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 2021 (English) Prev. Year Paper (01-Dec-2021) (Shift 1)

Total Time: 1 Hour : 30 Minute   **Total Marks:** 100

Instructions

SI No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks
1	General Intelligence and Reasoning	25	25	0.25	1
2	General Knowledge and General Awareness	25	25	0.25	1
3	Elementary Mathematics	25	25	0.25	1
4	English	25	25	0.25	1

1.) A total of 90 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. Select the option that is related to the fourth number in the same way as the first number is related to the second number and the fifth number is related to the sixth number. **(+1, -0.25)**

    195 : 15 :: ? : 19 :: 273 : 21

    a. 280

    b. 247

    c. 311

    d. 252

---

2. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different. **(+1, -0.25)**

    a. FLO

    b. LRU

    c. PVY

    d. GMQ

---

3. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series. **(+1, -0.25)**

    MRV, QVZ, UZD, YDH, ?

    a. CHL

    b. CGM

c. DHE

d. CFN

---

4. Select the figure from among the given options that can replace the question mark(?) in the following series.

(+1, −0.25)

a.

b.

c.

d.

---

5. In a certain code language, 'GINGER' is coded as '30 – 30' and 'RADISH' is coded as '23 – 36'. How will 'TOMATO' be coded in that language?

(+1, −0.25)

a. 35 – 45

b. 39 – 41

c. 49 – 39

d. 48 – 36

---

6. Select the correct option that indicates the arrangement of the given   **(+1, –0.25)**
    words in the order in which they appear in an English dictionary.

    1. Tamale

    2. Tamagotchi

    3. Tamarind

    4. Tamarack

    5. Tamable
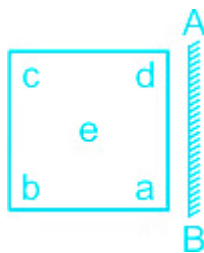
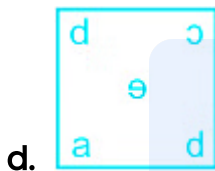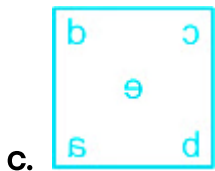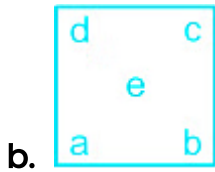   **a.** 1, 3, 4, 5, 2

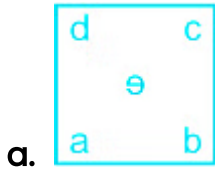   **b.** 2, 1, 3, 4, 5

    c. 5, 2, 1, 4, 3

    d. 1, 5, 2, 4, 3

---

7. Select the correct mirror image of the given figure when the mirror is   **(+1, –0.25)**
    placed at 'AB' as shown.

a.

b.

c.

d.

---

8. In a certain code language, ZOMBIE is written as BEIMOZ, and FLEX is written as EFLX. How will PRODUCT be written in that language?   (+1, −0.25)

   a. CDPORTU

   b. CDPORUT

   c. CDOPRTU

   d. CDORPTU

---

9. Select the option that is related to the third term in the same way as the second term is related to the first term.   (+1, −0.25)

   SANITY : OBTZUJ :: FOSTER : ?

a. TPGSFU

b. TPESFV

c. TQGSGU

d. TGPHFU

---

10. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.   (+1, -0.25)

    Statements:

    I. Some tablets are smartphones.

    I. All smartphones are mobile phones.

    Conclusions:

    I. Some mobile phones are tablets.

    II. Some mobile phones are smartphones.

    a. Neither conclusion I nor II follows.

    b. Only conclusion II follows.

    c. Only conclusion I follows.

    d. Both conclusions I and II follow.

---

11. If 'A + B' means 'A is the father of B', 'A @ B' means 'A is the brother of B', and 'A & B' means 'A is the daughter of B', then how is P related to V in the following expression?   (+1, -0.25)

S + P + R @ Q & T & V

a. Son

b. Father-in-law

c. Son-in-law

d. Daughter-in-law

---

12. Select the number from among the given options that can replace the question mark (?) in the following series.
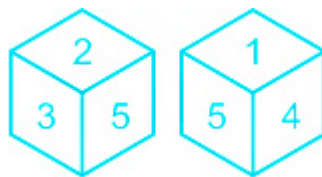
(+1, -0.25)

3, 15, 60, 180, ?

a. 260

b. 360

c. 240

d. 199

---

13. Two different positions of the same dice are shown, the six faces of which are numbered from 1 to 6. Select the number that will be on the face opposite to the face having '6'

(+1, -0.25)

a. 3

b. 5

c. 4

d. 2

14. Select the combination of letters that when sequentially placed in the   (+1, –0.25)
blanks of the given series will complete the sequence.

R _ T _ T U _ _ R U _ S _ S T

a. SSTURR

b. SRTURU

c. STURSR

d. URTSSR

15. Study the given pattern carefully and select the number that can replace   (+1, –0.25)
the question mark (?) in it.

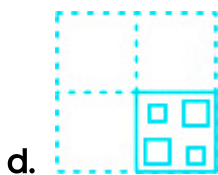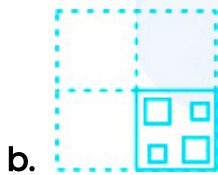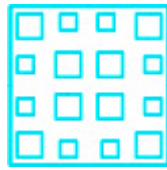| 5	6	7
8	7	9
189	265	?

a. 424

b. 341

c. 395

d. 409

---

16. A paper sheet is folded in a particular manner and several punches are made. When unfolded the paper sheet looks like the question figure. From the given options, select the figures that follows the manner in which the paper is folded and punched.

(+1, −0.25)

Question figure

a.

b.

c.

d.

---

17. There are two computer rooms, Lab A and Lab B. If 10 students are sent from Lab A to Lab B, then the number of students in each room will be the same. If 26 students are sent from Lab B to Lab A, then the number of

(+1, −0.25)

students in Lab A will be triple the number of students in Lab B. The number of students in Lab B is:

a. 82

b. 78

c. 62

d. 98

---

18. In a certain code language, 'DEACTIVATION' is written as 'CAEDAVITNOIT'.   (+1, -0.25)
    How will 'FACILITATION' be written in that language?

    a. ICFTAAILNOIT

    b. ICFAATILNOIT

    c. ICFTILAANOIT

    d. ICAFATILNOIT

---

19. Six poets, A, B, C, D, E and F, are sitting opposite to each other in a circle,   (+1, -0.25)
    facing towards the centre. A is opposite to E. F is adjacent to E. A is
    adjacent to C. B is sitting immediate right to D. C is opposite to B. Who is 5
    th to the left of B?

    a. A

    b. E

    c. D

    d. F

---

20. Select the number from among the given options that can replace the question mark (?) in the following series.

(+1, −0.25)

7, 7, 10.5, 21, 52.5, ?

  a. 157.5

  b. 105

  c. 163.5

  d. 145

---
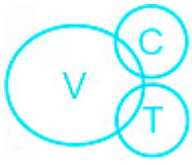
21. Arpita, Chetan, Insiya, Lohita, Manuvi and Yukti are sitting around a circular table facing its centre. Chetan is sitting to the immediate right of Manuvi. Arpita is sitting between Insiya and Yukti. Yukti is sitting second to the right of Manuvi. Who is sitting between Lohita and Arpita?

(+1, −0.25)

  a. Manuvi

  b. Insiya

  c. Chetan

  d. Yukti

---

22. Select the Venn diagram that best represents the relationship between the following classes.

(+1, −0.25)

Vehicles, Truck, Car

(V: Vehicles; C: Car; T: Truck)

a.

b.

c.

d.

---

23. 'Sweater' is related to 'Wool' in the same way as 'Coin' is related to **(+1, -0.25)**
'_____'.

   a. Metal

   b. King

   c. Money

   d. Currency

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24. Select the option in which the given figure is embedded(rotation is NOT **(+1, -0.25)**
allowed).

a.

b.

c.

d.

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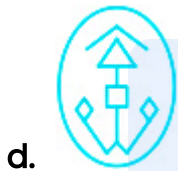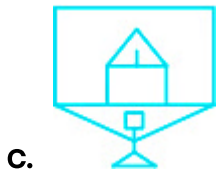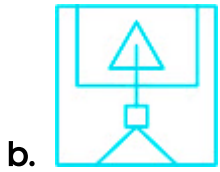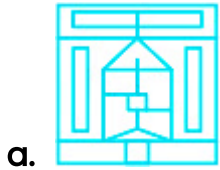
25. What will be the value of the given expression if 'A' means '+', 'B' means '−', 'C' means '×', and 'D' means '÷'?   (+1, −0.25)

12 A 9 C (17 B 6) B 24 A (28 D 7) = ?

a. 51

b. 104

c. 91

d. 83

General Knowledge and General Awareness

26. The territorial units assigned to military commanders in the Delhi Sultanate were known as _____. (+1, -0.25)

   a. Iqta

   b. Ushr

   c. Kharaj

   d. Hundi

27. What are the organisms that give birth to baby offspring called? (+1, -0.25)

   a. Fissile

   b. Viviparous

   c. Oviparous

   d. Ovoviviparous

28. Which of the following ministry organized 'Shikshak Parv' in September 2021? (+1, -0.25)

   a. Ministry of Education

   b. Ministry of Youth Affairs and Sports

   c. Ministry of Culture

   d. Ministry of Labor and Employment

29. Who is the winner of World Games Athlete of the Year Award 2019?　　(+1, -0.25)

    a. Savita Poonia

    b. Ritu Rani

    c. Rani Rampal

    d. Jaspreet Kaur

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30. In November 2020, India _ _ _ _ _ _ _ _ _ became the country to have its　　(+1, -0.25)
own independent regional navigational satellite system. It is recognized
by the International Maritime Organization (IMO) as a part of the
'Worldwide Radio Navigation System' (WWRNS).

    a. Fifth

    b. Third

    c. Fourth

    d. Sixth

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31. Which of the following Indian sitarists and prominent musicians, in the　　(+1, -0.25)
early 20th century, developed a notation system and classified the
musical practices of the Indian subcontinent that continued to grow from
earlier oral tradition?

    a. Vishnu Narayan Bhatkhande

    b. Siddhar khan

    c. Manikchand Dubey

d. Haji Vilayat Ali Khan

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32. Which of the following is not a bone in babies at birth? (+1, -0.25)

a. Pelvic

b. Collar

c. Cheek

d. Kneecap

---

33. 'Operation Thunder 2020' is related to: (+1, -0.25)

a. Cyclone relief and rescue operations

b. Action against environmental crimes

c. Vaccine for COVID-19 (Corona)

d. Military action against terrorism

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34. The Elephanta Caves have a collection of rock art belonging to the _____ sect. (+1, -0.25)

a. Buddha

b. Tirthankara Mahavir

c. Shiva

d. Vishnu

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35. Which of the following does not provide direct credit assistance to rural households?   (+1, −0.25)

    a. Regional Rural Bank

    b. Agricultural Trader

    c. Cooperative Credit Societies

    d. Finance Ministry

36. Which of the following is a night blooming flower?   (+1, −0.25)

    a. Gazania daisy

    b. Angel's trumpet

    c. Jamaican feverplant

    d. Venice mallow

37. The prize money for the _____ Award was increased from the previous amount of ₹7.5 lakhs to ₹25 lakhs in 2020.   (+1, −0.25)

    a. Rajiv Gandhi Khel Ratna

    b. Dronacharya (Lifetime)

    c. Dronacharya (Regular)

    d. Arjuna

38. _____ is a partially confined coastal water body where salt water   (+1, −0.25)
from oceans mix with fresh water from rivers and streams.

    a. Estuary

    b. Delta

    c. Desert

    d. Lagoon

---

39. Which of the following provisions of the Constitution of India can be   (+1, −0.25)
amended by a simple majority of the Parliament?

    a. Any list in the Seventh Schedule

    b. Quorum in Parliament

    c. President's election and its procedure

    d. Fundamental Rights

---

40. Which of the following is a tributary of river Krishna?   (+1, −0.25)

    a. Praneeta

    b. Poorna

    c. Manjra

    d. Ghatprabha

---

41. Who among the following won the Linz Open Tennis Singles title for 2020?   (+1, −0.25)

a. Sofia Kenin

b. Serena Williams

c. Aryna Sabalenka

d. Elise Martens

---

42. The Unregulated Deposit Schemes Ban Act in India was implemented in the year _____.   (+1, -0.25)

a. 2020

b. 2019

c. 2021

d. 2018

---

43. In which of the following cities is the head office of SEBI located?   (+1, -0.25)

a. Gandhinagar

b. Mumbai

c. Chandigarh

d. New Delhi

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44. The popular dance 'Laho' is related to which Indian state?   (+1, -0.25)

a. Meghalaya

b. Bihar

    c. Uttar Pradesh

    d. Haryana

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45. Nepalese poet, Bhanubhakta Acharya, is famous for translating _____ from Sanskrit into Nepali language.   **(+1, -0.25)**

    a. Ramayana

    b. Yoga Sutras

    c. Manusmriti

    d. Mahabharata

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46. As announced in the Union Budget 2020, an amount up to ₹ _____ can be claimed as deduction on interest paid on loans taken for purchase of electric vehicles.   **(+1, -0.25)**

    a. 1.5 lakh

    b. 5 lakh

    c. 2 lakh

    d. 2.5 lakh

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47. Which of the following things found at the site of Harappa, did engineers take away to build the first railway lines in Punjab in present-day Pakistan?   **(+1, -0.25)**

    a. Doors

    b. Bricks

c. Iron tracks

d. Bronze beams

---

48. Which of the following pair is incorrect?   (+1, -0.25)

    a. Sharqi Dynasty - Punjab

    b. Ahom Dynasty - Assam

    c. Gajapati Dynasty - Odisha

    d. Mewar Dynasty - Rajasthan

---

49. Who among the following is the author of the book 'Saving Capitalism   (+1, -0.25)
    from the Capitalist'?

    a. Raghuram Rajan

    b. Bimal Jalan

    c. Urjit Patel

    d. Shaktikanta Das

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50. According to 'India State of Forest Report 2019', which of the following   (+1, -0.25)
    states of India has the maximum amount of forest covered area?

