

Prepp

Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



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IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

SSC MTS Previous Year Paper (Held on: 6 Oct 2021 Shift 3)

Total Time: 1 Hour : 30 Minute

Total Marks: 100

Instructions

Sl No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks
1	General English	25	25	0.25	1
2	General Intelligence & Reasoning	25	25	0.25	1
3	Numerical Aptitude	25	25	0.25	1
4	General Awareness	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 English

1. Select the most appropriate one-word substitution for the given group of words. (+1, -0.25)

A person who remains unmoved and unaffected by other people's opinions, suggestions

- a. Irresponsible
- b. Unreliable
- c. Imprudent
- d. Impervious

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

_____ entering the hall, please turn off your mobile phones.

- a. Previous
- b. Ahead
- c. Earlier
- d. Before

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

With your new credit card, you can _____ up to Rs. 20,000 in a day.

- a. withdraw
- b. withdraws

- c. withdrew
- d. withdrawn

4. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'. (+1, -0.25)

I'm certain go to start studying from today.

- a. certain going
- b. No substitution required
- c. certainly go
- d. certainly going

5. Select the INCORRECTLY spelt word. (+1, -0.25)

- a. Decorative
- b. Ornamental
- c. Extravagent
- d. Elaborate

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

Over the moon

- a. Highly imaginative
- b. Extremely happy

- c. Very ambitious
 - d. Very unrealistic
-

7. Identify the segment in the sentence which contains a grammatical error. (+1, -0.25)

Slowly the dog, Spot, went towards it and pounced up the rat.

- a. and pounced
 - b. up the rat
 - c. Slowly the dog, Spot
 - d. went towards it
-

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

Copycat

- a. One who imitates another closely
 - b. One who copies all drawings of cats
 - c. One who doesn't like cats as pets
 - d. One who loves cats and dogs
-

9. Select the INCORRECTLY spelt word (+1, -0.25)

- a. Scenic
- b. Persuasion
- c. Absense

d. Erroneous

10. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'. (+1, -0.25)

There were a dozen eggs in the basket, but now there will be only six.

- a. there is
 - b. No substitution required
 - c. there been
 - d. there are
-

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

They looked at each other for a moment without speaking and then fell into a _____.

- a. confidence
 - b. conversation
 - c. conversion
 - d. conviction
-

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

FLIMSY

- a. Clumsy

- b. Strong
 - c. Weak
 - d. Tiny
-

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

GRACEFUL

- a. friendly
 - b. pleasant
 - c. elegant
 - d. dangerous
-

14. Identify the segment in the sentence which contains a grammatical error. (+1, -0.25)

Vijaya saw the play in a auditorium near her house.

- a. near her house
 - b. Vijaya saw
 - c. in a auditorium
 - d. the play
-

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

Half-way _____ the two towns, there was a mountain which had to be crossed.

- a. around
 - b. across
 - c. between
 - d. within
-

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

FLUORESCENT

- a. flowery
 - b. perfumed
 - c. glowing
 - d. elaborate
-

17. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'. (+1, -0.25)

Very soon, the people find out as the snake was harmless and the boys began to tease it mercilessly.

- a. found out that
 - b. finds out but
 - c. finding out so
 - d. No substitution required
-

18. Identify the segment in the sentence which contains a grammatical error. (+1, -0.25)

Obi wanted to continue on his idea of building a modern school.

- a. building a modern school
 - b. his idea of
 - c. Obi wanted
 - d. to continue on
-

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

DEFENCE

- a. guard
 - b. protection
 - c. security
 - d. offence
-

20. Select the most appropriate one-word substitution for the given group of words. (+1, -0.25)

A boat or ship for conveying passengers and goods, especially over a relatively short distance and as a regular service

- a. Dinghy
- b. Freighter
- c. Submarine

d. Ferry

-
21. Comprehension: In the following passage, some words have been deleted. (+1, -0.25)
Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Long ago in China, at a time when girls (1)_____ expected to stay at home and (2)_____ household work while the boys (3)_____ to school, a girl named Zhu had a desire (4)_____ study. Her family was wealthy and Zhu was (5)_____ so she too could have had her wish, but her father did not want to go against tradition.

