Answer: c**

Explanation:

B	Brackets in order (),{},[]	ब्रैकेट (),{},[] क्रम में
O	of	का
D	Division (÷)	विभाजन (÷)
M	Multiplication (×)	गुणा (×)
A	Addition (+)	जोड़े (+)
S	Subtraction (-)	घटाव (-)

Given statement : 48 + 36 − 81 × 9 ÷ 2 = 66

According to the question, **after interchanging the signs** :

So,

- Option − (1) : + and −

48 + 36 − 81 × 9 ÷ 2 = 66 ⇒ 48 − 36 + 81 × **9 ÷ 2** = 66

48 − 36 + **81 × 4.5** = 66

48 + 364.5 − 36 = 66

412.5 − 36 = 66

376.5 ≠ 66 (LHS ≠ RHS)

- Option − (2) : × and +

48 + 36 − 81 × 9 ÷ 2 = 66 ⇒ 48 × 36 − 81 + **9 ÷ 2** = 66

48 × 36 − 81 + 4.5 = 66

1728 + 4.5 − 81 = 66

1732.5 − 81 = 66

1651.5 ≠ 66 (LHS ≠ RHS)

- Option − (3) : ÷ and ×

48 + 36 − 81 × 9 ÷ 2 = 66 ⇒ 48 + 36 − <u>81 ÷ 9</u> × 2 = 66

48 + 36 − <u>9 × 2</u> = 66

<u>48 +36</u> − 18 = 66

<u>84 − 18</u> = 66

66 = 66 (LHS = RHS)

- Option − (4) : ÷ and −

48 + 36 − 81 × 9 ÷ 2 = 66 ⇒ 48 + <u>36 ÷ 81</u> × 9 − 2 = 66

48 + <u>0.44 × 9</u> − 2 = 66

<u>48 + 3.96</u> − 2 = 66

<u>51.96 − 2</u> = 66

49.96 ≠ 66 (LHS ≠ RHS)

Hence, "Option − (3)" is the correct answer.

---

12. **Answer: a**

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

Logic :

- First and second letters → (3) is added to the position value according to English alphabetic series.
- Third and fourth letters → (3) is subtracted from the position value according to English alphabetic series.

So,

D	H	V	Y
4	8	22	25

↓ +3 ↓ +3 ↓ -3 ↓ -3

G	K	S	V
7	11	19	22

↓ +3 ↓ +3 ↓ -3 ↓ -3

J	N	P	S
10	14	16	19

↓ +3 ↓ +3 ↓ -3 ↓ -3

M	Q	M	P
13	17	13	16

↓ +3 ↓ +3 ↓ -3 ↓ -3

P	T	J	M
16	20	10	16
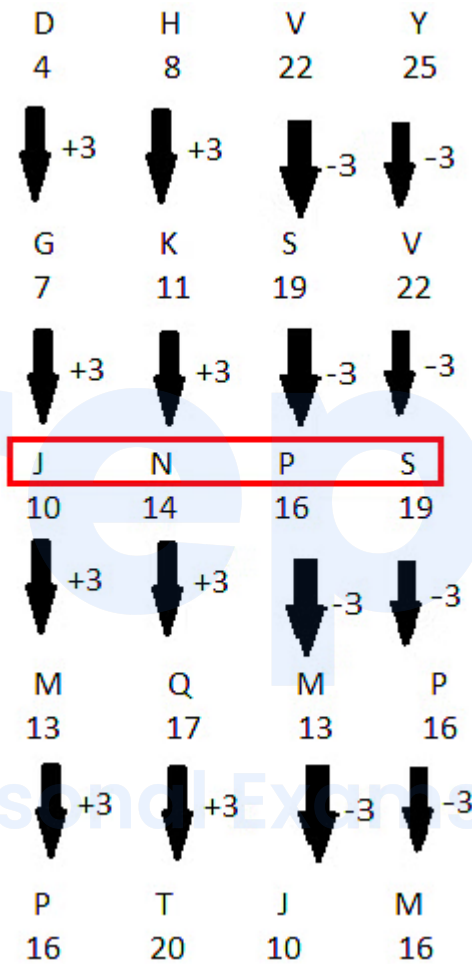
Hence, **" JNPS "** is the correct answer.

---

13. **Answer: a**

Explanation:

Given : Six students are sitting around a circular table facing the centre.
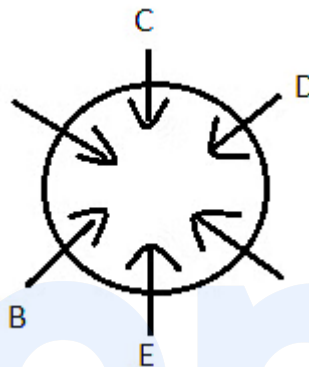
Explanation :

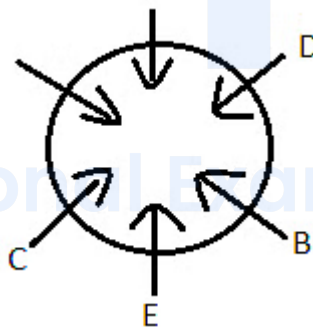1) D sits second to the right of E.

2) B is an immediate neighbour of E and sits second to the right of C.

As position of B is not known yet therefore there are two possible positions for B.

- Case - (1) :

- Case - (2) :

3) F sits second to the right of D.

4) F is an immediate neighbour of A.

As in case - (1) there is no possible position for A therefore, case - (1) is eliminated.

- Case - (2) :
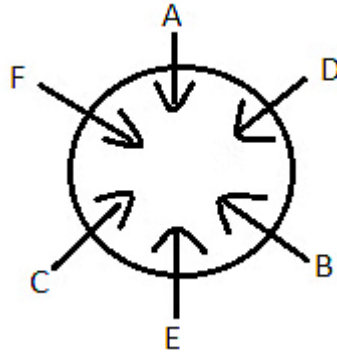
Thus, according to the final arrangement C sits to the immediate left of E.

Hence, **"C"** is the correct answer.

---

14. Answer: b

Explanation:

Given:
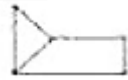
- The image must not to be rotated

No.	Option	Question	Answer
1.			Not Embedded
2.			Embedded
3.			Not Embedded
4.			Not Embedded

Hence, the correct answer is "Option – (2)".