    a. Andhra Pradesh

    b. Nagaland

    c. Madhya Pradesh

d. Assam

51. The price of a sweater was slashed from ₹1422 to ₹1264 by a shopkeeper in the winter season. Find the rate of discount given by him (Correct to two decimal places).   **(+1, −0.25)**

    a. 11.11%

    b. 12.11%

    c. 9.11%

    d. 10%

---

52. The average of nine numbers is 20.6. The average of three of them is 26.1, while the average of another three of theses numbers is 15.2. What is the average of the remaining three numbers?   **(+1, −0.25)**

    a. 21.5

    b. 20.5

    c. 35.75

    d. 21

---

53. Hari bought two articles A and B for a total of ₹1,250. He sold A at a loss of 20% and B at a profit of 15%. If the selling price of B was ₹75 less than two times that of A, then the cost price (in ₹) of A was: **(+1, −0.25)**

    a. 650

    b. 550

c. 600

d. 525

---

54. There is a discount of 12.5% on 6 shirts marked at ₹8,400. How many shirts can be bought with ₹4,900? **(+1, −0.25)**

    a. 6

    b. 5

    c. 7

    d. 4

---

55. The average marks of 100 students in a class were 80. The average marks of the top 15 students and the bottom 15 students in the merit list were 84 and 74, respectively. Find the average marks of the remaining students (correct to two decimal places). **(+1, −0.25)**

    a. 79.43

    b. 82.42

    c. 70.42

    d. 80.43

---

56. How much maximum water can be poured into an empty cylindrical tank having the depth of 7 m and radius of 20 m? **(+1, −0.25)**

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

    a. 8800 m^3

b. 4800 m^3

c. 8000 m^3

d. 4000 m^3

---

57. The ratio of X's and Y's incomes in the last year was 4 : 5. The ratio of their own incomes of the last year to those of this year is 3 : 4 and 2 : 3, respectively. If the sum of their present incomes is ₹15,400, what is the present income of X?   **(+1, −0.25)**

   a. ₹6,400

   b. ₹7,900

   c. ₹9,000

   d. ₹7,500

---

58. If the HCF of 273, 312 and 351 is x, then x lies between: **(+1, −0.25)**

   a. 35 and 40

   b. 25 and 30

   c. 30 and 35

   d. 40 and 45

---

59. If 0.25 : x : : 5 : 6, then x is equal to: **(+1, −0.25)**

   a. 0.9

   b. 0.3

c. 1.3

d. 0.6

---

60. The value of 60 ÷ 16 × 2 − [76 ÷ 5 of 19 − 15 ÷ 8 × (21 − 25) − 3] ÷ 53 is: **(+1, −0.25)**

  a. $6\frac{4}{15}$

  b. $3\frac{7}{10}$

  c. $7\frac{2}{5}$

  d. $4\frac{2}{5}$

---

61. Three numbers are such that the first number is 30 % more than the third   **(+1, −0.25)**
number and the second number is 40% less than the third number. What
is the ratio of the first number to the sum of the first number and the
second number?

  a. $\frac{13}{19}$

  b. $\frac{9}{13}$

  c. $\frac{6}{13}$

  d. $\frac{6}{19}$

---

62. A man borrows ₹13,000 to be paid back with the compound interest at a   **(+1, −0.25)**
rate of 8% per annum compounded annually by the end of 2 years in two
equal yearly instalments. How much will each instalment be?

  a. ₹7,500

  b. ₹7,725

c. ₹7,290

d. ₹7,250

---

63. Three numbers are in the ratio 4 : 3 : 7 and their HCF is 6. What is the sum of the three numbers?   **(+1, −0.25)**

a. 84

b. 42

c. 98

d. 56

---

64. A man covered a distance of 245 km in 7 hours on a scooter. How much distance (in km) can be covered on a electric cycle in 4 hours, if he rides the electric cycle at 3/7 of the speed of the scooter?   **(+1, −0.25)**

a. 45

b. 35

c. 50

d. 60

---

65. Express the given fraction percentage as a ratio in the lowest term.   **(+1, −0.25)**

$\frac{75}{17}$ %

a. 3 : 67

b. 3 : 68

c. 68 : 3

d. 3 : 57

---

66. Two pipes A and B can empty a full tank in 10 minutes and 15 minutes, respectively, whereas pipe C along can fill the same (empty) tank in 12 minutes. When the tank is full, A and B are opened for 4 minutes and then only pipe A is closed, and C is opened instantly (with B). How much time (in minutes) will it take now to fill the tank completely ? **(+1, −0.25)**

a. 20

b. 40

c. 25

d. 30

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67. The price of an article increases by 20% every year. If the difference between its price at the end of the third and that of the fourth year is ₹86.40, then its price (in ₹) at the end of the second year is: **(+1, −0.25)**

a. 360

b. 420

c. 350

d. 400

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68. A train can travel 50% faster than a car. Both start from point A at the same time and reach point B, 81 kms away from A, at the same time. On the way, however, the train lost about 12 minutes while stopping at the stations. The speed of the car is (rounded off to the nearest integer): **(+1, −0.25)**

a. 85 km/h

b. 95 km/h

c. 105 km/h

d. 135 km/h

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69. A shopkeeper bought two pairs of shoes at the same price and sold one   (+1, −0.25)
pair at a profit of 15% and the other pair at a loss of 5%. if the difference
between their selling prices is ₹140, then how much profit did he earn in
the whole transaction?

a. ₹210

b. ₹35

c. ₹70

d. ₹7

---

70. By selling an article for ₹210.80, a man loses 15%. To gain 9.5%, he should   (+1, −0.25)
sell it for:

a. ₹280.45

b. ₹265.40

c. ₹291.50

d. ₹271.56

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71. The simple interest on a certain sum of money for three and a half years   (+1, −0.25)
at 10% per annum is ₹55 less than the simple interest on the same sum for

four and a half years at 9% per annum. What is the sum?

a. ₹407.40

b. ₹975

c. ₹1,000

d. ₹500

---

72. Initially, Rekha works at such a rate that she can complete a piece of work in 24 h, but she works at that rate only for 8 h. After that, she works in such a way that she can complete the remaining work in 9 h. Rekha has to complete this work in one working period, then how many h will she take to complete that work? **(+1, -0.25)**

a. 12

b. 10

c. 14

d. 16

---

73. Mrs. Gupta invested a sum of ₹50,000 in fixed deposit for 1 year at the rate of 8% per annum compound interest compounded semi-annually. What amount will she get on maturity of the fixed deposit? **(+1, -0.25)**

a. ₹58,000

b. ₹54,000

c. ₹54,080

d. ₹50,416

74. Find the number of lead balls, each 2 cm in diameter, which can be made from a sphere of 18 cm of diameter.

(+1, -0.25)

    a. 729

    b. 827

    c. 843

    d. 972

75. The value of $\frac{4}{5} \div 3\frac{1}{4}$ of $\frac{8}{13} - \frac{\frac{1}{7} - \frac{1}{8}}{\frac{1}{7} + \frac{1}{8}} \times 4\frac{2}{7} + \frac{3}{5}$ is equal to:

(+1, -0.25)

    a. $\frac{5}{7}$

    b. $\frac{2}{7}$

    c. $\frac{3}{7}$

    d. $\frac{6}{7}$

English

76. Select the INCORRECTLY spelt word.   (+1, −0.25)

   a. Palace

   b. Paint

   c. Pecket

   d. Peddle

---

77. Select the correctly spelt word.   (+1, −0.25)

   a. Vigorously

   b. Carying

   c. Metalic

   d. Crystalisation

---

78. Select the most appropriate option to fill in the blank.   (+1, −0.25)

The child _ _ _ _ _ _ that he had broken the vase.

   a. collected

   b. demanded

   c. admitted

   d. requested

---

79. Select the most appropriate ANTONYM of the given word.   **(+1, -0.25)**

Assuage

a. Provoke

b. Decrease

c. Soothe

d. Relieve

80. Select the option that can be used as a one-word substitute for the given   **(+1, -0.25)**
group of words.

Dwarf varieties of trees and shrubs grown in pots

a. Shrimp

b. Pygmy

c. Bonsai

d. Bonanza

81. Select the most appropriate meaning of the given idiom.   **(+1, -0.25)**

Full steam ahead

a. Move very noisily

b. Make a train journey

c. Miss the train before reaching

d. Move onward with determination

82. Select the most appropriate synonym of the given word.   (+1, -0.25)

Enormous

a. Massive

b. Expensive

c. Ordinary

d. Limited

83. Select the most appropriate SYNONYM of the given word.   (+1, -0.25)

Wily

a. Frank

b. Crafty

c. Friendly

d. Honest

84. Select the most appropriate ANTONYM of the given word.   (+1, -0.25)

Certainty

a. Unreasonable

b. Prolong

c. Doubt

d. Divulge

85. Select the option that is closest in meaning to the underlined idiom/phrase in the given sentence. **(+1, -0.25)**

Please <u>cut down on</u> your expenses now or you will face difficulties in the future.

   a. recover

   b. raise

   c. refuse

   d. reduce

86. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. **(+1, -0.25)**

God is great / and we could / be grateful to him for all the gifts / he has bestowed on us.

   a. he has bestowed on us

   b. God is great

   c. and we could

   d. be grateful to him for all the gifts

87. Select the option that can be used as a one-word substitute for the given group of words. **(+1, -0.25)**

Person who is not an expert in a field of art or music

   a. Pariah

  b. Amateur

  c. Patron

  d. Eccentric

---

88. Select the most appropriate option to fill in the blank.   **(+1, -0.25)**

Look at the hippo _ _ _ _ _ _ about happily in the river.

  a. crackling

  b. stammering

  c. sputtering

  d. splashing

---

89. The following sentence has been divided into parts. One of them contains   **(+1, -0.25)** an error. Select the part that contains the error from the given options.

We forgot / to wish Susan / in her birthday / this year.

  a. to wish Susan

  b. We forgot

  c. in her birthday

  d. this year

---

90. Select the most appropriate option to fill in the blank.   **(+1, -0.25)**

In the year 1973, there were only 9 tiger reserves, but _ _ _ _ _ _ the number has risen to fifty.

a. consequently

b. gradually

c. adamantly

d. technically

91. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. (+1, -0.25)

Peter said / then / he was / feeling unwell.

a. feeling unwell

b. he was

c. then

d. Peter said

92. Select the option that will improve the underlined part of the given sentence. In case no improvement is needed, select 'No improvement required'. (+1, -0.25)

Not only did he run away from home, but also stole the money.

a. He only did not run

b. Only he did not ran

c. Not only did he ran

d. No improvement required

93. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

(+1, -0.25)

No sooner <u>he had returned home then</u> he saw the letter lying on the table.

a. had he returned home when

b. No substitution required

c. he returned home than

d. had he returned home than

94. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

(+1, -0.25)

They have decorated their house nicely, <u>didn't they</u> ?

a. No substitution required

b. have they

c. did they

d. haven't they

95. Select the option that can be used as a one-word substitute for the given group of words.

(+1, -0.25)

A place where antiques are kept

a. Museum

b. Hangar

c. Resort

d. Orphanage

---

96. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.   (+1, −0.25)

Once there were two brothers. One brother was (1) _ _ _ _ _ _ poor farmer. He worked in the fields, and (2) _ _ _ _ _ _ the weather was bad, he (3) _ _ _ _ _ _ no food. But he was kind and worked a (4) _ _ _ _ _ _. The other brother was a rich man (5) _ _ _ _ _ _ worked on a ship. He was not kind and often cheated people.

Select the most appropriate option to fill in blank no. 1.

a. a

b. simply

c. the

d. only

---

97. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.   (+1, −0.25)

Once there were two brothers. One brother was (1) _ _ _ _ _ _ poor farmer. He worked in the fields, and (2) _ _ _ _ _ _ the weather was bad, he (3) _ _ _ _ _ _ no food. But he was kind and worked a (4) _ _ _ _ _ _. The other brother was a rich man (5) _ _ _ _ _ _ worked on a ship. He was not kind and often cheated people.