Select the most appropriate option to fill in blank number 1.

- a. be
- b. are
- c. will
- d. were

-
22. Comprehension: In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+1, -0.25)

Long ago in China, at a time when girls (1)_____ expected to stay at home and (2)_____ household work while the boys (3)_____ to school, a girl named Zhu had a desire (4)_____ study. Her family was wealthy and Zhu was (5)_____ so she too could have had her wish, but her father did not want to go against tradition.

Select the most appropriate option to fill in blank number 2.

- a. teach

- b. do
- c. make
- d. produce

23. Comprehension: In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+1, -0.25)

Long ago in China, at a time when girls (1) _____ expected to stay at home and (2) _____ household work while the boys (3) _____ to school, a girl named Zhu had a desire (4) _____ study. Her family was wealthy and Zhu was (5) _____ so she too could have had her wish, but her father did not want to go against tradition.

Select the most appropriate option to fill in blank number 3.

- a. went
- b. goes
- c. go
- d. going

24. Comprehension: In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+1, -0.25)

Long ago in China, at a time when girls (1) _____ expected to stay at home and (2) _____ household work while the boys (3) _____ to school, a girl named Zhu had a desire (4) _____ study. Her family was wealthy and Zhu was (5) _____ so she too could have had her wish, but her father did not want to go against tradition.

Select the most appropriate option to fill in blank number 4.

- a. in
- b. to
- c. at
- d. for

25. Comprehension: In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+1, -0.25)

Long ago in China, at a time when girls (1) _____ expected to stay at home and (2) _____ household work while the boys (3) _____ to school, a girl named Zhu had a desire (4) _____ study. Her family was wealthy and Zhu was (5) _____ so she too could have had her wish, but her father did not want to go against tradition.

Select the most appropriate option to fill in blank number 5.

- a. treated
- b. prepared
- c. trained
- d. pampered

General Intelligence & Reasoning

26. In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements. (+1, -0.25)

Statements:

All Toms are Jerrys.

Some Jerrys are Mickeys.

Conclusions:

I. Some Toms are Mickeys.

II. Some Toms are not Mickeys.

III. Some Jerrys are Toms.

- a. Only conclusion II follows.
- b. Both conclusions II and III follow.
- c. Only conclusion I follows.
- d. Only conclusion III follows.

-
27. Which letter-cluster will replace the question mark (?) in the following letter-cluster series? (+1, -0.25)

GJM, QTW, ADG, ?

- a. KNQ
- b. JMP

c. KOR

d. JNR

28. Two statements are given, followed by two conclusions numbered I and II. (+1, -0.25)
Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

All Eagles are Kites.

All Kites are Sparrows.

Conclusions:

I. All Sparrows are Eagles.

II. All Eagles are Sparrows.

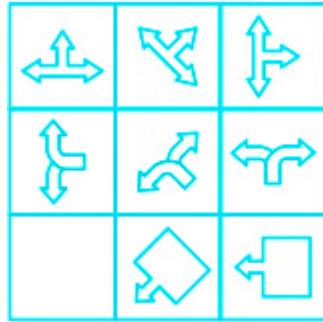
a. Neither conclusion I nor II follows.

b. Both conclusions I and II follow.

c. Only conclusion II follows.

d. Only conclusion I follows.

29. Identify the option figure that when placed in the blank space completes the pattern in the given question figure. (+1, -0.25)



30. If in a coding system, ORATORY is coded as 116 and RAVENOUS is coded as 119, then how will IRIDOLOGY be coded in the same coding system? (+1, -0.25)