15. **Answer: a**

Explanation:

Symbol in Diagram	Meaning
◯	Female
☐	Male
═	Married couple
—	Siblings
│	Difference of a generation

Given Statement : Looking at a photograph, Anjali said, "He is the only son of my father."
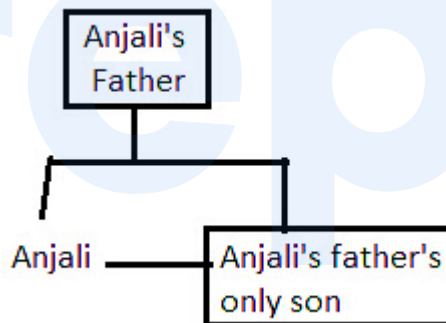
Thus, according to the final family tree the man in the photograph is brother of Anjali.

Hence, **"Brother"** is the correct answer.

---

16. **Answer: b**

Explanation:

Logic: $(1st number + 2)^2 = $ 2nd number.

Now,

13 : 225

→ $(13 + 2)^2 = 15^2 = 225$

For, 17 : 361

→ $(17 + 2)^2 = 19^2 = 361$

Similarly, for **16 : ?**

→ $(16 + 2)^2 = 18^2 = 324$

Hence, the correct answer is **"324"**.

---

17. Answer: d

Explanation:

Logic : Alternate series if cubes and squares are added subsequently.
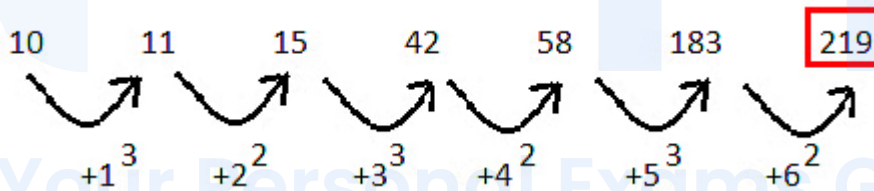
Hence, **"219"** is the correct answer.

---

18. Answer: d

Explanation:

The paper when unfolded will appear as shown below:
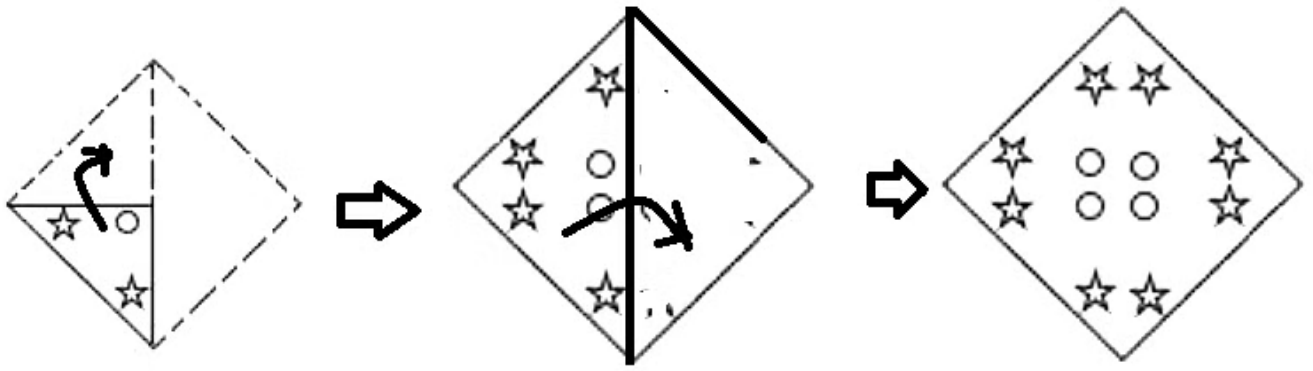
Hence, the correct answer is "Option 4".

---

19. **Answer: d**

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

The logic followed here is : No specific pattern is followed here, random digits are assigned to each letter.

So,

- 'BARK' is numerically coded as 5132

And,

- 'BEND' is numerically coded as 5749

B	E	N	D
2	5	14	4
↓	↓	↓	↓
5	7	4	9
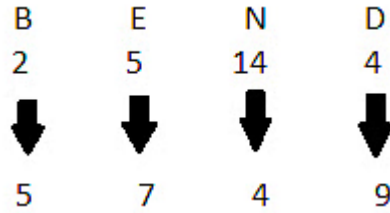
Thus, from the above it can be concluded as :

Letter	B	A	R	K	E	N	D
Code	5	1	3	2	7	4	9

Similarly,

- 'BEARD' will be numerically coded as :

B	E	A	R	D
2	5	1	18	4
↓	↓	↓	↓	↓
5	7	1	3	9
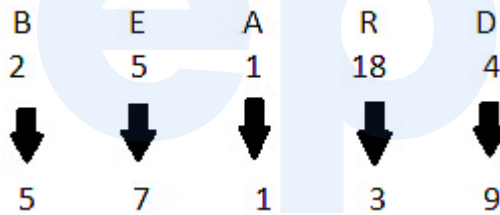
Hence, **"57139 "** is the correct answer.

---

20. **Answer: b**

Explanation:

According to the sequence in the dictionary:

The correct order of the given words is:

1. Glob

3. Global

4. Globe

2. Globule

5. Gloom

Hence, the correct answer is "1, 3, 4, 2, 5".

---

21. **Answer: a**

Explanation:

Vishwanathan Anand is a world-renowned chess player who has won numerous titles and championships. He hails from India and is considered a national treasure in the country. Anand's mastery of the game has earned him worldwide recognition and acclaim, and he continues to be a dominant force in the world of chess.

---

22. **Answer: d**

Explanation:

As of 10 April 2022, a total of 17 general elections have been held to the Lok Sabha. This information is important for understanding the history and political landscape of India, as well as for researchers and journalists who may need accurate data on past elections.

---

23. **Answer: c**

Explanation:

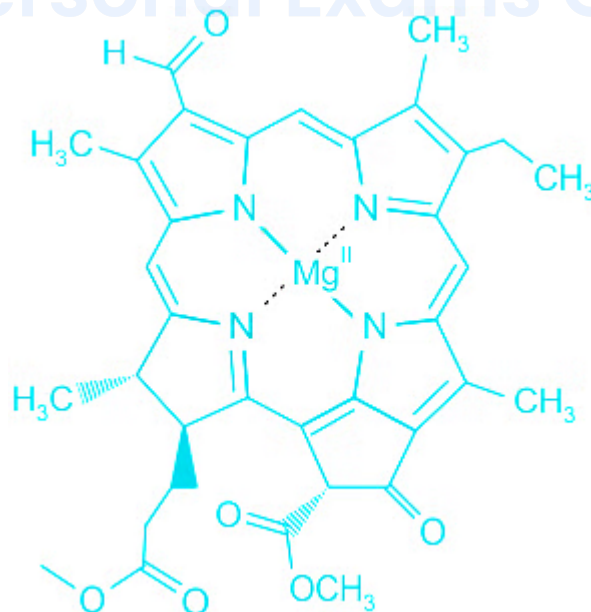The correct answer is **green**.