Select the most appropriate option to fill in blank no. 2.

a. when

b. what

c. after

d. while

---

98. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

(+1, -0.25)

Once there were two brothers. One brother was (1) _ _ _ _ _ _ poor farmer. He worked in the fields, and (2) _ _ _ _ _ _ the weather was bad, he (3) _ _ _ _ _ _ no food. But he was kind and worked a (4) _ _ _ _ _ _. The other brother was a rich man (5) _ _ _ _ _ _ worked on a ship. He was not kind and often cheated people.

Select the most appropriate option to fill in blank no. 3.

a. will have

b. had

c. may have

d. has

---

99. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

(+1, -0.25)

Once there were two brothers. One brother was (1) _ _ _ _ _ _ poor farmer. He worked in the fields, and (2) _ _ _ _ _ _ the weather was bad, he (3) _ _ _ _ _ _ no food. But he was kind and worked a (4) _ _ _ _ _ _. The other brother was a rich man (5) _ _ _ _ _ _ worked on a ship. He was not kind and often cheated people.

Select the most appropriate option to fill in blank no. 4.

a. lots

b. much

c. hard

d. lot

---

100. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.   **(+1, -0.25)**

Once there were two brothers. One brother was (1) _ _ _ _ _ _ poor farmer. He worked in the fields, and (2) _ _ _ _ _ _ the weather was bad, he (3) _ _ _ _ _ _ no food. But he was kind and worked a (4) _ _ _ _ _ _. The other brother was a rich man (5) _ _ _ _ _ _ worked on a ship. He was not kind and often cheated people.

Select the most appropriate option to fill in blank no. 5.

a. that

b. who

c. which

d. whom

Answers

1. Answer: b

Explanation:

The logic followed here is :-

Second number × 13 = First number

- 195 : 15 → 15 × 13 = 195
- **? : 19 → 19 × 13 = 247**
- 273 : 21 → 21 × 13 = 273

Hence, the correct answer is **"247"**.

---

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

The logic followed here is :-

1) FLO

F   L   O
  +6   +3

2) LRU

```
L     R     U
|__↑__|__↑
   +6     +3
```

3) PVY

```
P     V     Y
|__↑__|__↑
   +6     +3
```

4) GMQ

```
G     M     Q
|__↑__|__↑
   +6     +4
```
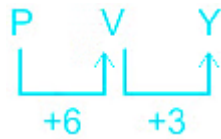
∴ Here, 'GMQ' is different from other three alternatives.

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

---

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 :-

```
        M   R   V
       +4| +4| +4|
        ↓   ↓   ↓
        Q   V   Z
       +4| +4| +4|
        ↓   ↓   ↓
        U   Z   D
       +4| +4| +4|
        ↓   ↓   ↓
        Y   D   H
       +4| +4| +4|
        ↓   ↓   ↓
      ┌─────────┐
      │ C   H   L│
      └─────────┘
```
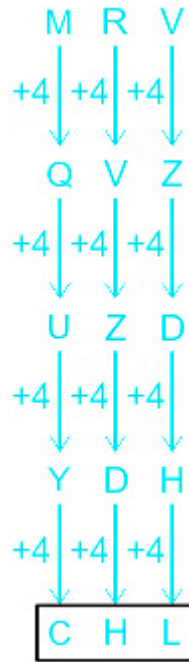
Hence, the correct answer is **"CHL"**.

4. Answer: d

Explanation:

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

- On top left corner of 1st and 3rd figure is darken, 2nd and 4th figure is un darken.
- Line pointed at middle of top left corner then moves to below left corner and repeats from figure to figure.
- In below right corner rectangle boxes are added +1 and alternate boxes are darken from below from figure to figure.
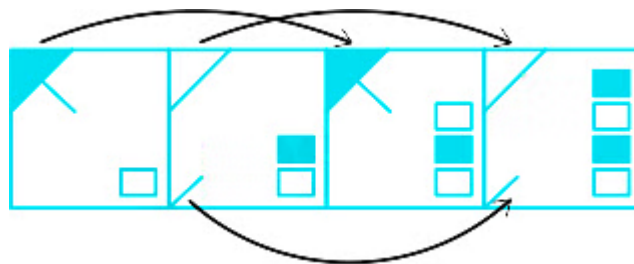
Hence, the correct answer is **"Option 4".**

---

5. **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 :-

Sum of first three letters of given word – Sum of last three letter of given word.

'GINGER' is coded as '30 – 30'.

$$\begin{array}{cccccc} G & I & N & G & E & R \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 7 & 9 & 14 & 7 & 5 & 18 \end{array}$$
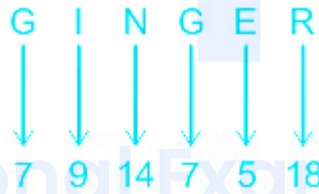
= (7 + 9 + 14) – (7 + 5 + 18)

= 30 – 30

And

'RADISH' is coded as '23 – 36'.

$$\begin{array}{cccccc} R & A & D & I & S & H \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 18 & 1 & 4 & 9 & 19 & 8 \end{array}$$
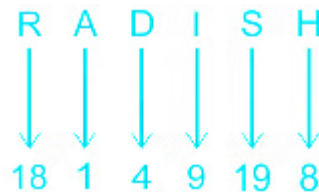
= (18 + 1 + 4) – (9 + 19 + 8)

= 23 – 36

Similarly,

'TOMATO' will be coded as :
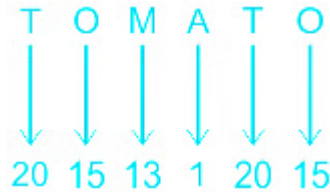
= (20 + 15 + 13) – (1 + 20 + 15)

= 48 – 36

Hence, the correct answer is **"48 – 36"**.

---

6. **Answer: c**

Explanation:

The arrangement of the given words in the order in which they appear in an English dictionary is as shown below :

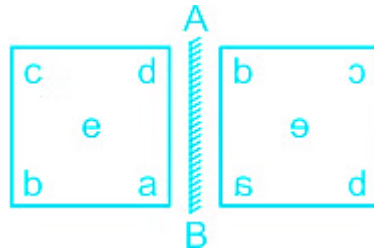5. **Tama b**le

2. **Tama g**otchi

1. **Tama l**e

4. **Tamar a**ck

3. **Tamar i**nd

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

---

7. **Answer: c**

Explanation:

The correct mirror image of the given combination when the mirror is placed at AB is as shown below :-

Hence, the correct answer is **"Option 3"**.

---

8. Answer: c

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 :

Alphabet positional values are arranged in increasing order.

ZOMBIE is written as BEIMOZ.

And
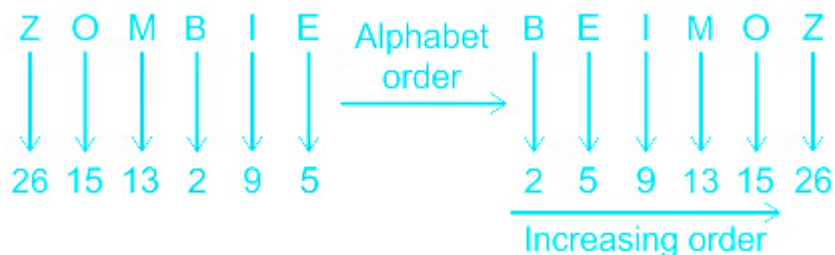
FLEX is written as EFLX.
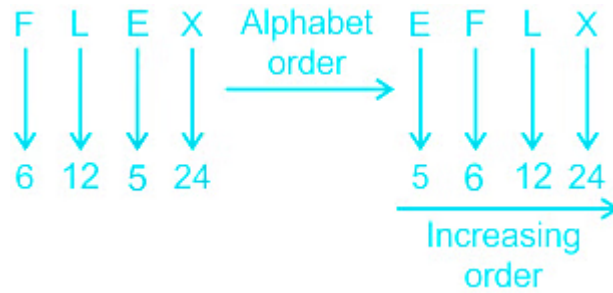
Similarly,

PRODUCT will be written as :
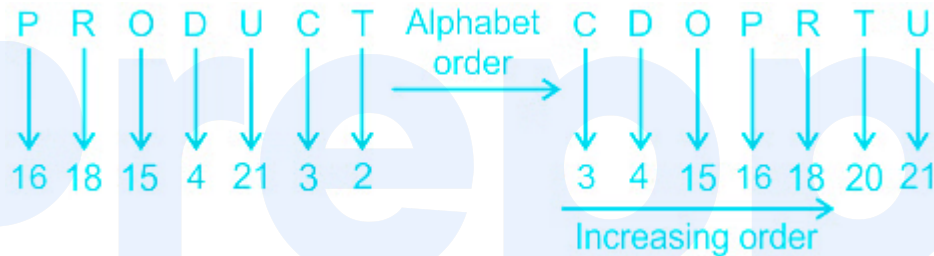
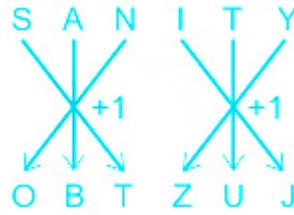Hence, the correct answer is **"CDOPRTU"**.

---

9. **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 :-

SANITY : OBTZUJ

S A N I T Y

+1 +1

O B T Z U J

Similarly,

FOSTER : ?

F O S T E R

+1 +1
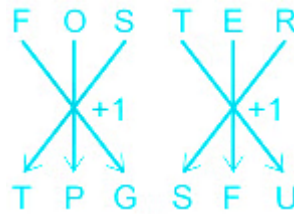
T P G S F U

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

10. **Answer: d**

Explanation:

The least possible Venn diagram for the given statements is as shown below :

mobile phones

smartphones | tablets

Conclusions:

I. Some mobile phones are tablets → True (As All smartphones are mobile phones and Some tablets are smartphones so, Some mobile phones are tablets is true)

II. Some mobile phones are smartphones → True (As All smartphones are mobile phones so, Some mobile phones are smartphones is true)

∴ Here, Both conclusions I and II are true.

Hence, the correct answer is **"Both conclusions I and II follow"**.

---

11. **Answer: c**

Explanation:
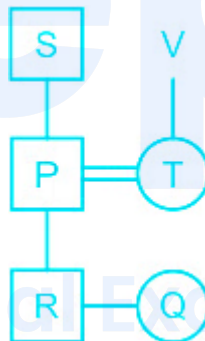
Preparing the family tree using the following symbols:

Symbol in Diagram	Meaning
◯	Female
☐	Male
═	Married Couple
—	Siblings
⏐	Difference of A Generation

According to the given information,

	A is		
Symbol	+	@	&
Meaning	father	brother	daughter
	Of B		

The given expression is :

'S + P + R @ Q & T & V' → S is father of P, P is father of R, R is brother of Q, Q is daughter of T, T is daughter of V.
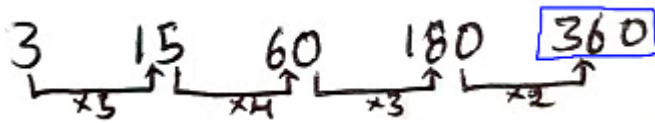

∴ Here, P is son-in-law of V.

Hence, the correct answer is **"Son-in-law"**.

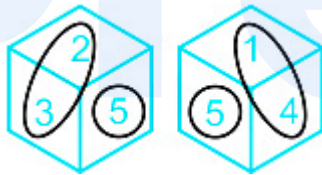
12. Answer: b

Explanation:

The logic followed here is :-

Hence, the correct answer is **"360"**.

---

13. Answer: b

Explanation:

The given dice 1 and dice 2 is as shown below :

T he six faces of which are numbered from 1 to 6.

From dice 1 and dice 2, '5' is adjacent of 1, 2, 3, 4.

So, the 5 will be opposite face '6'.

Hence, the correct answer is **"5"**.

---

14. Answer: a

Explanation:

Given :- R _ T _ T U _ _ R U _ S _ S T

By checking options and substituting accordingly.

1) SSTURR → R **S** T – **S** T U – **T U** R – U **R** S – **R** S T

RST - STU - TUR - URS - RST

- Here, the cycle of "RSTU" is repeating from word to word.

2) SRTURU → R **S** T – **R** T U – **T U** R – U **R** S – **U** S T

3) STURSR → R **S** T – **T** T U – **U R** R – U **S** S – **R** S T

4) URTSSR → R **U** T – **R** T U – **T S** R – U **S** S – **R** S T

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

---

15. **Answer: a**

Explanation:

The logic followed here is :-

In a column, First number ^{3} + Second number ^{2} = Third number

Column 1) :

5
8
189

= $5^3 + 8^2$

= 125 + 64

= 189

Column 2) :

6
7
265

$= 6^3 + 7^2$

$= 216 + 49$

$= 265$

Column 3) :

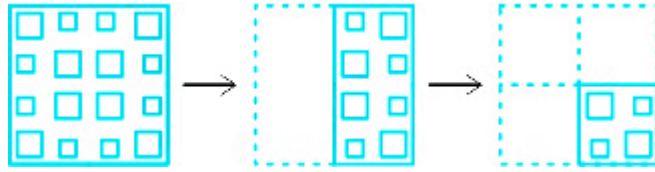| |
|---|
| 7 |
| 9 |
| ? |

$= 7^3 + 9^2$

$= 343 + 81$

$= 424$

Hence, the correct answer is **"424"**.

---

16. **Answer: b**

Explanation:

After unfolding the given paper the figure formed is as shown below :

Hence, the correct answer is **"Option 2"**.