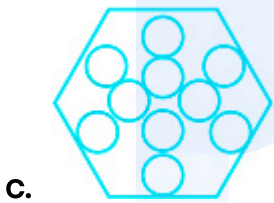
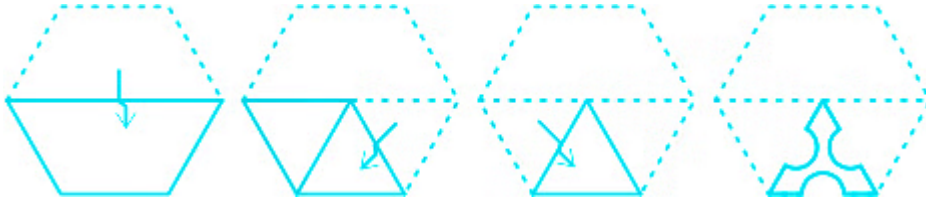
a. 110

b. 114

c. 118

d. 116

31. A paper is folded and cut as shown in the following figures. How will it appear when unfolded? (+1, -0.25)

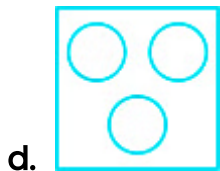
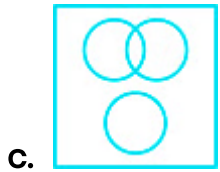
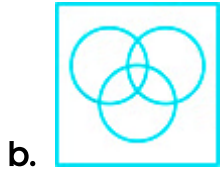


32. Select the Venn diagram that best illustrates the relationship between the following classes. (+1, -0.25)

Village people, Educated people, Intelligent people



a.



33. 'Young' is related to 'Age' in the same way as 'Short' is related to (+1, -0.25)

'-----'.

- a. Train
- b. Small
- c. Rain
- d. Period

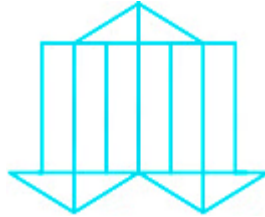
34. Select the correct mirror image of the given combination when the mirror is placed to the right side of the it. (+1, -0.25)

U&A?FS

- a. 2F?À&Ú
- b. U&A?FS
- c. SF?Á&Ú

d. 2E3A8U

35. Identify the option figure which is embedded in the following figure (rotation is NOT allowed). (+1, -0.25)



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36. In a certain code language, if FINALIZE is written as JKRCPKDG, then how will INSIGNIA be written in the same code language? (+1, -0.25)
- a. MPTMIPMG
 - b. GRWGKRGY
 - c. KRWKKRKC
 - d. MRWMKRMG

37. Five persons, V, W, X, Y and Z are sitting along a round table facing the center. V is sitting 2nd to the right of W, who is 2nd to the right of X. If Y is sitting adjacent to X, then who is to the immediate left of V? (+1, -0.25)
- a. W
 - b. Y
 - c. X
 - d. Z

38. Which number will replace the question mark (?) in the following number series? (+1, -0.25)
- 2, 12, 30, 56, 90, 132, ?
- a. 186
 - b. 180
 - c. 184
 - d. 182

39. In a certain code language, 12345 is coded as 182764125. How will 65428 be coded in that language? **(+1, -0.25)**

- a. 216125648512
- b. 216125747512
- c. 21512463511
- d. 149016025

40. Eight students were sitting on two benches, L, M, N, O on the front bench and P, Q, R, S on the next one, but not in the same sequence. Q was sitting exactly behind M, who was sitting to the extreme right. O & P and L & S were sitting adjacent to each other in diagonally cross positions, S being on the extreme left. What was the sitting position of N? **(+1, -0.25)**

- a. Left of L
- b. Exactly in front of R
- c. Diagonal to R
- d. Right of O

41. Which two digits can be interchanged so as to balance the given equation? **(+1, -0.25)**

$$76 + 108 \div 9 - 11 \times 2 = 18$$

- a. 2 and 7
- b. 1 and 7

c. 6 and 2

d. 8 and 7

42. Select the option word that is related to the third word in the same way as the second word is related to the first word. (+1, -0.25)

Kohima : Nagaland :: Shillong : ?

a. Meghalaya

b. Odisha

c. Sikkim

d. Assam

43. Six special lectures are to be organised on Banking system, Quality circles, Work motivation, Decision making, Current affairs, and Personality development. Lectures are scheduled to be held, one lecture on each day from Monday to Sunday, as per the details given below: (+1, -0.25)

1. Work motivation should be organised immediately after Decision making.

2. Quality circle should be organised on Wednesday and should not be followed by Personality development.

3. Decision making should be organised on Friday and there should be a gap of two days between Banking system and Current affairs.