⭐ **Key Points**

- **Chloroplasts are plastids that contain chlorophyll pigment,** which is responsible for the green color in plants.

- Chlorophyll is essential for photosynthesis, the process by which plants **convert light energy** into chemical energy.
- Chloroplasts are the site of photosynthesis in plant cells and are crucial for the survival of plants.

⭐ <u>Additional Information</u>

Chlorophyll:

- **Chlorophyll** is a **green pigment** that absorbs light energy and converts it into chemical energy.
- This green pigment can also be **found in chloroplasts of algae and plants.**
- Chlorophyll is **essential in the photosynthesis process** because it allows plants to absorb energy from the sun's light.
- <u>Chlorophyll contains magnesium as its metallic constituent.</u>
- Magnesium is **located at the center of this pigment.**
- Magnesium **promotes the proper functioning of pigments** and also **stimulates the activity of some enzymes.**
- It is also **responsible for the green color of leaves.**
- Chlorophyll is divided into five types: **chlorophyll a, b, c, d, and e**, which are found in the chloroplasts of higher plants.
- **Chlorophylls are Magnesium ion complexes** with four porphyrin rings
- Chlorophyll has the following structure:

24. **Answer: d**

Explanation:

Alarmel Valli was awarded the Sangeet Natak Akademi Award in 2001.

25. **Answer: c**

Explanation:

Ashvaghosha is the correct answer. He was a poet and philosopher who lived in the court of Kanishka and wrote the Buddhacharita, a biography of the Buddha. His work is considered one of the most important early Buddhist texts and is still widely read and studied today.

26. **Answer: b**

Explanation:

The correct answer is option 2, Both A and B. Tariffs and quotas are both trade barriers that restrict imports and protect domestic producers from foreign competition. Tariffs are taxes imposed on imported goods, while quotas limit the amount of a specific product that can be imported. Both measures increase the price of foreign goods, making domestic products more competitive.

27. **Answer: d**

Explanation:

Aluminium smelting belongs to the metallurgical industry. It involves extracting aluminium from its ore, bauxite, through a chemical process. The process requires

high temperatures and specialized equipment, which are typically found in the metallurgical industry.

---

28. **Answer: d**

Explanation:

Saturn is an outer planet of the solar system. It is the sixth planet from the sun and is known for its beautiful rings. Outer planets, also called gas giants, are primarily composed of gas and have thick atmospheres. They are located beyond the asteroid belt and include Jupiter, Saturn, Uranus, and Neptune.

---

29. **Answer: a**

Explanation:

Tashi Sabdo is the dance form associated with Sikkim. It is a folk dance performed during festivals and celebrations. The dance involves graceful movements and is accompanied by traditional music. Tashi Sabdo is an important part of Sikkimese culture and is performed by both men and women.

---

30. **Answer: a**

Explanation:

The Goods and Services Tax (GST) Act, which is a comprehensive indirect tax on the manufacture, sale, and consumption of goods and services, was implemented in India from 1 July 2017. This tax reform aimed to simplify the existing indirect tax structure and bring more transparency and efficiency in the system.

---

31. **Answer: a**

Explanation:

Mendeleev started his work when 63 elements were known. He arranged these elements in a periodic table based on their atomic weight and properties. His work laid the foundation for modern periodic table and helped in predicting the properties of yet-to-be-discovered elements.

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32. Answer: a

Explanation:

China is not a part of Commonwealth Games. The Commonwealth Games is a multi-sport event that takes place every four years and involves athletes from the Commonwealth of Nations. While China is a neighbouring country of India, it is not a member of the Commonwealth of Nations. Therefore, it does not participate in the Commonwealth Games.

---

33. Answer: d

Explanation:

Nuakhai is the harvest festival primarily celebrated by the people of western Odisha. It is a major festival for the farmers who offer the first crop of the season to their presiding deity. The festival is celebrated with great enthusiasm and includes rituals like offering of new rice to the gods, feasting, and cultural programs. It is a symbol of gratitude towards nature and a celebration of the hard work put in by the farmers.

---

34. Answer: b

Explanation:

The correct answer is option 2, which is Butterfly. It is a stroke used in swimming where the swimmer uses a dolphin-like kick and both arms simultaneously to move

forward. It requires strength, coordination, and endurance to perform efficiently. It is one of the most challenging strokes to master but is commonly used in competitive swimming.

---

35. Answer: c

Explanation:

The correct answer is option 3, Part IV A. The 42nd Amendment Act of 1976 added Part IV A to the Indian Constitution, which includes the Directive Principles of State Policy. These principles provide guidelines for the government to ensure social and economic justice, reduce inequality, and improve the standard of living for all citizens.

---

36. Answer: d

Explanation:

Aman Giri won the bypoll election from Gola Gokarannath constituency in Uttar Pradesh in November 2022.

---

37. Answer: b

Explanation:

C. V. Ananda Bose has been appointed as the Governor of West Bengal in November 2022. He is a retired IAS officer and has previously served as the Chief Secretary of West Bengal. Bose has also held various other important positions in the state government. He is known for his administrative skills and is expected to contribute significantly to the development of the state as the Governor.

---

38. Answer: d

Explanation:

Jallianwala Bagh is located in Punjab, India. It is a public garden in Amritsar and is infamous for the Jallianwala Bagh massacre that occurred on April 13, 1919. British troops under the command of Colonel Reginald Dyer opened fire on a crowd of unarmed Indian civilians who had gathered for a peaceful protest, resulting in the death of hundreds of people. The incident played a significant role in the Indian independence movement.

39. Answer: d

Explanation:

The correct answer is option 4, which states that the interest rate at which the Reserve Bank absorbs liquidity from banks against the collateral of eligible government securities under the LAF is called the Reverse repo rate. This means that banks can lend money to the Reserve Bank of India using eligible government securities as collateral, and the Reserve Bank will pay interest on these borrowings at the reverse repo rate. This helps the Reserve Bank in managing liquidity in the market.