---

17. Answer: c

Explanation:

There are two computer rooms, Lab A and Lab B.

Let us consider,

Students in Lab A = X

Students in Lab B = Y

If 10 students are sent from Lab A to Lab B, then the number of students in each room will be the same.

$\Rightarrow$ X – 10 = Y + 10

$\Rightarrow$ X – Y = 20 .... (1)

If 26 students are sent from Lab B to Lab A, then the number of students in Lab A will be triple the number of students in Lab B.

$\Rightarrow$ X + 26 = 3(Y – 26)

$\Rightarrow$ X + 26 = 3Y – 78

$\Rightarrow$ X = 3Y – 104 .... (2)

Substitute eqn (2) in equ (1) So, we get

$\Rightarrow$ X – Y = 20

$\Rightarrow$ 3Y – 104 – Y = 20

$\Rightarrow$ 2Y = 124

$\Rightarrow$ Y = 62

$\therefore$ Here, Number of students in Lab B taken as Y = 62

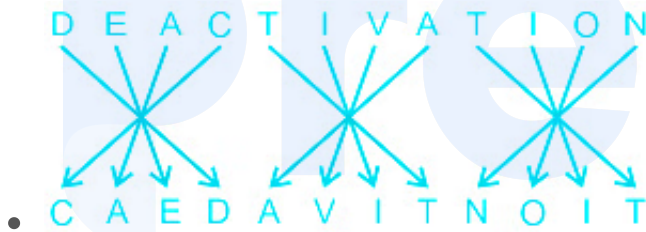Hence, the correct answer is **"62".**

---

18. **Answer: d**

Explanation:

The logic followed here is :-

'DEACTIVATION' is written as 'CAEDAVITNOIT'.
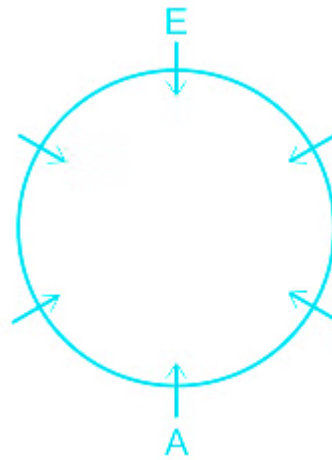

Similarly,

'FACILITATION' will be written as :

Hence, the correct answer is **"ICAFATILNOIT".**
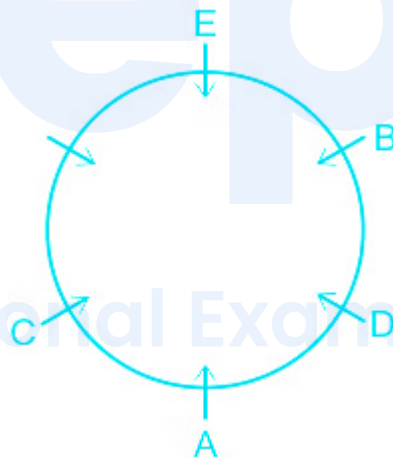
---

19. **Answer: b**

Explanation:

Six poets, A, B, C, D, E and F, are sitting opposite to each other in a circle, facing towards the centre.
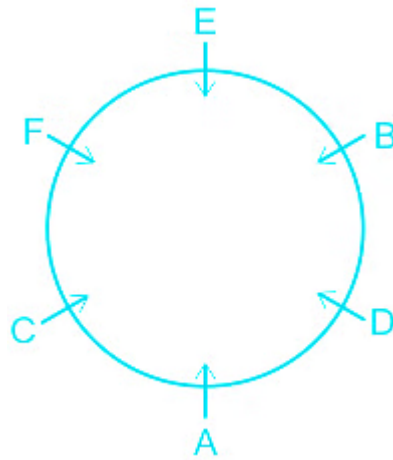
1) A is opposite to E.

2) C is opposite to B and A is adjacent to C and B is sitting immediate right to D.

3) F is adjacent to E.

∴ Here, 'E' is 5 th to the left of 'B'.

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

---

20. Answer: a
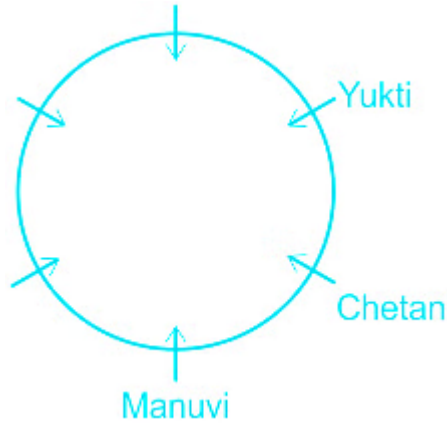
Explanation:

The logic followed here is :-

Hence, the correct answer is **"157.5".**
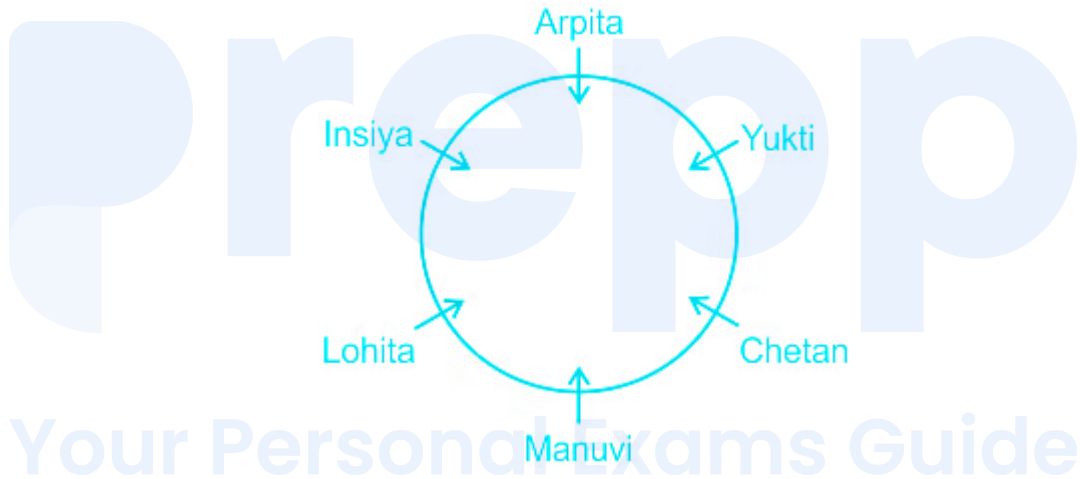
---

21. Answer: b

Explanation:

Arpita, Chetan, Insiya, Lohita, Manuvi and Yukti are sitting around a circular table facing its centre.

1) Chetan is sitting to the immediate right of Manuvi and Yukti is sitting second to the right of Manuvi.

2) Arpita is sitting between Insiya and Yukti.

∴ Here, 'Insiya' is sitting between Lohita and Aprita.

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

---

22. **Answer: b**

Explanation:

The least possible Venn diagram for the given relation is as shown below :

- All Trucks can be Vehicles.
- All Cars can be Vehicles.

Hence, the correct answer is **"Option 2".**

---

23. **Answer: a**

Explanation:

The logic followed here is :-

Sweater is made from wool.

Similarly,

Coin is made from metal.
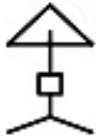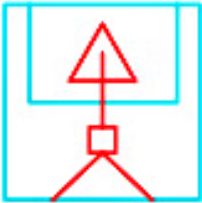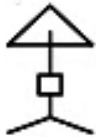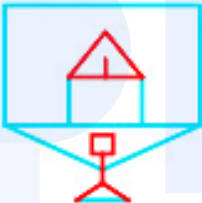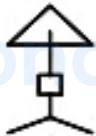
Hence, the correct answer is **"Metal".**

---

24. **Answer: a**

Explanation:

The figure embedded in the given options is as shown below :

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

Hence, the correct answer is **"Option 1"**.

---

25. Answer: c

Explanation:

The logic followed here is :-

By using BODMAS RULE :

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

Alphabet	A	B	C	D
Symbol	+	−	×	÷

Given expression : 12 A 9 C (17 B 6) B 24 A (28 D 7) = ?

After replacing the symbols in place of alphabets the expression is as follows : 12 + 9 × (17 − 6) − 24 + (28 ÷ 7)

= 12 + 9 ×(17 − 6)− 24 +(28 ÷ 7)

= 12 +9 × 11− 24 + 4

= 12 + 99− 24+ 4

= 115 − 24

= 91

Hence, the correct answer is **"91"**.

26. Answer: a

Explanation:

The correct answer is **Iqta**.

⭐ **Key Points**

- The Iqta System or Iqtadari System was introduced by <u>Shamsuddin Iltutmish</u> of the Delhi Sultanate.
- Iqtadari System was a powerful instrument for centralization.
- Iqtadari System was based on the division of territories between Sultans and Nobility.
- The agricultural and land revenue system of the early Turkish Sultans was based on the Iqta (assignment of land revenue) and Kharaj (Land Revenue).
- Under Iqta System, the land of the empire was divided into several large and small tracts called Iqta and assigned these Iqtas to his soldiers, officers and nobles.
- In the beginning, an Iqta was based upon salary.
- Later, under Firoz Shah Tughlaq it became hereditary.
- Alauddin Khilji suddenly abolished the system of small Iqtas and brought them under the central Government.
- This was regarded as one of the most important agrarian reforms of Alauddin Khilji.

27. Answer: b

Explanation:

The correct answer is <u>Viviparous.</u>

⭐ **Key Points**

- Viviparous animals are organisms that give birth to live offspring**/children** .

- Man is a viviparous animal.
- The female of the species takes on the responsibility of giving birth to the new offspring.
- Fertilization and embryo development are completed inside the female reproductive organ.
- Once fetal development is complete, the mother (female of the species) gives birth to the offspring.

⭐ <u>Additional Information</u>

- Frogs, lizards, and fish are oviparous animals .
- Oviparous animals produce offspring after their eggs hatch .
- Oviparous animals are distinguished by the e xternal development of embryos .
- There are four significant types of viviparous animals:
    - Histotrophic viviparity- where the new offspring are produced in the oviducts and get nutrition by eating their siblings, called adelphophagy.
    - Hemotrophic viviparity - is some primitive version of the placenta that acts as a channel for the child to get nutrients from the mother.
    - Placental viviparity- where the mothers provide nutrients to the offspring through the placenta till their developmental stage can tolerate the outside environment.
    - Ovoviviparity - is also known as the extended oviparous stage , where the progenitor gives birth to live offspring after keeping the eggs in their egg sac over extended periods.

---

28. **Answer: a**

Explanation:

The correct answer is the <u>Ministry of Education.</u>

⭐ <u>Key Points</u>

- Education Ministry is organising a 2-day conclave on School Education in 21st Century under Shikshak Parv starting 10 September 2020, through online

medium.

- On the first day of the Conclave, the focus will be on Principal and Teacher practitioners, who will discuss how they have already implemented certain themes of the NEP in creative ways.
- PM Modi will address the conclave on 11 September 2020.

⭐ **Additional Information**

- President Ram Nath Kovind will also confer the awards to 44 awardees through virtual mode on the Teacher's Day .
- The National Awards to Teachers were first instituted in 1958 to recognize excellence and commitment of teachers.
- The Prime Minister will launch five initiatives of the Department on 7th September 2021.
- These include:
    - Indian Sign Language dictionary of 10 thousand words,
    - Talking Books the audio books for visually impaired,
    - School Quality Assessment and Accreditation Framework SQAAF of CBSE,
    - NISTHA teachers' training programme for NIPUN Bharat and
    - Vidyanjali Portal for facilitating education volunteers or donors or CSR contributors for school development.

---

29. **Answer: c**

Explanation:

The correct answer is **Rani Rampal.**

⭐ **Key Points**

- Rani Rampal has been nominated for the 'World Games Athlete of the Year' Award, 2019 by the International Hockey Federation (FIH).
- 'World Games Athlete of the Year' award has been the first time won by a hockey player.
- Rani Rampal has received Padmashree award, one of the highest civilian awards of our country in 2020.

⭐ <u>Additional Information</u>

Minister of State, Youth Affairs and Sports	Anurag Thakur (Sept 2020)
Captain of the Indian women's hockey team	Rani Rampal
President, Hockey India	Mohd. Mushtaque Ahmad
International Hockey Federation (FIH), Headquarters	Lausanne, Switzerland
FIH President	Narinder Batra

30. **Answer: c**

Explanation:

The correct answer is <u>Fourth.</u>

⭐ <u>Key Points</u>

- In November 2020, India became the **fourth country** to have its own independent regional navigational satellite system.
- **The Indian Regional Navigation Satellite System (IRNSS)** has been accepted as a component of the World Wide Radio Navigation System (WWRNS) for operation in the Indian Ocean Region by the International Maritime Organization (IMO).
- IRNSS is an independent regional navigation satellite system being developed by India . It is designed to provide accurate position information service to users in India as well as the region extending up to 1500 km from its boundary , which is its primary service area.