4. On one day, other than Saturday, there should be no lecture. Current affairs should be on previous day of holiday.

Which lecture will be organised on the first day (Monday)?

- a. Banking system
- b. Working motivation
- c. Personality development
- d. Current affairs

44. Select the option figure that will replace the question mark (?) in the following figure series. (+1, -0.25)



- a.
- b.
- c.
- d.

45. If in a coding system, HOUSE is coded as 340 and FOETUS is coded as 516, (+1, -0.25)
then how will CONSENT be coded in the same coding system?

- a. 455
- b. 630

c. 360

d. 542

46. In a certain code language, if HARIDWAR is written as FCPKBYYT, then how will BIKANER be written in the same code language? (+1, -0.25)

a. ZKICLGP

b. AGIALCP

c. KIBNARE

d. DKMCPGT

47. Select the correct sequence of mathematical signs to sequentially replace the A, B, C, D and E so as to balance the given equation. (+1, -0.25)

$$38 A 56 B 8 C 15 D (36 E 28) = 151$$

a. $+\div\times-+$

b. $\times-\div+-$

c. $-\div+\times-$

d. $-\times+\div-$

48. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster. (+1, -0.25)

ORGANZA : LJTAMBZ :: TEMPLATE : ?

a. FFNQMZHV

- b. GWNLOAGW
- c. GFMQLZGV
- d. QBJMIXQB

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

9	7	79
7	8	71
6	9	?

- a. 69
- b. 66
- c. 74
- d. 71

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50. Which number will replace the question mark (?) in the following number series? (+1, -0.25)

86, 74, 84, 76, ?, 78, 80

- a. 84
- b. 78
- c. 80
- d. 82

Numerical Aptitude

51. If $x\%$ of 180 is 25% less than $(x + 350)$, then 18% of $(x + 50)$ is what percentage more than 12% of x ? (+1, -0.25)
- a. 60
 - b. 75
 - c. 72
 - d. 80
-

52. The average of the 2-digit numbers 49, $6x$, $x4$ and 70 is 65. What is the average of $(x + 8)$ and $(x + 12)$? (+1, -0.25)
- a. 16
 - b. 17
 - c. 18
 - d. 19
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-

53. 84 persons take 56 days to complete a certain task. When one-fourth of the task was completed, one-seventh of the workers left. How many days in all does it take to complete the entire task? (+1, -0.25)
- a. 63
 - b. 60
 - c. 64
 - d. 66

54. The amount obtained by investing a certain sum at $r\%$ p.a. for 3 years at simple interest is equal to the simple interest on the same sum at the same rate for 13 years. The value of r is: (+1, -0.25)

- a. 16
- b. 8
- c. 12
- d. 10

55. The value of (+1, -0.25)

$79 - [128 - \{75 - (72 \div 16 \times 4) + (18 \div 2 \text{ of } 6) \times 4\}]$ is:

- a. 15
- b. 10
- c. 14
- d. 17

56. The average of 18 numbers is 65. The average of the first 10 numbers is 72 and that of the last 9 numbers is 58. If the 10th number is excluded, then what is the average of the remaining numbers (correct to one decimal place)? (+1, -0.25)

- a. 65.4
- b. 66.6
- c. 65.2

d. 64.6

57. The ratio of A and B is 2 : 3, and B is 8 more than A. If a certain number k is added to each of A and B, then the ratio becomes 7 : 9. The value of k is: **(+1, -0.25)**

a. 12

b. 16

c. 10

d. 8

58. Pipes A and B can fill a tank in 8 hours and 12 hours, respectively. C is an outlet pipe. When all the three are opened together, the tank is filled in $13\frac{1}{3}$ hours. C alone can empty the full tank in: **(+1, -0.25)**

a. $6\frac{1}{2}$ hours

b. $7\frac{1}{2}$ hours

c. 8 hours

d. 6 hours

59. A sum of Rs. 3,780 is divided between A, B and C such that if their shares are decreased by Rs. 130, Rs. 150 and Rs. 200, respectively, then they are in the ratio of 5 : 2 : 4. What is the original share of C? **(+1, -0.25)**