40. Answer: c

Explanation:

The use of traditional practices and absence of modern technologies in agriculture leads to low productivity, hence the correct option is 3) low level. This highlights the need for adopting modern techniques and practices to improve agricultural productivity.

41. Answer: c

Explanation:

Given data:

Cost Price of sugar per kg (CP) = Rs. 40

Selling Price of sugar per kg (SP) = Rs. x

Fault in weighing machine: It shows 1 kg for 800 gm

Profit Percentage = 30%

Concept Used:

The profit percentage is calculated on the cost price. We also need to consider the fault in the weighing machine.

Solution:

Profit per kg of sugar is 30% of cost price, therefore,

⇒ Profit = 30/100 × CP = 30/100 × 40 = Rs. 12.

The actual Selling Price (SP) per kg would be,

⇒ CP + Profit = Rs. 40 + Rs. 12 = Rs. 52.

But due to the fault in the weighing machine, the customer receives only 800g when they pay for 1 kg.

This means that he is earning Rs. 52 for every 800g sold.

The selling price per kg (x), due to the weighing machine error,

⇒ x = (52 / 800) × 1000 = Rs. 65.

However, the price per kg should be calculated,

On the basis of the cost price of 800g as it is the actual weight of the sugar sold for Rs. 40.

The actual cost price for 800g = Rs. 40/kg × 0.8 = Rs. 32.

If the profit is 30%,

The selling price (SP) of 800g

⇒ 130% of actual CP = 1.3 × 32 = Rs. 41.6.

Due to the weighing machine error, this is the price per kg the customer is charged.

Therefore, the value of x per kg if his profit percentage is 30% is Rs. 41.6.

---

42. **Answer: b**

Explanation:

Given data:

The difference between Compound Interest (CI) and Simple Interest (SI) for 2 years = 144% of the principal (P)

Concept or formula:

Difference between CI and SI for 2 years is given by $P \times (r \div 100)^2$

Calculation:

Substitute the given values in the formula

⇒ 144% P = $P \times (r \div 100)^2$

⇒ $(144/100)P = P \times (R/100)^2$

Taking square root on both sides,

⇒ 12/10 = R/100

⇒ R = 120

Hence, the rate of interest per annum is 120%.

---

43. Answer: a

Explanation:

Given:

r = 7 cm

Total Surface Area = 1144 cm²

Formula Used:

Total Surface Area of Cylinder = 2πr(h + r)

Calculation:

Substituting these values into the formula

$\Rightarrow 1144 = 2 \times (22/7) \times 7 \times (h + 7)$

Simplify the equation:

$\Rightarrow 1144 = 44 \times (h + 7)$

Divide both sides by 44

$\Rightarrow 1144 / 44 = h + 7$

$\Rightarrow 26 = h + 7$

Finally, solve for h:

$\Rightarrow h = 26 - 7 = 19$ cm

So, the height of the cylinder is 19 cm.

44. Answer: a

Explanation:

Given data:

Distance travelled upstream = Distance travelled downstream = 15 km = 18 km

Time taken to travel upstream = Time taken to travel downstream = 3 hours

Concept or formula:

Speed of the current = (Downstream speed - Upstream speed) ÷ 2

Calculation:

Calculate the speeds of man (m) and current (c)

⇒ Upstream speed = distance ÷ time = 15 km ÷ 3 h = 5 km/h (m − c = 5 km/h)

⇒ Downstream speed = distance ÷ time = 18 km ÷ 3 h = 6 km/h (m + c = 6 km/h)

Solving these equations for c:

⇒ c = (m + c − m + c) ÷ 2 = (6 km/h − 5 km/h) ÷ 2 = $\frac{1}{2}$ km/h

Therefore, the speed of the current is $\frac{1}{2}$ km/h.

---

45. **Answer: a**

Explanation:

Given data:

Radius (r) of the hemisphere = 21 cm

Concept or formula:

Volume of a hemisphere = 2/3πr^3

Calculation:

Substitute the given values in the formula

⇒ Volume = $2/3 × 22/7 × 21^3$ = 19404 cm^3

Hence, the volume of the hemisphere is 19404 cm^3.

---

46. Answer: b

Explanation:

Given:

M can do the work in 12 days.

N can do the work in 24 days.

M leaves 6 days before completion.

Concept/Formula used:

Work done = Efficiency × Time.

Efficiency here is the amount of work done by M and N in one day.

Solution:

Calculate LCM of 12, 24

⇒ LCM = 24 (total work)

Efficiency of M:

⇒ 24/12 = 2 units/day

Efficiency of N:

⇒ 24/24 = 1 unit/day

Combined efficiency of M and N:

⇒ 2 + 1 = 3 units/day

Work done by N alone in the last 6 days:

⇒ 1 unit/day × 6 days = 6 units

Remaining work (done by M and N):

⇒ 24 units - 6 units = 18 units

Time for M and N to do remaining work:

⇒ 18 units ÷ 3 units/day = 6 days

Total time = 6 days (M and N together) + 6 days (N alone) = 12 days

Hence, the total time to complete the work is 12 days.

47. **Answer: d**

Explanation:

Given data:

Current population = 24000

Expected decrease = 4%

Concept or formula:

New population = Current population - (Expected decrease % of current population)

Calculation:

Calculate the new population

⇒ New population = 24000 - (4% of 24000) = 24000 - 960 = 23040

Hence, the population of the village next year will be 23040.

48. Answer: c

Explanation:

Given data:

Three fractions: 2/5, 4/15, 6/25

Concept or formula:

LCM of fractions = LCM of numerators/HCF of denominators

Calculation:

LCM of numerators (2, 4, 6) = 12

HCF of denominators (5, 15, 25) = 5

Therefore, LCM of the fractions = 12/5 = 12/5

Hence, the LCM of the fractions 2/5, 4/15, and 6/25 is 12/5.

49. Answer: d

Explanation:

Given data:

Ravi's time to decorate a wall = 6 hours

Ankita's time to decorate the same wall = 10 hours

Concept or formula:

Time taken to complete the work when working simultaneously = 1 / (1/A + 1/B)

Calculation:

Substitute the given values in the formula

⇒ Time = 1 / (1/6 + 1/10) = 1 / (5/30 + 3/30) = 1 / (8/30) = 3.75 hours

Therefore, Ravi and Ankita can decorate the wall in 3.75 hours when working simultaneously.