⭐ <u>Additional Information</u>

- An Extended Service Area lies between primary service area and area enclosed by the rectangle from Latitude 30 deg South to 50 deg North, Longitude 30 deg East to 130 deg East.
- IRNSS will provide two types of services, namely, Standard Positioning Service (SPS) which is provided to all the users and Restricted Service (RS) , which is an encrypted service provided only to the authorised users .
- The IRNSS System is expected to provide a position accuracy of better than 20 m in the primary service area .
- **Some applications of IRNSS are** :
  - Terrestrial, Aerial and Marine Navigation
  - Disaster Management
  - Vehicle tracking and fleet management
  - Integration with mobile phones
  - Precise Timing
  - Mapping and Geodetic data capture
  - Terrestrial navigation aid for hikers and travellers
  - Visual and voice navigation for drivers
- The IRNSS Signal-in-Space Interface Control Document for Standard Positioning Service (SPS) is released to the public to provide the essential information on the IRNSS signal-in-space, to facilitate research & development and aid the commercial use of the IRNSS signals for navigation-based applications.

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31. **Answer: a**

Explanation:

The correct answer is <u>Vishnu Narayan Bhatkhande .</u>

⭐ <u>Key Points</u>

- Pandit Vishnu Narayan Bhatkhande was an Indian musicologist, Indian sitarists and prominent musicians, in the early 20th century, developed a notation

system and classified the musical practices of the Indian subcontinent that continued to grow from earlier oral tradition.

- He was responsible for writing the first modern treatise on Hindustani classical music.

⭐ <u>Additional Information</u>

- Pandit Vishnu Narayan Bhatkhande started the famous Madhav music school in Gwalior, Madhya Pradesh in 1918 with the help of the Rajas of Gwalior.
  - He reclassified Ragas into thaat system .
  - He composed several Bandish which was like the grammar of ragas.
  - He published a book called Swar Malika describing ragas.
  - He also published Shri Mallakshaya Sangeetam in Sanskrit under his pen name Chatur Pandit.
- **Ustad Sidhhar Khan Dhadhi** was the founder of Delhi Gharana, the first and fundamental Gharana of Tabla.

---

32. **Answer: d**

Explanation:

The correct answer is <u>300 Bones.</u>

⭐ <u>Key Points</u>

- Babies are born without the kneecap (or patella) .
- The kneecap starts out as cartilage and starts significantly hardening into bone between the ages of 2 and 6 years old.
- In most cases, several areas of cartilage in the knee begin to harden at the same time and eventually fuse together to form one solid bone.
- When babies are born, **some of their "bones" are technically cartilage** that eventually hardens into bone as they grow.
- Adults still have some cartilage, but far less than newborns.
- Most of the cartilage in adults is located at the ends of bones to help them to glide smoothly over each other at the joints.

- Cartilage also gives a flexible shape and structure to places like the **ears and nose.**

⭐ Additional Information

- A baby's body has about 300 bones at birth.
- These in the end fuse (grow together) to form the 206 bones that adults have.
- Some of a baby's bones are made entirely of a special material known as cartilage.
- Newborns come in a range of healthy sizes.
- Most babies born between 37 and 40 weeks weigh somewhere between 5 pounds, 8 ounces (2,500 grams) and 8 pounds, 13 ounces (4,000 grams) .
- Newborns who are lighter or heavier than the average baby are normally fine.
- As well 9 out of 10 babies born at term (37 to 40 weeks) weight between 2.5kg and 4.5kg .

---

33. Answer: b

Explanation:

The correct answer is <u>Action against environmental crimes.</u>

⭐ Key Points

- **Operation Thunder 2020** is related to Action against environmental crimes.
- It resulted in more than 2,000 seizures of wildlife and forestry products.
- In total, 699 offenders were apprehended and at least one **INTERPOL Red Notice** has already been requested based on information gained during the operation.

⭐ Additional Information

- The India Customs intercepted an 18-tonne shipment of red sandalwood destined for the United Arab Emirates, during a month-long " **Operation Thunder 2020"** , coordinated by the **Interpol and the World Customs Organisation,** which involved law enforcement agencies in **103 countries.**

- The operation against environmental crime was held from **September 14 to October 11.**
- It resulted in large seizures of protected wildlife and forestry specimens and products, triggering arrests and investigations worldwide.
- **"Focusing on pre-identified routes and hotspots** , 'Operation Thunder 2020' resulted in more than 2,000 seizures of wildlife and forestry products.

---

34. Answer: c

Explanation:

The correct answer is <u>Shiva</u>.

⭐ **Key Points**

- Elephanta Caves are a UNESCO World Heritage Site and a collection of cave temples predominantly dedicated to the Hindu god Shiva .
- The 'City of Caves' , on an island in the Sea of Oman close to Bombay , contains a collection of rock art linked to the cult of Shiva.
- The Elephanta Caves are located in Western India on Elephanta Island (otherwise known as the Island of Gharapuri), which features two hillocks separated by a narrow valley.
- The Elephanta Caves are considered to be a contribution by the Kalachuris and the latest rules to contribute were the Rashtrakutas .

---

35. Answer: d

Explanation:

The correct answer is <u>**Finance Ministry .**</u>

⭐ <u>Key Points</u>

- Theyprovide direct credit assistance to rural households:
- **Regional Rural Banks (RRBs)**
- **Land Development Banks (LDBs)**
- **Agricultural Trader**
- **Cooperative Credit Societies**

⭐ <u>Additional Information</u>

- National Bank for Agriculture and Rural Development (NABARD) is a statutory body , established in 1982 under the National Bank for Agriculture and Rural Development Act, 1981.
- It was set up on the recommendation of the B. Sivaraman Committee.
- Objective: The main agenda behind its establishment is to promote agricultural and rural development and provide refinance facilities to Commercial banks, State Cooperative Banks, Central Cooperative Banks, Regional Rural Banks, and Land Development Banks.
- It supervises RRBs, State Cooperative Banks, and District Central Cooperative Banks.

---

36. **Answer: b**

Explanation:

The correct answer is <u>**Angel's trumpet.**</u>

⭐ <u>Key Points</u>

- Angel's trumpet is a **night blooming flower.**
- All parts of angel's trumpets are **considered poisonous and contain the alkaloids atropine, scopolamine, and hyoscyamine.**

- Ingestion of the plants can cause disturbing hallucinations, paralysis, tachycardia, and memory loss and can be fatal.
- Their large, fragrant flowers give them their common name of angel's trumpets, a name sometimes used for the closely related genus **Datura**.

⭐ Additional Information

- **Gazania** is a genus of flowering plants in the family Asteraceae, native to Southern Africa.
- **Venice mallow** (Hibiscus trionum) is a non-native annual in the mallow family (Malvaceae).

---

37. **Answer: a**

Explanation:

The correct answer is 25 Lakh.

⭐ Key Points

- The prize money for the **Rajiv Gandhi Khel Ratna Award** has been increased to **Rs 25 lakh from the previous amount of Rs 7.5 lakh.**
- Arjuna Award has been enhanced to **Rs 15 lakh from Rs 5 lakh.**
- The Dhronacharya (Lifetime) awardees, who were earlier given **Rs 5 lakh, will now be richer by Rs 15 lakh.**
- Dhronacharya (Regular) winners will be given **Rs 10 lakh instead of Rs 5 lakh.**

⭐ Additional Information

- The Rajiv Gandhi Khel Ratna award was instituted in the year 1991-92.
- The Rajiv Gandhi Khel Ratna named to "Major Dhyan Chand Khel Ratna" in 2021.
- It is India's highest honour given for achievement in sport.
- The award is named after the late Rajiv Gandhi, former Prime Minister of India.
- It carries a medal, a scroll of honour, and a cash component of 25 lakh.
- The Khel Ratna is conferred for outstanding sporting performance, whether by an individual or a team, across all sporting disciplines in a given year.

38. Answer: a

Explanation:

The correct answer is **Estuary.**

⭐ **Key Points**

- An estuary is a partially confined coastal water body where salt water from oceans mix with fresh water from rivers and streams.
- It is a coastal area where a river meets the ocean .
- It is strongly affected by tidal actions and is very rich in nutrients and consequently very rich in biodiversity too.
- The organisms here are highly tolerant and many species are endemic . The ecosystem is known to have high food productivity .
- However this ecosystem has to be protected from pollution.

⭐ **Additional Information**

- **A delta** extends a river's mouth into the body of water into which it is emptying.
  - A delta is sometimes divided into two parts: subaqueous and subaerial.
- **A desert** is a barren area of landscape where little precipitation occurs and, consequently, living conditions are hostile for plant and animal life.
- **A lagoon** is a shallow body of water separated from a larger body of water by a narrow landform, such as reefs, barrier islands, barrier peninsulas, or isthmuses.

39. Answer: b

Explanation:

The correct answer is **Quorum in Parliament.**

⭐ **Key Points**

- **Quorum** is the minimum number of members required to be present in the House before it can transact any business. It is 1/10 of the total strength of the House
- The Quorum refers to the number of members that must be present for a house meeting to take place.
- For both the Lok Sabha and the Rajya Sabha, the Constitution established a quorum of one-tenth of the total membership .
- Thus, at least 55 members must be present to hold a Lok Sabha session, while at least 25 members must be present to conduct a Rajya Sabha sitting.
- If a quorum is not present, the Speaker must adjourn the House or postpone the meeting until a quorum is present.

⭐ <u>Additional Information</u>

- Following provisions are amended by Simple Majority of Parliament:
  - 2 nd Schedule
  - 5 th Schedule
  - 6 th Schedule
  - Quorum in Parliament
  - Delimitation of constituencies.

---

40. **Answer: d**

Explanation:

The correct answer is <u>Ghatprabha.</u>

⭐ <u>Key Points</u>

- It originates from the Mahabaleshwar, Western Ghats.
- The tributaries of the river are
  - Tungabhadra,
  - Mallaprabha,
  - Koyna,
  - Bhima,
  - Ghataprabha,

- Yerla,
- Warna,
- Dindi,
- Musi, and
- Dudhganga.

- Nagarjuna Sagar Dam, Koyna Hydroelectric Project, Almatti Dam, Srisailam Dam and Bhadra Dam is on the Krishna river.

⭐ **Additional Information**

- Pranhita is a tributary of river Godavari .
  - It is a combined flow of rivers Wainganga, Penganga, Wardha.
- Tributaries of River Godavari are Pravara, the Purna, the Manjra, the Penganga, the Wardha, the Wainganga, the Indravati, the Maner and the Sabri.

---

41. **Answer: c**

Explanation:

The correct answer is **Aryna Sabalenka .**

⭐ **Key Points**

- Aryna Sabalenka won the Linz Open on November 16, 2020.
- The 22-year old Belarusian traded places with Serena Williams who has dropped to 11 th in the ranking.
- Aryna Sabalenka is a **Belarusian Tennis player.**
- She has been ranked at number **9 in singles and number 2 in doubles by the Women Tennis Association.**
- Aryna Sabalenka won her first Grand Slam at the 2019 US Open.
- She has won **twelve Women Tennis Association (WTA) titles.**

⭐ **Additional Information**

- **Sofia Anna "Sonya" Kenin** is an American professional tennis player.
- **Serena Jameka Williams** is an American inactive professional tennis player.

- **Elise Mertens** is a Belgian professional tennis player.

---

42. Answer: b

Explanation:

The correct answer is <u>2019</u>.

⭐ <u>Key Points</u>

- Unregulated Deposit Schemes were banned in India by the 'Banning of Unregulated Deposit Schemes Act, 2019'.
- Parliament has passed the Banning of Unregulated Deposit Schemes Bill, 2019, which seeks to put in place a mechanism by which poor depositors will get back their hard-earned money.
- The Banning of Unregulated Deposit Schemes Bill, 2019 was introduced in Lok Sabha by the Minister of Finance, Ms. Nirmala Sitharaman, on July 19, 2019.
- It also seeks to amend three laws, i.e., the Reserve Bank of India Act, 1934, the Securities and Exchange Board of India Act, 1992, and the Multi-State Co-operative Societies Act, 2002.
- Unregulated Deposit Scheme:
  - The Bill bans unregulated deposit schemes. A deposit-taking scheme is defined as unregulated if it is taken for a business purpose and is not registered with the regulators.

⭐ <u>Additional Information</u>

- Competent Authority:
  - The Bill provides for the appointment of one or more government officers, not below the rank of Secretary to the state or central government, as the Competent Authority.
  - The Competent Authority will have powers similar to those vested in a civil court.
  - The Competent Authority may:
    - provisionally attach the property of the deposit taker, as well as all deposits received

- summon and examine any person it considers necessary for the purpose of obtaining evidence
- orders the production of records and evidence
- The Bill will help to tackle the menace of illicit deposit-taking activities (Ponzi Schemes/Chit Funds) in the country , which at present are exploiting regulatory gaps and lack of strict administrative measures to dupe people of their savings.

---

43. Answer: b

Explanation:

The correct answer is Mumbai.

⭐ **Key Points**

- The headquarter of SEBI is situated in Mumbai .
- The regional offices of SEBI are located in Ahmedabad, Kolkata, Chennai, and Delhi .
- The Securities and Exchange Board of India:
    - It is a statutory body .
    - It was established on April 12, 1992 , in accordance with the provisions of the Securities and Exchange Board of India Act, 1992 .
    - Its basic functions are to protect the interests of investors in securities and to promote and regulate the securities market .