a. Rs. 1,430

b. Rs. 1,400

c. Rs. 1,330

d. Rs. 1,350

60. The ratios of acid and water in the solutions in vessels A and B are 4 : 5 and 5 : 1, respectively. A new solution is obtained by mixing 5 litres and 4 litres of the solutions from A and B, respectively. What is the ratio of acid and water in the new solution? (+1, -0.25)

a. 50 : 31

b. 25 : 16

c. 9 : 4

d. 15 : 8

61. The value of $\frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - (\frac{3}{10} + 21\frac{1}{5})} - (2\frac{2}{3} \text{ of } 1\frac{1}{2})$ is: (+1, -0.25)

a. $9\frac{1}{2}$

b. $11\frac{1}{2}$

c. $13\frac{1}{2}$

d. $12\frac{1}{2}$

62. A 270-m-long train takes 24 seconds to cross a pole. If it takes 1 minute to cross a tunnel, then the length (in m) of the tunnel is: (+1, -0.25)

a. 507

b. 405

c. 510

d. 408

63. A sum of Rs. 5,760 amounts to Rs. 7,200 in 4 years and to Rs. x in 12 years at a certain rate per cent per annum, when the interest is compounded yearly in both the cases. What is the value of x ? (+1, -0.25)

a. 11500

b. 12500

c. 12250

d. 11250

64. By selling a fan for Rs. 2,604, there is a loss of 7%. If it is sold for Rs. 3,094, then the profit percentage is: (+1, -0.25)

a. 9.5%

b. 10%

c. 10.5%

d. 12%

65. What is the radius (in cm) of a circle whose area is $2\frac{17}{30}$ times the sum of the areas of two triangles whose sides are 20 cm, 21 cm and 29 cm, and 11 cm, 60 cm and 61 cm (take $\pi = \frac{22}{7}$)? (+1, -0.25)

a. 21

b. 14

c. 24.5

d. 17.5

66. When an article is sold for Rs. 768, the profit percentage is $x\%$. When the same article is sold for Rs. 896, the profit percentage is $(x + 20)\%$. What is the value of x ? (+1, -0.25)

a. 30

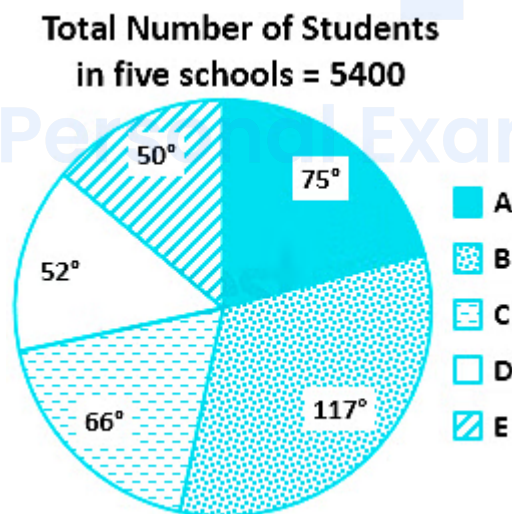
b. 20

c. 15

d. 25

67. Study the given pie chart and answer the question that follows. (+1, -0.25)

Break-up of the students studying in schools A, B, C, D and E managed by a society, in 2019



The ratio of the number of boys and girls in school B is 6 : 7, and 40% of the students in school D are boys. The total number of girls in school B and D is:

- a. 1413
 - b. 1508
 - c. 1503
 - d. 1410
-

68. What is the mean of the range and median of the given data? (+1, -0.25)

11, 16, 14, 7, 11, 23, 10, 30, 20, 33, 19, 12, 17, 14

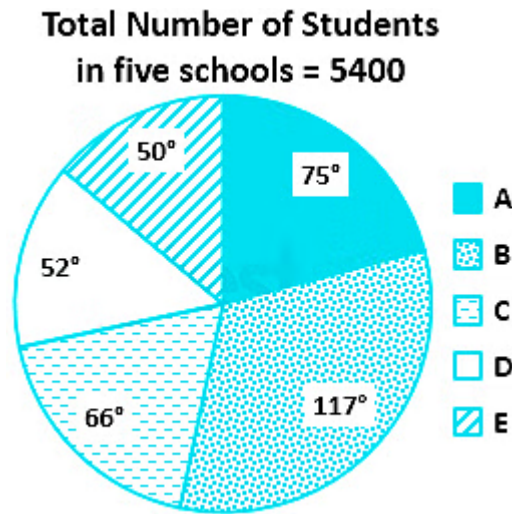
- a. 25.5
 - b. 20.5
 - c. 24
 - d. 19
-