---

50. Answer: d

Explanation:

Given data:

Marked price (MP) = 145% of cost price (CP)

Discount = 20%

Concept or formula:

Profit % = 100 × [(MP × (100 – discount %)/100 – CP)/CP]

Calculation:

Substitute the given values in the formula

⇒ Profit % = 100 × [(145 × (100 – 20)/100 – 100)/100] = 16%

Hence, the profit percentage of the dealer is 16%.

---

51. Answer: d

Explanation:

Given data:

Total weight of the rice = 8 kg (first type) + 4 kg (second type) = 12 kg

Total price of the rice = Rs. 70/kg × 12 kg = Rs. 840

Price of the first type of rice = Rs. 60/kg × 8 kg = Rs. 480

Concept or formula:

Price of a second type of rice = (Total price - Price of first type of rice) ÷ weight of second type

Calculation:

Substitute the given values in the formula

⇒ Price of second type = (840 - 480) ÷ 4 = Rs. 90/kg

Therefore, the price per kg of the second type of rice is Rs. 90.

---

52. **Answer: c**

Explanation:

Given data:

Length of rectangle reduced by 15%

Breadth of rectangle increased by 10%

Concept or formula: Percentage change in area = (Change in length + Change in breadth + Change in length ×

Change in breadth/100)

Calculation:

Substitute the given values in the formula

⇒ Percentage change in area = (–15 + 10 + –15 × 10 ÷ 100) = – 6.5% (– means decreased)

Hence, the percentage change in the area of the rectangle is 6.5% (area decreased).

---

53. Answer: d

Explanation:

Given data:

Three schemes: A. Two successive discounts of 20% and 24%, B. Buy 5 get 3 free, C. Buy 13 get 7 free

Concept or formula:

Effective discount for A = 100 − [(100 − first discount) × (100 − second discount) ÷ 100]

Discount for B and C = (number of free items ÷ total items) × 100

Calculation:

Calculate the effective discount for scheme A

⇒ Effective discount = 100 − [(100 − 20) × (100 − 24) ÷ 100] = 39.2%

Calculate the discount for schemes B and C

⇒ Discount B = (3 ÷ (5+3)) × 100 = 37.5%

⇒ Discount C = (7 ÷ (13+7)) × 100 = 35%

Comparing the discounts, scheme A offers the maximum discount

Therefore, scheme A gives the maximum discount to the buyer.

---

54. Answer: c

Explanation:

Given data:

Distance between home and school = 20 km

Return speed = 50 km/h

Average speed for the total journey = 37.5 km/h

Concept or formula:

Average speed = Total distance ÷ total time;

Total distance = 2 × single distance;

Total time = time1 + time2

Calculation:

Total distance = 2 × 20 km = 40 km

Total time = 40 km/37.5 km/h = 400/375 = 1.067 hours

Time for return journey = 20 km/50 km/h = 0.4 hours

Time for onward journey = total time - return time = 1.067 - 0.4 = 0.667 hours

Speed from home to school = 20 km/0.667 hours = 30 km/h

Therefore, the speed of Rani from home to school is 30 km/h.

---

55. **Answer: a**

Explanation:

Given data:

Amount after 2 years = Rs. 5,324

Rate of interest = 10% per annum, compounded annually

Concept or formula:

Compound interest formula,

$A = P(1 + r/n)^{(nt)}$,

where A = amount, P = principal, r = rate of

interest, n = number of times interest is compounded per time period and t = time.

Calculation:

Rearranging the formula for P

$\Rightarrow P = A / (1 + r/n)^{(nt)}$

Substitute the given values into the formula

$\Rightarrow P = 5324 / (1 + 10/100)^{(2)} = 5324 / (1.1)^2 = $ Rs. 4,400

Therefore, the principal is Rs. 4,400.

---

56. **Answer: d**

Explanation:

Given data:

Time to cover a distance of 162 km = 3 hours

Concept or formula:

Speed = Distance ÷ Time

Calculation:

Calculate the speed

$\Rightarrow$ Speed = 162 km ÷ 3 hours = 54 km/h

Calculate the distance covered in 5 hours

⇒ Distance = Speed × Time = 54 km/h × 5 hours = 270 km

Hence, the bike will cover a distance of 270 km in 5 hours.

---

57. **Answer: b**

Explanation:

Given data:

Actual weight = 250 gm

False weight used = 200 gm

Concept or formula:

Profit % = [(Actual weight – False weight) ÷ False weight] × 100

Calculation:

Substitute the given values in the formula

⇒ Profit % = [(250 gm – 200 gm) ÷ 200 gm] × 100 = 25%

Hence, the profit percentage of dishonest merchant is 25%.

---

58. **Answer: d**

Explanation:

Given data:

Distance covered upstream and downstream = 375 meters

Time taken to travel upstream = 30 min

Time taken to travel downstream = 18 min

Concept or formula:

Speed = Distance ÷ Time

Calculation:

Calculate the speeds

⇒ Speed upstream = 375 meters ÷ 30 min = 12.5 m/min

⇒ Speed downstream = 375 meters ÷ 18 min = 20.83 m/min

Speed of the boat in still water = (Speed downstream + Speed upstream) ÷ 2 = (20.83 m/min + 12.5 m/min) ÷ 2 = 16.67 m/min

Speed of the current = Speed downstream − Speed of the boat in still water = 20.83 m/min − 16.67 m/min = 4.16 m/min

Ratio of the speed of the boat to the speed of the stream = 16.67 ÷ 4.16 ≈ 4:1

Therefore, the ratio of the speed of the boat in still water and the speed of the stream is approximately 4:1.

---

59. **Answer: b**

Explanation:

Given:

The ratio a : b = 2 : 7.

343 is the third proportional to a and b.

Concept/Formula used:

In a ratio, if a : b = c : d, then the value of b can be expressed as b = a × (d/c).

Similarly, the third proportion of a and b (let's call it 'x') can be found by the formula x = b × (b/a).

Solution:

Given a : b = 2 : 7,

let's assume a = 2k and b = 7k for some constant 'k'.

As per the concept of third proportion,

343 = b × (b/a)

⇒ 343 = (7k × 7k) / (2k).

Solving this gives k = 7.

Substituting k = 7 into a = 2k and b = 7k gives a = 14 and b = 49.

The value of b - a = 49 - 14 = 35.

Here is where the error occurred. Let's correct it:

Solving 343 = (7k × 7k) / (2k) actually gives k = 14.

Substituting k = 14 into a = 2k and b = 7k gives a = 28 and b = 98.

The value of b - a = 98 - 28 = 70.