⭐ **Additional Information**

Power and functions of SEBI:

- SEBI is a quasi-legislative and quasi-judicial body that can draft regulations, conduct inquiries, pass rulings, and impose penalties.
- It functions to fulfill the requirements of three categories:
    - Issuers – By providing a marketplace in which the issuers can increase their finance.

- Investors – By ensuring safety and supply of precise and accurate information.
- Intermediaries – By enabling a competitive professional market for intermediaries.

---

44. Answer: a

Explanation:

The correct answer is <u>Meghalaya</u>.

⭐ <u>Key Points</u>

- Laho dance belongs to the state of <u>Meghalaya</u> in India.
- It is performed during the Behdienkhlam festival.
- It is performed by both men and women.
- Jaintiatribe perform this dance festival.
- Derogata ,Dodrua, Shad nongkrem are some of the dance festivals of Meghalaya.

⭐ <u>Additional Information</u>

Important dance forms	States
Bharatnatyam	Tamil Nadu, South India
Kathak	Uttar Pradesh, North India
Kathakali	Kerala, South India
Manipuri	Manipur, North East India
Kuchipudi	Andhra Pradesh
Odissi	Odisha, East India
Garba	Gujarat, West India
Rouf	Kashmir, North India
Ghoomar	Rajasthan
Chhau	Mayurbhanj, Odisha
Bihu	Assam, North-east India

Lavani	Maharashtra, West India
Mohiniyattam	Kerala, South India
Sattriya Dance	Assam, North East India

45. Answer: a

Explanation:

The correct answer is <u>Ramayana.</u>

⭐ <u>Key Points</u>

- **Nepalese poet, Bhanubhakta Acharya** , is famous for translating **Ramayana** from Sanskrit into Nepali language.
- He is known as 'Adikavi' for laying down the foundation stone of the Nepali language.
- He was the first writer to translate the great epic Ramayana from Sanskrit to Nepali.
- His birth anniversary is known as 'Bhanu Jayanti' & is celebrated by the people of Nepal, Darjeeling, and Sikkim.

⭐ <u>Additional Information</u>

- **Kambana** translated the Ramayana into Tamil.
- **Dara Shikoh** translated the Bhagavad-gita and Upanishads into the Persian language.
- **Ramayana and Singhasan Batisi** were translated by Mulla Abdul Qadir Badayuni into Persian.

46. Answer: a

Explanation:

The correct answer is
<u>1.5 lakh</u>.

⭐

<u>Key Points</u>

- As announced in the Union Budget 2020, an amount up to ₹ **1.5 lakh** can be claimed as deduction on interest paid on loans taken for purchase of electric vehicles.
- A deduction for interest payments up to **Rs 1,50,000 is available under Section 80EEB.**
- An individual taxpayer may have an electric vehicle for personal use or for business use.
- This deduction would facilitate individuals having an **electric vehicle for personal use to claim the interest paid on the vehicle loan.**

⭐ <u>Additional Information</u>

- Budget and Constitutional Provisions
  - According to Article 112 of the Indian Constitution, the Union Budget of a year is referred to as the Annual Financial Statement (AFS).
  - It is a statement of the estimated receipts and expenditure of the Government in a financial year (which begins on 01 April of the current year and ends on 31 March of the following year). In addition to it, the Budget contains:
  - Estimates of revenue and capital receipts,
  - Ways and means to raise the revenue,
  - Estimates of expenditure,
  - Details of the actual receipts and expenditure of the closing financial year and the reasons for any deficit or surplus in that year, and
  - The economic and financial policy of the coming year, i.e., taxation proposals, prospects of revenue, spending programme and introduction of new schemes/projects.

47. Answer: b

Explanation:

The correct answer is <u>Bricks.</u>

⭐ <u>Key Points</u>

- **Bricks** found at the **site of Harappa**, did engineers take away to build the first railway lines in **Punjab in present-day Pakistan.**
- To them, it seemed like a mound that was a **rich source of ready made, high quality bricks.**
- So they carried off **thousands of bricks from the walls of the old buildings** of the city to build railway lines.
- Many buildings were **completely destroyed.**
- Then, about eighty years ago, archaeologists found the site, and **realised that this was one of the oldest cities in the subcontinent.**
- As this was the first city to be discovered, all other sites from where similar buildings (and other things) were found were described as **Harappan Civilization.**
- These cities developed about **4700 years ago.**

⭐ <u>Additional Information</u>

- Harappa was situated on the banks of the river Ravi.
- The Indus Valley civilization was discovered first in 1921 at the modern site of Harappa situated in the province of West Punjab in Pakistan .
- The city lies on the banks of the river Ravi, a left-bank tributary of river Indus.
- Harappan civilization is also known as Indus Valley Civilization for being situated on and around the banks of the Indus river.
- It flourished around 2,500 BCE in the western part of South Asia, in contemporary Pakistan, western India, and parts of Afghanistan.

48. Answer: a

Explanation:

The correct answer is**Sharqi Dynasty - Punjab.**

⭐ **Key Points**

- The Sharqi Dynasty was founded by a slave of Indian origin (Malik Sarwar).
- In 1389, Malik Sarwar received the title of Khwajah-i-Jahan and Malik-Us-Sharqi.
- In 1394, he was appointed as the governor of **Jaunpur** and received his title of Malik-us-Sharq from Sultan Nasiruddin Mahmud Shah Tughluq.
  - **Hence it is not related to Punjab.**

⭐ **Additional Information**

- The **Ahom dynasty** ruled over present-day Assam.
  - The dynasty ruled over Assam for almost 6 centuries from 1228 to 1826.
  - The founder of the Ahom dynasty was Sukhapaa who came from Mong Mao, Mong Mao was a small medieval state located on present-day Myanmar-China border.
  - The rule of the dynasty ended in the Burmese invasion of Assam in 1826.
- Kapilendra Deva was the founder of the Suryavamsa **Gajapati dynasty** that ruled parts of **Orissa and Andhra Pradesh in the 15th century.**
  - He had staged a military coup against the preceding and the last Eastern Ganga dynasty ruler Bhanu Deva IV and overtook the throne.
- **Mewar or Mewad i**s a region in the south-central part of **Rajasthan state of India.**
  - Mewar was founded by **Bappa Rawal,** formerly a chieftain of the Mori king of Chittor, who acquired control of Chittor in c. 728.

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49. **Answer: a**

Explanation:

The correct answer is **Raghuram Rajan.**

- As per the India state of forest report 2019, <u>Madhya Pradesh</u> is the state which has the largest forest cover (area-wise).
- **Area wise largest forest cover in the country** :
    - Madhya Pradesh
    - Arunachal Pradesh
    - Chhattisgarh
    - Odisha
    - Maharashtra
- The **top three states show an increase in forest area** :
    - Karnataka (1,025 sq km)
    - Andhra Pradesh (990 sq km)
    - Kerala (823 sq km)

⭐ <u>Additional Information</u>

- India State of Forest Report 2019 is the 16th biennial assessment of India's forests by the Forest Survey of India.
- FSI undertakes the National Forest inventory to assess the growing stock in forests and TOF, bamboo resource, carbon stock and to assess the dependence of the people living in Forest Fringe Villages for fuelwood, fodder, small timber, and bamboo.
- The 2019 report for the first time has assessed the qualitative nature of the forest cover, including listing its biodiversity and the type of plants and trees found.
- It also created a national forest inventory for the first time on produce from forests.
- Forest Cover (Percentage) : Mizoram (85.4%)> Aruncachal Pradesh(79.63%)> Meghalaya (76.33%).

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51. **Answer: a**

Explanation:

Calculation:

Total discount given = ₹1422 – ₹1264 = ₹158

Discount percentage = $\frac{158}{1422}$ × 100 = 11.11%

The discount percentage offered is 11.11%.

---

52. Answer: b

Explanation:

Formula:

Average = Sum of the numbers ÷ Total numbers

Calculation:

Sum of 9 numbers = 20.6 × 9 = 185.4

Sum of three numbers = 26.1 × 3 = 78.3

Sum of three numbers = 15.2 × 3 = 45.6

∴ The Sum of remaining three numbers = 185.4 – (78.3 + 45.6) = 61.5

⇒ Average of remaining three numbers = 61.5 ÷ 3 = 20.5

∴ The average of remaining three numbers is 20.5.

---

53. Answer: b

Explanation:

Given:

Hari bought two articles A and B for a total of ₹1,250

Loss (L A) = 20%

Profit (L B) = 15%

Formula used:

$$SP = \frac{(100 - Loss\%)}{100} \times CP$$

$$SP = \frac{(100 + Gain\%)}{100} \times CP$$

Calculation:

Let,

The cost price of A is x

The cost price of B is (1250 – x)

SP A = $\frac{(100 - 20)}{100} \times x$

SP$_A$ = 4x/5

SP$_B$ = $\frac{(100 + 15)}{100} \times (1250 - x)$

SP B = $\frac{23}{20} \times (1250 - x)$

According to the question

The selling price of B was ₹75 less than two times that of A

∴ (2 × 4x/5) – (1250 – x) × 23/20 = 75

⇒ (8x/5) – (1250 × 23/20) + (23x/20) = 75

⇒ (11x/4) = 75 + 2875/2

⇒ 11x = 6050

x = 550

∴ The cost price (in ₹) of A was Rs. 550.

54. Answer: d

Explanation:

Calculation:

Cost of the shirts after discount = 0.875 × ₹ 8,400 = ₹ 7,350

Cost of each shirt = $\frac{7350}{6}$ = ₹1,225

Total shirts that can be bought for ₹ 4,900 = $\frac{4900}{1225}$ = 4

∴ **4 shirts could be bought for ₹ 4,900.**

55. Answer: d

Explanation:

Given:

The average marks of 100 students were 80.

The average marks of the top 15 students is 84

and the average of the bottom 15 students is 74.

Concept Used:

Number of students × Average marks = Total obtained marks of the students

Calculation:

The total marks of 100 students = 100× 80

⇒ 8000

The total marks of Top 15 students = 84 × 15

⇒ 1260

The total marks of Bottom 15 students = 74 × 15

⇒ 1110

So, total number of (15+15) = 30 students

⇒ Total marks of those 30 students = (1260 + 1110)

⇒ 2370

Total number of remaining students = (100-30)

⇒ 70 students

Total marks of remaining 70 students = Total marks of 100 students - Total marks of 30 students

⇒ (8000 - 2370)

⇒ 5630

So, the average marks of the remaining 70 students = 5630 / 70 = 80.43

∴ The average marks of the remaining students is 80.43

---

56. Answer: a

Explanation:

Formula:

Volume of the water tank = $\pi \times r^2 \times h$

Where, "r" and "h" are the radius and height of the tank.

Concept:

The amount of maximum water that can be poured into the empty tank would be equal to the volume of the cylindrical tank.

Calculation:

Substituting the values in the equation, we get-

⇒ Volume of the tank = $\frac{22}{7}$ × 20 × 20 × 7 = 8800 m^3

∴ **The tank can hold a maximum capacity of 8800 m^3 water.**

57. **Answer: a**

Explanation:

Calculation:

Let the common ratio for the income of last year be "a".

⇒ Income of X last year = 4a

⇒ Income of Y last year = 5a

Let the current income of X be "x" and Y be "y"

⇒ $\frac{4a}{x}$ = $\frac{3}{4}$ and $\frac{5a}{y}$ = $\frac{2}{3}$

⇒ x = $\frac{16a}{3}$ and y = $\frac{15a}{2}$

According to the question-

$\Rightarrow \frac{16a}{3} + \frac{15a}{2}$ = Rs 15,400

$\Rightarrow \frac{77a}{6}$ = Rs 15,400

$\Rightarrow a = \frac{6 \times 15,400}{77}$ = Rs 1200

$\therefore$ Current income of X = $\frac{16 \times 1200}{3}$ = Rs 6400

The current income of X is Rs 6400.

---

58. Answer: a

Explanation:

Calculations:

Finding the HCF of 273, 312 and 351 through the prime factorization method, we get-

273 = 3 × 7 × 13

312 = 2 × 2 × 2 × 3 × 13

351 = 3 × 3 × 3 × 13

Thus, HCF of the numbers is 3 × 13 = 39

Hence, the HCF of the numbers lies between 35 and 40.

The HCF of the numbers lies between 35 and 40.

---

59. Answer: b

Explanation:

Given:

0.25 : x :: 5 : 6

Calculation:

The given proportion can also be written as,

$$\frac{0.25}{x} = \frac{5}{6}$$

On cross multiplying, we get

$\Rightarrow$ x = (6 × 0.25) / 5

$\Rightarrow$ x = 0.3

$\therefore$ The value of x is 0.3

---

60. **Answer: c**

Explanation:

Concept:

We would use the concept of BODMAS-

B – Bracket

O – Off

D – Divide

M – Multiplication

A – Addition

S – Subtraction

Calculation:

60 ÷ 16 × 2 – [76 ÷ 5 of 19 – 15 ÷ 8 × (21 – 25) – 3] ÷ 53

$\Rightarrow$ 60 ÷ 16 × 2 – [76 ÷ 5 of 19 – 15 ÷ 8 × –4 – 3] ÷ 53

⇒ 60 ÷ 16 × 2 – [76 ÷ 95 – 15 ÷ 8 × –4 – 3] ÷ 53

⇒ 60 ÷ 16 × 2 – [$\frac{4}{5}$ – $\frac{15}{8}$ × –4 – 3] ÷ 53

⇒ 60 ÷ 16 × 2 – [$\frac{4}{5}$ + $\frac{15}{2}$ – 3] ÷ 53

⇒ 60 ÷ 16 × 2 – [$\frac{83}{10}$ – 3] ÷ 53

⇒ 60 ÷ 16 × 2 – [$\frac{83-30}{10}$] ÷ 53

⇒ 60 ÷ 16 × 2 – [$\frac{53}{10}$] ÷ 53

⇒ $\frac{15}{4}$ × 2 – $\frac{1}{10}$

⇒ $\frac{15}{2}$ – $\frac{1}{10}$

⇒ $\frac{74}{10}$ = $7\frac{2}{5}$

∴ The answer is $7\frac{2}{5}$.