69. A solid metal cube of edge 12 cm is immersed completely in water in a cylindrical vessel whose radius is 20 cm and height is 32 cm, and the water in the vessel is up to a height of 15 cm. The height (in cm) by which the water will rise in the vessel is (correct to one decimal place): (+1, -0.25)

- a. 1.2
 - b. 1.1
 - c. 0.9
 - d. 1.4
-

70. Study the given pie chart and answer the question that follows. (+1, -0.25)

Break-up of the students studying in schools A, B, C, D and E managed by a society, in 2019



The difference between the number of students in school B and the total number of students in schools D and E is p. The value of p lies between:

- a. 200 and 210
- b. 210 and 220
- c. 220 and 230
- d. 230 and 240

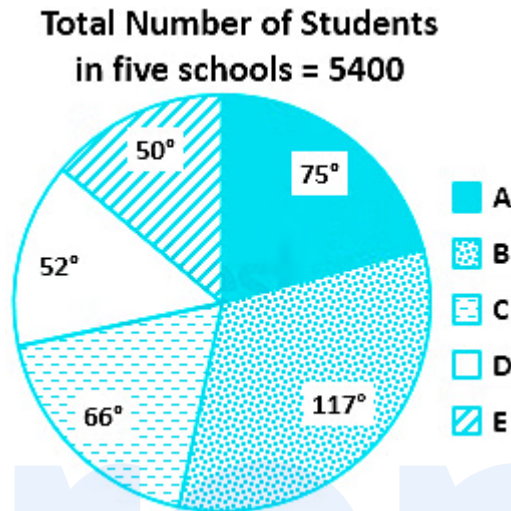
71. The value of $\frac{3}{7} + \frac{1}{14} \times 2\frac{4}{5} - \left(\frac{1}{4} \div \frac{2}{7} \text{ of } 2\frac{1}{3}\right) \times \left(5\frac{1}{5} \div 3\frac{1}{2} \times \frac{5}{13}\right)$ is: (+1, -0.25)

- a. $\frac{22}{35}$
- b. $\frac{29}{70}$
- c. $\frac{3}{14}$
- d. $\frac{14}{21}$

72. Study the given pie chart and answer the question that follows.

(+1, -0.25)

Break-up of the students studying in schools A, B, C, D and E managed by a society, in 2019



The average number of students in schools A, B, and C is how much percent more than the number of students in school E?

- a. 60 %
- b. 72 %
- c. 65 %
- d. 70 %

73. Let x be the smallest number between 70000 and 75000 which when divided by 225, 250 and 275 leaves remainder 61 in each case. Find the sum of the digits of x .

(+1, -0.25)

- a. 16
- b. 21

c. 12

d. 29

74. A man covers a certain distance with a speed of $4\frac{1}{6}$ m/sec and comes back to the starting point with a speed of 12 km/h. Find his average speed (in km/h). (+1, -0.25)

a. $13\frac{1}{2}$

b. $12\frac{1}{2}$

c. $10\frac{1}{3}$

d. $13\frac{1}{3}$

75. A shopkeeper marks an article 24% above its cost price and allows a 15% discount on the marked price. If he earns a profit of Rs. 27 by selling the article, then the selling price of the article is: (+1, -0.25)

a. Rs. 522

b. Rs. 508

c. Rs. 527

d. Rs. 517

General Awareness

76. Under the rule of which king was the Sun Temple at Konark built? (+1, -0.25)
- a. Anantha Padmanbhan
 - b. Samudragupta
 - c. Anantavarman Chodaganga
 - d. Narasimhadeva I
-

77. Which of the following elements is NOT a component of baking soda? (+1, -0.25)
- a. Calcium
 - b. Oxygen
 - c. Hydrogen
 - d. Sodium
-