Therefore, the value of b - a is 70.

60. **Answer: b**

Explanation:

Concept Used:

Follow the BODMAS rule according to the table given below:

B	Brackets in order (), {}, []	ब्रैकेट (), {}, [] क्रम में
O	of	का
D	Division (÷)	विभाजन (÷)
M	Multiplication (×)	गुणा (×)
A	Addition (+)	जोड़ (+)
S	Subtraction (−)	घटाव (−)

Calculation:

$65 ÷ 13 × 4 + (35 ÷ 7 × 9)^2 + 100 ÷ 5 \text{ of } 4 × 80$

$⇒ 5 × 4 + (5 × 9)^2 + 5 × 80$

$⇒ 20 + 2025 + 400$

$⇒ 2445$

∴ Option 2 is the correct answer.

---

61. **Answer: b**

Explanation:

The correct answer is 'Option 2'

⭐ **Key Points**

In the original sentence, the phrase "we have to sending a mail today" is incorrect because the structure "have to" should be followed by a base form of a verb (infinitive without to), and the verb "sending" is in the incorrect form.
The correction should therefore be "If we send a mail today." Here, "send" is the correct base form of the verb.

This sentence implies that if the action (sending a mail) is performed today, the response will be received within two days.

Therefore, the correct use of modal verb (have to, for obligation) and the correct form of the main verb (send) should be "If we send a mail today, we shall get a reply in two days."

Therefore, the correct answer is- Option 2

⭐ Additional Information

Option 1 "If we would send a mail today" is incorrect because 'would' is a modal verb of hypothetical situations used in conditionals that does not suit the context here.

Option 3 "If we will send a mail today" incorrectly uses "will" instead of the base form of the main verb after "if" in a conditional sentence.

Option 4 "If we have sending a mail today" doesn't correct the original mistake of verb form misuse.

The error in the original sentence is that the verb form after 'to' is incorrect. The correct form after 'to' is the base form of the verb

---

62. **Answer: c**

Explanation:

The correct answer is 'Option 3'

⭐

Key Points The original sentence is in the present continuous tense, and the task is to change it to a past tense form.

Option 3: "The home nurse was expecting a salary hike from the relatives of the new family" correctly changes the sentence to the past continuous tense, which is appropriate here because it shows the nurse's expectation was ongoing in the past.

Therefore, the form 'was expecting' is correct as it puts the event, which is an ongoing event in the past.

Therefore, the correct answer is - Option 3

⭐

<u>Additional Information</u> Option 1: "The home nurse will be expecting a salary hike from the relatives of the new family." This changes the tense to future continuous, which is not what the question is asking for.

Option 2: "The home nurse expects a salary hike from the relatives of the new family." This is the present tense, not the past.

Option 4: "The home nurse has been expecting a salary hike from the relatives of the new family." This is the present perfect continuous tense, not the past.

---

63. **Answer: b**

Explanation:

The correct answer is 'Option 2'

⭐ **Key Points**

The bracketed phrase "have taken the pony" is incorrect. The verb 'have' does not agree with the singular subject 'the thief'.

The correct verb form for singular third person past perfect is 'had'.

Thus, the correct substitute for the bracketed segment is "had taken the pony".

Therefore, the sentence correctly reads as "The thief who had taken the pony was found guilty by the jury."

Therefore, the correct answer is- Option 2

⭐ **Additional Information**

Option 1: "has took the pony" is incorrect because 'has took' is grammatically incorrect. It should be 'has taken'.

Option 2: "have took the pony" is incorrect. 'have took' is grammatically incorrect and should be 'have taken', and 'have' does not agree with the singular subject 'the thief'.

Option 4: "has taken the pony" is incorrect for the sentence. 'has' represents present perfect, but past perfect 'had' is needed in the sentence.

---

64. Answer: a

Explanation:

The correct answer is **'Option 1'**.

⭐

Key Points The word provided here is 'Extrime'. But there is no such word in English. In English, '**Extreme**' (चरम in Hindi) is the correct spelling. An example of 'Extreme' in a sentence could be: The weather conditions are extreme today.
Therefore, the correct answer is- 'Option 1'.

⭐ Additional Information

'Eccentricity': It is spelt correctly and in Hindi, it is translated as विचित्रता.
'Electricity': This is also a correctly spelt word which translates as बिजली in Hindi.
'Excite': This word too is spelt correctly and means उत्तेजना in Hindi.

65. Answer: c

Explanation:

The correct answer is 'Option 3'

⭐ Key Points

The idiom 'To be in the doldrums' generally refers to being in a state of low spirits or depression.
The English meaning of this phrase would be to be in a state of low spirits or to feel down.
In Hindi, this phrase can be translated to नीरस और उदास होना.
An example of this phrase in a sentence might be: After failing his exams, he was in the doldrums for several weeks.
Therefore, the correct answer is- 'Option 3'

⭐ **Additional Information**

Option 1 can be dismissed as the phrase does not indicate a sense of 'high energy and happiness' but rather the opposite.

Option 2 and 4 might seem plausible, but the specific context of 'doldrums' refers primarily to a state of low spirits rather than confusion or helplessness.

---

66. **Answer: c**

Explanation:

The correct answer is 'Option 3'

⭐ **Key Points**

The idiomatic phrase "born and bred" fits perfectly in this context. It's a fixed phrase that refers to a person's upbringing or background.

The phrase "I am born and bred in a cultured family" means that the speaker was both born into a certain family or place, and also brought up there.

Therefore, the appropriate word to complete the sentence is "bred", forming the idiomatic expression "born and bred."

Therefore, the correct answer is- Option 3

⭐ **Additional Information**

Option 1: "bare" means naked or uncovered, which is not suitable in this context.

Option 2: "bread" is a type of food made from flour and water, and is not the correct match in this context.

Option 4: "beard" refers to the hair that grows on the chin and cheeks of a man's face, and is incorrect in this context.

---

67. **Answer: c**

Explanation:

The correct answer is 'Option 3'.

⭐ Key Points

The word provided is 'Cease' which means to stop or bring something to an end.
The English meaning of 'Cease' is to stop or end (हिंदी में - बंद करना). An example of 'Cease' in a sentence could be: The hostilities had ceased and normal life was resumed.
The word that is opposite in meaning to 'Cease' is 'Commence', meaning to begin or start.
The Hindi meaning of 'Commence' is 'शुरू करना'. An example of 'Commence' in a sentence could be: The festivities will commence with a parade.
Therefore, the correct answer is- 'Option 3'.