---

61. Answer: a

Explanation:

Given:

Out of three numbers , 1st number is 30% more than the 3rd number.

2nd number is 40% less than the third number

Calculation:

Let, 3rd number is 100

Then 1st number = 100 + 100 × (30/100)

⇒ 130

Again, 2nd number is 40% less than the third number

⇒ 100 – (100 × 40/100)

⇒ 60

The sum of the 1st number and 2nd number is = (130 + 60)

⇒ 190

And, the 1st number is 130

The ratio of the first number to the sum of the first number and the second number = 130:190

⇒ 13:19

∴ T he ratio of the first number to the sum of the first number and the second number is 13:19

---

62. **Answer: c**

Explanation:

Given:

Total principal(P) = Rs. 13000

Rate (R) = 8%

Time (T) = 2 years

Formula used:

Amount (A) = P $(1 + R/100)^T$

Calculation:

Let each installment be x

Principal amount for 1st installment P_1 = x/(1 + 8/100)

$P_1 = x/(108/100) = 100x/108$

Principal amount for 2nd installment $P_2 = x/(1 + 8/100)^2$

$P_2 = x/(1 + 8/100)^2 = 10000x/11664$

Now,

$P_1 + P_2 = 13000$

$(100x/108) + (10000x/11664) = 13000$

$20800x/11664 = 13000$

$x = 13000 \times 11664/20800$

$x = 7290$

∴ The installment each year be Rs. 7290.

---

63. **Answer: a**

Explanation:

Given:

Three numbers are in the ratio of 4:3:7

Their HCF is 6

Concept Used:

Three numbers are in the ratio of 4:3:7

So, If one is 4x, then other two are 3x and 7x respectively

(Here ' **x** ' is the HCF of the numbers)

Calculation:

Let numbers are 4x, 3x and 7x.

Then sum of the numbers is (4x + 3x + 7x) = 14x

HCF is x = 6 (as per question)

sum of the numbers is 14 × 6 = 84

∴The sum is= 84

---

64. Answer: d

Explanation:

Given:

Total distance covered = 245

Total time = 7 hour

Calculation:

Speed of the scooter = 245/7 = 35 km/h

Speed of the electric cycle = 3/7 × 35 = 15 km/h

∴ Required distance = (15 × 4) = 60 km

∴ 60 km can be covered by the electric cycle.

---

65. Answer: b

Explanation:

Given:

Fraction percentage = $\frac{75}{17}$ %

Concept used:

Percentage: - By a certain percent, we mean that many hundredths. Thus, x% means x hundredths, written as x%

To express x% as a fraction: We have, x% = $\frac{x}{100}$

Calculation:

$\Rightarrow$ $\frac{75}{17}$ % = $\frac{75}{17 \times 100}$

$\Rightarrow$ $\frac{3}{68}$

---

66. Answer: b

Explanation:

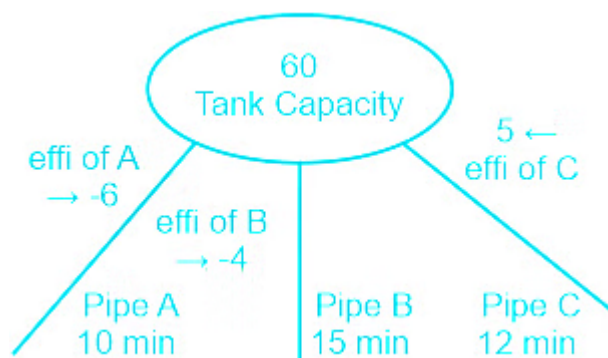### Given:

A pipe can empty in 10 minutes

B pipe can empty in 15 minutes

C pipe can fill in 12 minutes

A and B opened for 4 minutes

Then only pipe A closed and c opened

⭐ Shortcut Trick

sign = For tank emptying pipes

+ sign = For tank filling pipes

A and B are opened for 4 minutes:

Therefore, 60 + 4 × (– 6 – 4) = 20   ---(40units removed)

Then only pipe A is closed, and C is opened instantly with B:

Efficiency of B + C = – 4 + 5 = 1

Time required = 40/1 = 40 min.

∴ Time required to fill the tank completely is 40 minutes.

⭐ **Alternate Method**

Concept Used:

Efficiency = Total work / Total time taken

A and B pipes emptied the tank so their efficiency should be calculated as negative

on the other hand, C pipe is filling the tank, so its efficiency should be calculated as positive.

Calculation:

Let , total work is = LCM of 10,12 & 15

⇒ 60 unit

Efficiency of Pipe A = 60/10

⇒ 6 unit

Efficiency of Pipe B = 60/15

⇒ 4 unit

Efficiency of Pipe C 60/12

⇒ 5 unit

So in 4 minutes pipe A and B eliminated together (6 + 4) × 4 = 40 unit of water.

The remaining water, 60 - 40 = 20 units.

Now, only pipe A is closed, and C is opened instantly (with B)

B eliminated 4 units of water in 1 minute and C filled 5 units in 1 minute.

They are working together,

Both B and C together filled (5 - 4) = 1 unit of water in 1 minute.

They filled the remaining 60 - 20 = 40 units of water in 40 minutes.

∴ Time required to fill the tank completely is 40 minutes.

⭐ Additional Information

Efficiency is inversely proportionate to the number of time to complete the work.

---

67. **Answer: a**

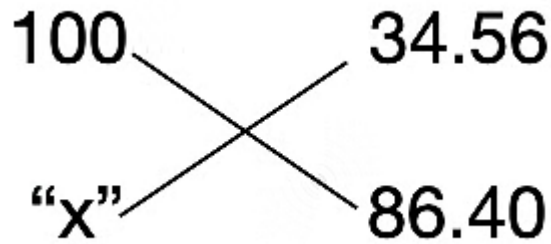**Explanation:**

Calculation:

Let the initial cost of the article be 100.

⇒ Price of article after 1st year = 1.2 × 100 = 120

⇒ Price of article after 2nd year = 1.2 × 120 = 144

⇒ Price of article after 3rd year = 1.2 × 144 = 172.8

⇒ Price of article after 4th year = 1.2 × 178 = 207.36

Difference in the cost after the third and fourth years = 207.36 - 172.8 = 34.56

$$\begin{array}{ccc} 100 & & 34.56 \\ & \diagdown \diagup & \\ & \diagup \diagdown & \\ \text{``x''} & & 86.40 \end{array}$$

$\Rightarrow$ x = $\frac{86.4 \times 100}{34.56}$ = Rs 250

$\therefore$ Price at the end of the second year = 1.2 × 1.2 × 250 = Rs 360

The price at the end of the second year is Rs 360.

---

68. **Answer: d**

Explanation:

Given data:

Speed of train is 50% more than the speed of the car

Distance = 81 km

Time lost by the train = 12 min = $^{12}/_{60}$ h = 1/5 h

Calculation:

Let the speed of the car be x kmph.

Then, speed of the train = $^{150x}/_{100}$ = $^{3x}/_{2}$ km/h

According to the question:

$\frac{81}{x} - \frac{81}{\frac{3x}{2}} = \frac{1}{5}$

$\Rightarrow \frac{81}{x} - \frac{54}{x} = \frac{1}{5}$

$\Rightarrow \frac{81-54}{x} = \frac{1}{5}$

$\Rightarrow$ x = 135

∴ The speed of the car is 135 km/h.

---

69. Answer: c

Explanation:

Calculation:

Let the cost price be "a".

⇒ 1.15a − 0.95a = Rs 140

⇒ 0.20a = Rs 140

⇒ a = $\frac{140}{0.20}$ = Rs 700.

Selling price of one pair = 1.15 × 700 = Rs 805

Selling price of other pair = 0.95 × 700 = Rs 665

Total selling price = Rs 805 + Rs 665 = Rs 1470

Total cost price = Rs 700 + Rs 700 = Rs 1400

∴ Profit = Rs 1470 − Rs 1400 = Rs 70

The total profit earned is Rs 70.

---

70. Answer: d

Explanation:

Formula :

CP = $\frac{SP}{1 - \frac{L}{100}}$, where

CP = Cost Price

SP = Selling Price

L = Loss%

Calculation:

Substituing the value in the Selling Price equation-

$\Rightarrow$ CP = $\frac{210.8}{1-\frac{15}{100}}$ = 210.8 × $\frac{20}{17}$ = Rs 248

According to the question-

$\Rightarrow$ New SP = Rs 248 × $\left(1 + \frac{9.5}{100}\right)$ = Rs 271.56

$\therefore$ The selling price is Rs 271.56

---

71. **Answer: c**

Explanation:

Given:

The simple interest on a certain sum of money for (three and a half years) = 7/2 years at 10% per annum is ₹55 less

than the simple interest on the same sum for (four and a half years) = 9/2 years at 9% per annum.

Principal is same in both the cases.

Formula Used:

Simple Interest (SI) = [Principal (P) × Rate of interest (R) × Time(T)] / 100

Calculation:

Let , Time (T_1) = 7/2 years

Rate of interest (R_1) = 10%

Again , Time (T$_2$) = 9/2 years

Rate of interest (R$_2$) = 9%

Principal (P) is same in both of the cases.

As per question,

(P × R$_2$ × T$_2$)/100 – (P × R1 × T1)/100 = 55

⇒ (P × 9 × 9/2) /100 – (P × 10 × 7/2) /100 = 55

⇒ 5.5 P = 55 × 100

⇒ P = (55 × 100) / 5.5

⇒ P = 1000

∴ The sum is ₹1000

⭐ Additional Information

Amount (**A**) = Principal (**P**) + Interest (**I**)

---

72. **Answer: c**

Explanation:

Given:

Rekha works at a rate such that she can finish the work in 24 h

Concept used:

Total work = Efficiency of the worker × time taken by him

Calculation:

Let the efficiency of Rekha be x units/h

Now,

Total work = 24 × x

⇒ 24x

In 8 hours she will complete 8 × x = 8x units

Remaining work = 24x - 8x = 16x

If Rekha completes the remaining work in 9 hours then her efficiency = 24x/9

⇒ 8x/3

So,

The remaining work is completed = 16x/(8x/3)

⇒ 6 hours

Total time = 8 + 6

⇒ 14 hours

∴ She will take 14 hours to finish this work.

⭐ **Shortcut Trick**

	Time	Efficiency	Total work
Rekha	24	x	24x
Rekha 1st condition	8	x	
Rekha 2nd condition	9	y	16x

We get that 24x = 8x + 9y ⇒ 9y = 16x ⇒ y =16x/9
Time = total work /efficiency = 24x / (16x/9) = 27/ 2 = 13.50

73. Answer: c

Explanation:

Given:

Total sum = 50,000

Total time = 1 year

Rate = 8% per annum

Compound interest compounded semi annually.

Concept:

For 2 year compound interest golden ratio is 2 : 1

Calculation:

Rate = 8% per annum

Rate for 6 month = 4%

The golden ratio for 2 year compound interest is 2 : 1

$$
\begin{array}{c|c}
2 & 1 \\
\hline
2000 & 80 \\
\end{array}
$$

So, Amount is 50000 + 2000 × 2 + 80 = 54080

∴ He will get ₹54,080 after maturity of fixed deposit.

74. Answer: a

Explanation:

Given:

Diameter of large sphere = 18 cm

Radius of large sphere = 9 cm

Diameter of lead balls = 2 cm

Radius of lead balls = 1 cm

Formula used:

Volume of sphere = 4/3 × π r ^{3}

Number of lead balls = volume of sphere / volume of one lead ball

Calculation:

Volume of larger sphere = 4/3 × π 9 3

Volume of small sphere = 4/3 × π 1 3

Total number of lead balls = $\frac{\frac{4}{3}\pi \times 9^3}{\frac{4}{3}\pi \times 1^3}$ = 729

So the total number of lead balls is 729.

75. **Answer: a**

Explanation:

Given:

$\Rightarrow$ $\frac{4}{5}$ ÷ $3\frac{1}{4}$ of $\frac{8}{13}$ − $\frac{\frac{1}{7}-\frac{1}{8}}{\frac{1}{7}+\frac{1}{8}}$ × $4\frac{2}{7}$ + $\frac{3}{5}$

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:

$\Rightarrow \frac{4}{5} \div 3\frac{1}{4}$ of $\frac{8}{13} - \frac{\frac{1}{7} - \frac{1}{8}}{\frac{1}{7} + \frac{1}{8}} \times 4\frac{2}{7} + \frac{3}{5}$

$\Rightarrow \frac{4}{5} \div \frac{13}{4}$ of $\frac{8}{13} - \frac{\frac{1}{7} - \frac{1}{8}}{\frac{1}{7} + \frac{1}{8}} \times \frac{30}{7} + \frac{3}{5}$

$\Rightarrow \frac{4}{5} \div \frac{13}{4} \times \frac{8}{13} - \frac{\frac{1}{7} - \frac{1}{8}}{\frac{1}{7} + \frac{1}{8}} \times \frac{30}{7} + \frac{3}{5}$

$\Rightarrow \frac{4}{5} \div \frac{2}{1} - \frac{\frac{1}{7} - \frac{1}{8}}{\frac{1}{7} + \frac{1}{8}} \times \frac{30}{7} + \frac{3}{5}$

$\Rightarrow \frac{4}{5} \times \frac{1}{2} - \frac{1}{15} \times \frac{30}{7} + \frac{3}{5}$

$\Rightarrow \frac{2}{5} - \frac{2}{7} + \frac{3}{5}$

$\Rightarrow \frac{25}{35}$

$\Rightarrow \frac{5}{7}$

---

76. **Answer: c**

Explanation:

The correct answer is **Pecket** .

⭐ **Key Points**

- The correct spelling and meaning of the selected option are as follows:

- ○ **Packet:** a small box, bag, etc. in which things are packed to be sold in a shop.
  - ○ **Example:** Rahul threw the empty **packet** in the dustbin after eating chips.
- Thus, the incorrectly spelt word is given in **option 3** .

⭐ **Additional Information**

- **Palace:** a large house that is or was the home of a king or queen.
- **Paint:** coloured liquid that is put onto a surface to decorate or protect it.
- **Peddle:** to go from place to place selling something.

---

77. Answer: a

Explanation:

The correct answer is **Vigorously.**

⭐ **Key Points**

- **Vigorously:** in a way that is very forceful or energetic.
  - ○ Environmentalists and local government officials have **vigorously** opposed the project.
- Thus, the correctly spelt word is given in **option 1** .

⭐ **Additional Information**

- The correct spellings and meanings of other given options are as follows:
  - ○ **Carrying:** holding somebody/something while moving from one place to another.
  - ○ **Metallic:** connected with metal or metals.
  - ○ **Crystallisation:** a process in which thoughts or opinions become clear and fixed.

---

78. Answer: c

Explanation:

The correct answer is **admitted** .

⭐ <u>Key Points</u>

- **Admit** : to agree that something unpleasant is true or that someone has done something wrong.
  - **Example:** Rohan **admitted** that he had stolen the pen.
- Thus, the most appropriate option to fill in the blank is **option 3** .

⭐ <u>Additional Information</u>

- **Collect:** to bring a number of things together.
- **Demand:** a strong request or order that must be obeyed.
- **Request:** an act of asking for something.

---

79. **Answer: a**

Explanation:

The correct answer is **Provoke** .

⭐ <u>Key Points</u>

- **Assuage:** to make an unpleasant feeling less strong.
- **Provoke:** to say or do something that will make a person angry or upset.
- Thus, the most appropriate antonym of **assuage** is **provoke** .

⭐ <u>Additional Information</u>

- **Decrease:** to become or to make something smaller or less
- **Relieve:** to make an unpleasant feeling or situation stop or get better.
- **Soothe:** to make somebody calmer or less upset; to comfort somebody.

---

80. Answer: c

Explanation:

The correct answer is **Bonsai** .

⭐ <u>Key Points</u>

- **Bonsai** : a small tree which is grown in a pot and is not allowed to grow to its normal size.
  - **Example:** I promptly bought the **bonsai** tree painting plus took it house.
- Thus, the option that can be used as a one-word substitute for the given group of words is **option 3** .

⭐ <u>Additional Information</u>

- **Shrimp:** a small sea creature with a shell and a lot of legs that turns pink when it is cooked.
- **Pygmy:** a very small person or thing or one that is weak in some way.
- **Bonanza:** a situation in which somebody can make a lot of profit or be very successful.

---

81. Answer: d

Explanation:

The correct answer is **move onward with determination** .

⭐ <u>Key Points</u>

- **Full steam ahead:** to start to carry out a particular project in a thorough and determined way.
  - **Example:** The Government is going **full steam ahead** with its privatization programme.

- Thus, the most appropriate meaning of the given idiom is expressed in **option 4**.

---

82. **Answer: a**

Explanation:

The correct answer is **massive** .

⭐ **Key Points**

- **Enormous:** very big or very great.
- **Massive:** very big.
- Thus, the most appropriate synonym of **enormous** is **massive** .

⭐ **Additional Information**

- **Expensive:** costing a lot of money.
- **Limited:** small or controlled in number, amount, etc.
- **Ordinary:** normal; not unusual or different from others.

---

83. **Answer: b**

Explanation:

The correct answer is **Crafty** .

⭐ **Key Points**

- **Wily:** clever at getting what one wants.
- **Crafty:** clever at getting or achieving things by using unfair or dishonest methods.
- Hence, the most appropriate synonym of the given word is given in **option 2** .

⭐ **Additional Information**

- **Frank:** showing one's thoughts and feelings clearly.
- **Friendly:** behaving in a kind and open way.
- **Honest:** telling the truth; not lying to people or stealing.

---

84. Answer: c

Explanation:

The correct answer is **doubt** .

⭐ **Key Points**

- **Certainty:** the state of being completely sure about something.
- **Doubt:** a feeling of uncertainty.
- Hence, the most appropriate **antonym** of the given word is given in **option 3** .

⭐ **Additional Information**

- **Unreasonable:** unfair; expecting too much.
- **Prolong:** to make something last longer.
- **Divulge:** to tell something that is secret.

---

85. Answer: d

Explanation:

The correct answer is **reduce** .

⭐ **Key Points**

- **Cut down:** to reduce the size, amount, or number of something.
  - **Example:** I need to **cut down** on coffee and eat a balanced diet.
- Thus, the option that is closest in meaning to the underlined idiom/phrase in the given sentence is **option 4** .

- **Recover:** to become well again after one has been ill.
- **Raise:** to lift something up.
- **Reduce:** to make something less or smaller in quantity, price, size, etc.

---

86. Answer: c

Explanation:

The correct answer is **and we could** .

⭐ <u>Key Points</u>

- **Could** should be reduced by **can** .
- The given sentence is in the **present tense** .
- Could is the **past form** of can.
- The use of **can** is more appropriate here.
- Thus, the the segment that contains a grammatical error is given in **option 3** .

---

87. Answer: b

Explanation:

The correct answer is **amateur** .

⭐ <u>Key Points</u>

- **Amateur:** a person who takes part in a sport or an activity for pleasure, not for money as a job.
  - **Example:** Jerry is an **amateur** who dances because he feels like it.
- Thus, the option that can be used as a one-word substitute for the given group of words is **option 2** .

⭐ <u>Additional Information</u>

- **Pariah:** an outcast.
- **Patron:** a person who gives money and support to artists, writers and musicians.
- **Eccentric:** (used about people or their behaviour) strange or unusual.

---

88. Answer: d

Explanation:

The correct answer is **splashing** .

⭐ <u>Key Points</u>

- **Splash:** (used about a liquid) to fall or to make liquid fall noisily or fly in drops onto a person or thing.
  - **Example:** The children are **splashing** around in the shallow end of the swimming pool.
- **Splashing** is the **present participle or gerund** of splash.
- Thus, the most appropriate option to fill in the blank is **option 4** .

⭐ <u>Additional Information</u>

- **Crackle:** to make a series of short, sharp sounds.
- **Stammer:** to speak with difficulty, repeating sounds and pausing before saying things correctly.
- **Sputter:** make a series of soft explosive or spitting sounds..

---

89. Answer: c

Explanation:

The correct answer is **in my birthday** .

⭐ <u>Key Points</u>

- **On** should be used instead of **in** .
- **In** is used for **months, years, centuries and long periods** .
- The word "on" is used to refer to a calendar date, a day of the week, or a special day such as a birthday or anniversary.
  - For example - on Christmas Day, on 6 March, etc
- Thus, the part that contains the error from the given options is contained in **option 3** .

---

90. Answer: b

Explanation:

The correct answer is **gradually** .

⭐ **Key Points**

- **Gradually:** slowly over a period of time or a distance.
  - **Example:** Women have **gradually** started taking stand for their empowerment.
- Thus, the most appropriate option to fill in the blank is **option 2** .

⭐ **Additional Information**

- **Consequently:** as a result; therefore.
- **Adamantly:** with great insistence or determination.
- **Technically:** according to the exact meaning, facts, etc.

---

91. Answer: c

Explanation:

The erroneous part is: **then** .

⭐ **Key Points**

- The following sentence is in the **indirect speech** .
- 'That' is used to introduce a **subordinate clause** that expresses a statement or hypothesis.
  - For example: Ravi said **that** he had been waiting for me.
- Similarly, in this context, 'that' should be used after 'said' as it is used to introduce the subordinate clause.
- The use of 'then' is grammatically incorrect in this context.
- 'then' should be replaced by 'that'.

Therefore, the correct answer is: *Peter said **that** he was feeling unwell.*

---

92. Answer: d

Explanation:

The correct answer is **no improvement required** .

⭐ <u>Key Points</u>

- **Not only... (but) also** is used for emphasizing the fact that there is something more to add.
  - **Example:** I **not only** wrote the text **but also** researched the photographs.
- To add **emphasis** , not only can be used at the **beginning of a clause** .
- When this is done, the order of subject and verb is **inverted** .
- The sentence is grammatically correct and **does not require any improvement** .
- Thus, the correct option is **option 4** .

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93. Answer: d

Explanation:

The correct answer is **had he returned home than** .

⭐ Key Points

- **No sooner** is used to show that one thing happens **immediately after another thing** .
- It is often used with **past perfect tense** and usually followed by **than** .
- When no sooner is used in the **front position** , the order of the auxiliary verb and subject is **inverted** .
- Thus, **auxiliary verb** should be used prior to **subject** .
- Here, the auxiliary verb is **had** and the subject is **he** .
- Hence, most appropriate option that can substitute the underlined segment in the given sentence is **option 4** .

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94. Answer: d

Explanation:

The correct option is **haven't they** .

⭐ Key Points

- **Didn't they** should be replaced by **haven't they** .
- In the given sentence, **present perfect tense** is used.
- Thus, the **question tag** will be formed using the helping verb of **present perfect tense (has or have),**
- Question tags are formed by using a regular sentence in the present perfect simple, then adding **haven't or hasn't and a pronoun** (I, you, we, they, he, she, it) and a **question mark** .
- Hence, the most appropriate option that can substitute the underlined segment in the given sentence is **option 4** .

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95. Answer: a

Explanation:

The correct answer is **Museum** .

⭐ <u>Key Points</u>

- **Museum:** a building where collections of valuable and interesting objects are kept and shown to the public.
  - **Example:** We visited Science **Museum** last month.

Thus, the correct option that can be used as a one-word substitute for the given group of words is **option 1** .

⭐ <u>Additional Information</u>

- **Hangar:** a big building where planes are kept.
- **Resort:** a place where a lot of people go to on holiday.
- **Orphanage:** a home for children whose parents are dead.

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96. **Answer: a**

Explanation:

The correct answer is **a.**

⭐ <u>Key Points</u>

- Articles can be divided into **definite (the) and indefinite (a, an) articles** .
- The definite article (the) is used before a noun to indicate that **the identity of the noun is known to the reader** .
- The indefinite article (a, an) is used before **a noun that is general or when its identity is not known** .
- The use of **a** is more appropriate here.
- Thus, the most appropriate option to fill in blank no. 1 is **option 1** .

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97. **Answer: a**

Explanation:

The correct answer is **when** .

⭐ Key Points

- **When** can be used in the following ways:
    - as a **conjunction** (connecting two clauses)
    - as a **question adverb** (introducing a direct or indirect question)
    - as a **relative adverb** (referring back to a noun and introducing a relative clause)
- In the given context, when is used as a **conjunction** in order to join two clauses.
- Thus, the most appropriate option to fill in the blank no. 2 is **option 1** .

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98. Answer: b

Explanation:

The correct answer is **had** .

⭐ Key Points

- The passage is given in the **past tense** .
- The use of **had** is appropriate here.
- Had is used as the **main verb** here.
- It is a **transitive verb** , and must therefore be followed by **a direct object** .
- The direct object of to have can be **a noun, a noun group, a pronoun or a numeral** .
- Hence, the most appropriate option to fill in blank no. 3 is **option 2** .

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99. Answer: d

Explanation:

The correct answer is **lot** .

⭐ Key Points

- **A lot** means very often or very much.
- It is used as **an adverb** .
- It often comes at the **end of a sentence** and never before a noun.
- Thus, the most appropriate option to fill in the blank no. 4 is **option 4** .

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100. **Answer: b**

Explanation:

The correct answer is **who** .

⭐ Key Points

- Who is used as a **relative pronoun** here.
- Relative pronouns refer back to **a noun phrase or pronoun** that has just been mentioned.
- The relative pronoun is the **subject/object of the relative clause** , so we do not repeat the subject/object.
- Thus, the most appropriate option to fill in blank no. 5 is **option 2** .