⭐ Additional Information

'Terminate': Also means to end or cease, hence it is a synonym rather than an antonym of 'Cease'.
'Stop': Similar to terminate, it is a synonym of 'Cease'.
'Quit': This is generally used in the context of leaving a job or habit, but it aligns more as a synonym rather than an antonym of 'Cease'.

---

68. **Answer: b**

Explanation:

The correct answer is 'Option 2'

⭐ Key Points

The original phrase "there is a few rice left in the cooker" is incorrect because "rice" is an uncountable noun, and "a few" is used with countable nouns.
Using "little" with uncountable nouns to indicate a small amount is grammatically correct. So, the phrase should be "There is little rice left in the cooker."
Therefore, the phrase "a few" in the original sentence should be substituted with "little" to correctly convey the intended meaning of the sentence.

Therefore, the correct answer is- Option 2

⭐ Additional Information

Option 1: "fewest rice left in" is incorrect, as "fewest" is used for countable nouns and "rice" is uncountable.
Option 3: "less rice left on" is incorrect, as it changes the structure of the sentence in a way that doesn't retain the exact original meaning.
Option 4: "any rice left in" would indicate uncertainty about any rice being left, which is not the intent of the original sentence.

---

69. **Answer: a**

Explanation:

The correct answer is 'Option 1'

⭐ **Key Points**

The idiom 'The best thing since sliced bread' is often used to refer to a good and useful invention or idea.
The English meaning of this phrase would be a really good invention or idea.
In Hindi, this phrase can be translated to एक सच्ची अच्छी आविष्कार (a really good invention).
An example of this phrase in a sentence might be: The invention of smartphones has been considered the best thing since sliced bread.
Therefore, the correct answer is- 'Option 1'

⭐ **Additional Information**

'A thoroughly examined food','An openly performed confession', and 'A sincerely made apology' do not match the given idiom's meaning, making them incorrect options.

---

70. **Answer: b**

Explanation:

The correct answer is 'Option 2'

⭐ **Key Points**

The sentence implies that the boat developed by the students can reach any given destination without human control or direction.
The term "autonomously", which means something is self-directing or independent, best fits this context.
Therefore, "autonomously" is applicable for the features of the boat that can navigate to a location without human intervention.
Therefore, the correct answer is- Option 2

⭐ **Additional Information**

Option 1: "highly" would more typically modify an adjective or another adverb, not a destination.
Option 3: "verbally" would imply that the boat reaches its destination by speaking, which doesn't make sense in this context.
Option 4: "collaboratively" would imply some form of teamwork or cooperation is needed for the boat to reach its destination, which contrasts with the idea of it operating independently.

71. **Answer: b**

Explanation:

The correct answer is 'Option 2'

⭐ **Key Points**

The English word given in brackets here is 'Negative' which typically suggests something harmful or undesirable.
The English meaning of 'Negative' is harmful or bad (In Hindi - नकरात्मक).

An example of 'Negative' in a sentence could be: Drug abuse has a negative effect on the community.
The word that is synonym to 'Negative' in this context is 'Adverse', indicating something that's harmful or unfavorable.
The Hindi meaning of 'Adverse' is 'प्रतिकूल'. An example of 'Adverse' in a sentence could be: Smoking has an adverse impact on our health.
Therefore, the correct answer is- 'Option 2'

⭐ Additional Information

'Hospitable': Generally pertains to being friendly or welcoming, does not fit this context.
'Despairing': Means losing all hope or joy, not applicable here.
'Arbitrary': Means based on random choice or personal whim, not related to the word 'negative'.

---

72. Answer: a

Explanation:

The correct answer is 'Option 1'

⭐ Key Points

The underlined word in this sentence is 'acquired' which means to obtain or to gain knowledge or skills.
The English meaning of 'Acquired' is gained or obtained (हिंदी में - प्राप्त).
An example of 'Acquired' in a sentence could be: He has acquired proficiency in French language.
The synonym to 'Acquired' in this context is 'Obtained', which also means to get or gain through some effort.
The Hindi meaning of 'Obtained' is 'प्राप्त हुई'. An example of 'Obtained' in a sentence could be: She obtained the highest marks in her exams.
Therefore, the correct answer is- 'Option 1'

⭐ Additional Information

'Forfeited': It means to lose or give up something, does not fit this context.
'Admired': Means to regard with respect or warm approval, not applicable here.
'Awarded': Means to give something as a result of a decision, not related to the word 'acquired'.

---

73. Answer: c

Explanation:

The correct answer is 'Option 3'

⭐ Key Points

The word provided in brackets here is 'Feeble' which means lacking physical strength, especially as a result of age or illness.
The English meaning of 'Feeble' is weak or frail (In Hindi – कमजोर).
An example of 'Feeble' in a sentence could be: After her illness, she was too feeble to work.
The word that is opposite in meaning to 'Feeble' is 'Strong', that represents physical power and robustness.
The Hindi meaning of 'Strong' is मजबूत. An example of 'Strong' in a sentence could be: She has strong determination towards her goal.
Therefore, the correct answer is- 'Option 3'

⭐ Additional Information

'Wimpy' and 'Asthenic': They both mean weak, hence they are synonyms rather than antonyms of 'Feeble'.
'Effete': This word generally refers to being weak or exhausted, making it a synonym of 'Feeble'.

---

74. Answer: d

Explanation:

The correct answer is 'Option 4'

⭐ **Key Points**

In the sentence provided, the word 'citezen' is misspelt.
In English, 'Citizen' (नागरिक in Hindi) is the correct spelling. An example of 'Citizen' in a sentence could be: Every citizen has the right to vote.
Therefore, the correct answer is- 'Option 4'

⭐ **Additional Information**

'Allouse', 'Chosing', and 'Goverment': These options do not appear in the given sentence and are incorrect spellings for 'Allow', 'Choosing', and 'Government' respectively.

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75. **Answer: d**

Explanation:

The correct answer is 'Option 4'

⭐ **Key Points**

The word provided here is 'Contagion' which generally refers to the transmission of a disease from one person or organism to another by direct or indirect contact.
The English meaning of 'Contagion' is the spread of a harmful idea or practice (In Hindi – संक्रामण).
An example of 'Contagion' in a sentence could be: The contagion of the flu virus caused the pandemic.
The word that is synonym to 'Contagion' in this context is 'Transmission', indicating the action or process of transmitting something.
The Hindi meaning of 'Transmission' is 'संचारण'. An example of 'Transmission' in a sentence could be: The transmission of cultural values to younger generation is important.
Therefore, the correct answer is- 'Option 4'

⭐ **Additional Information**

'Grandeur': Signifying splendor and impressiveness, does not fit this context.
'Illusion': Relationships to a misrepresentation or false perception, not applicable here.
'Transfusion': Generally associated with the transfer of blood, it doesn't quite capture the meaning of 'Contagion'

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76. **Answer: d**

Explanation:

The correct answer is 'Option 4'

⭐

<u>Key Points</u> In the first blank, the context of the sentence involves a low-pressure area characterized by rapid and damaging air circulation. This suggests some sort of production or creation, hence the word "generates" fits perfectly.
The verb "generates" traditionally refers to the act of causing or producing something. In this context, it implies that such low-pressure areas create or result in cyclones.
Therefore, it correctly conveys that this type of low-pressure area and air circulation generates or produces cyclones.
Therefore, the correct answer is - Option 4

⭐ <u>Additional Information</u>

Option 1: "inspires" generally implies stimulating someone to do or feel something, generally in a creative or emotional sense. The formation of cyclones, however, is a physical phenomenon and not tied to emotional or creative inspiration.
Option 2: "spawns" can mean 'generate or cause' similar to 'generates', but it's less commonly used in the context of natural phenomena like cyclones.
Option 3: "destroys" contradicts the context of the sentence. The low-pressure area doesn't diminish or remove cyclones, but rather leads to their formation.

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77. Answer: a

Explanation:

Correct answer: 'Option 1' i.e. 'unfavourable'.

⭐ Key Points

The context of the sentence refers to the conditions during a cyclone, which are typically harsh, dangerous, and adverse. Hence, the term 'unfavourable' correctly describes the commonly associated conditions during cyclones.
The adjective 'unfavourable' can be used to describe something that's not helpful, or that creates difficulties or prevents success, which fits appropriately in the context of a cyclone, a natural phenomenon known for its destructive and disruptive nature.
The sentence structure requires an adjective at the blank 2. Among the given options, 'unfavourable' is an adjective that fits appropriately into the context of the sentence.
'Unfavourable' properly maintains the coherence and overall meaning of the sentence whereas the other options disrupt it.
Therefore, the correct answer is 'Option 1' i.e. 'unfavourable'.

⭐ Additional Information

Accustomed: This term means to become familiar with something or get used to something, through exposure or experience. It is not suitable here because it doesn't accurately describe the characteristics of the weather during cyclones.
Advantageous: It is generally used to describe something that is beneficial or creates favorable conditions, which is contrary to the negative and destructive conditions typically observed during cyclones, making it inappropriate for this context.
Unaccepted: This term is used to indicate something that is not agreed upon or not approved, which doesn't make sense in the context of describing weather conditions during a cyclone.

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78. Answer: a

Explanation:

Correct answer: 'Option 1' i.e. 'whereas'.

⭐ **Key Points**

The term 'whereas' is used to indicate a contrast or comparison between two statements. In this context, it is used to contrast the air movement in the Northern hemisphere (counterclockwise) with the Southern hemisphere (clockwise).
The use of 'whereas' maintains the coherence and flow of the sentence by effectively bringing out the clear difference between the two hemispheric cyclonic patterns.
The conjunction 'whereas' works grammatically in the sentence structure by connecting two independent but related sentences.
'Whereas' is used to compare two different things or situations, reinforcing the understanding of the difference in cyclone patterns in the previous and the next sentence.
Therefore, the correct answer is 'Option 1' i.e. 'whereas'.

⭐ **Additional Information**

Because: This term introduces a reason or explanation for an occurrence. It doesn't fit in this context as we're contrasting two occurrences, not explaining them.
Or: This conjunction is used to link alternative possibilities. However, in this context, we're not presenting options, but contrasting air movements in different hemispheres.
Unless: The term 'unless' is used to specify the only situation in which something will not happen or be true. It's inappropriate here because we're not stating a condition under which something would not occur, but contrasting two statements.

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79. **Answer: c**

Explanation:

Correct answer: 'Option 3' i.e. 'categories'.

⭐ <u>Key Points</u>

The term 'categories' is used when things or ideas are divided or grouped based on similar features or characteristics. In this context, it is used to group the different types of cyclones - extratropical and tropical
The use of 'categories' correctly communicates that the two types of cyclones mentioned (extratropical and tropical) are classifications within the broader term "cyclones".
The term 'categories' perfectly fits into the sentence structure and it maintains the logical coherence of the sentence by indicating the correct grouping.
Using 'categories' supports the understanding of the topic being discussed, making it the most suitable option among others.
Therefore, the correct answer is 'Option 3' i.e. 'categories'.

⭐ <u>Additional Information</u>

Ranks: This term relates to hierarchy or position in a series. It doesn't fit in this context as we're not discussing some form of hierarchy of cyclones, but rather types or classifications of cyclones.
Statuses: The term 'statuses' refers to the relative position or standing of something within a system or society. It does not correctly describe the divisions of cyclones.
Species: This term is used in biology to classify organisms and doesn't fit appropriately in the context of classifying weather phenomena like cyclones.

80. **Answer: d**

Explanation:

Correct answer: 'Option 4' i.e. 'resemble'.

⭐ <u>Key Points</u>

The verb 'resemble' is used to describe one thing being similar to or having likeness with another. In this context, it is used to show the likeness of tropical storms in the Arabian Sea and Bay of Bengal to coiled sea serpents.

The use of 'resemble' correctly maintains the flow and the integrity of the sentence, expressing the comparison of the cyclonic storms to coiled sea serpents in terms of visual appearance.

'Resemble' fits grammatically into the sentence structure, maintaining the overall coherence and meaning.

'Resemble' provides the most understandable and logical completion of the sentence, reinforcing the metaphorical comparison drawn in its context.

Therefore, the correct answer is 'Option 4' i.e. 'resemble'.

⭐ <u>Additional Information</u>

Collect: This verb refers to the action of bringing together and accumulating items. It doesn't make contextual sense in reference to tropical storms and coiled sea serpents.

Negate: The term 'negate' means to nullify or make ineffective. It doesn't fit here, as the context is not about cancelling or nullifying something.

Mimic: The term 'mimic' means to copy the behavior or action of something. But in our context, storms don't actively copy the coiled sea serpents; they rather appear similar. Hence, 'resemble' fits better than 'mimic'.