78. Ronald Reagan, the 40th President of the US, signed the largest tax cut in the history of their country in 1981. Which economic theory was this policy centered around? (+1, -0.25)
- a. Kuznets Curve
 - b. Lorenz Curve
 - c. Sweezy's Kinked Demand Curve
 - d. Laffer Curve
-

79. Who among the following developed the Cholera vaccine in 1885? (+1, -0.25)

- a. Jaime Ferrán
 - b. Leon Calmette
 - c. Jonas Salk
 - d. Edward Jenner
-

80. In which of the following cities was the Veda Samaj established in 1864? (+1, -0.25)

- a. Calcutta (now Kolkata)
 - b. Calicut
 - c. Madras (now Chennai)
 - d. Bombay (now Mumbai)
-

81. The procedure for the nomination of members to the Rajya Sabha in the Constitution of India is borrowed from which of the following countries' constitutions? (+1, -0.25)

- a. Ireland
 - b. The US
 - c. Russia
 - d. Germany
-

82. Identify the waterways which separate the Andaman and the Nicobar Islands? (+1, -0.25)
- a. Maliku Kandu
 - b. Ten Degree Channel
 - c. Palk Strait
 - d. Duncan Passage
-

83. The European Champions Cup or Heineken Cup is associated with which sport? (+1, -0.25)
- a. Football
 - b. Rugby
 - c. Cricket
 - d. Hockey
-

84. What does Ornithology deal with? (+1, -0.25)
- a. Study of birds
 - b. Study of fish
 - c. Study of reptiles and amphibians
 - d. Study of insects
-

85. Who was the author of the book 'The Golden Threshold'?' (+1, -0.25)
-

- a. Dr. Rajendra Prasad
 - b. Sarojini Naidu
 - c. ZA Bhutto
 - d. Jawaharlal Nehru
-

86. How many seats are allocated to Bihar in the Lok Sabha as per the statewise list of the 17th Lok Sabha? (+1, -0.25)

- a. 40
 - b. 48
 - c. 60
 - d. 78
-

87. Which of the following monuments is also known as the 'Taj of the Deccan'? (+1, -0.25)

निम्नलिखित में से किस स्मारक को 'दक्कन का ताज' भी कहा जाता है?

- a. Chand Minar
 - b. Bibi ka Maqbara
 - c. Qutb Minar
 - d. Mahabat Maqbara
-

88. The Paithani saree weaving industry is in which state? (+1, -0.25)

- a. Assam
 - b. Maharashtra
 - c. Gujarat
 - d. Rajasthan
-

89. Which of the following was the first English language newspaper of India? (+1, -0.25)

- a. Hicky's Bengal Gazette
 - b. The Madras Courier
 - c. The Bombay Herald
 - d. Maratha
-

90. What is Agraphia? (+1, -0.25)

- a. Loss of the ability to understand
 - b. Loss of the ability to hear
 - c. Loss of the ability to write
 - d. Loss of the ability to speak
-

91. The two epics, 'Raghuvamsha' and 'Kumarasambhava' are works of (+1, -0.25)

- a. Sivananda
- b. Kalidas

- c. Ramdas
 - d. Valmiki
-

92. The 'Veeragase' dance, performed during the Dusshera festival holds a special place in the folk dances of the state of _____ (+1, -0.25)

- a. Assam
 - b. Odisha
 - c. Sikkim
 - d. Karnataka
-

93. Which of the following states has the highest coal reserve? (+1, -0.25)

- a. Chhattisgarh
 - b. Odisha
 - c. Jharkhand
 - d. West Bengal
-

94. Anjum Moudgil won the 2019 Arjuna Award for which sport? (+1, -0.25)

- a. Boxing
- b. Weightlifting
- c. Shooting
- d. Cricket

95. 'Harshacharita' (The Deeds of Harsha), which is the biography of Indian Emperor Harsha, was written by _____ (+1, -0.25)

- a. Rabindranath Tagore
- b. Banabhatta
- c. Swami Sivananda
- d. Valmiki

96. What does Article 360 of the Constitution of India provide with? (+1, -0.25)

- a. Financial emergency
- b. Right to life
- c. Fundamental duties
- d. Right to property

97. When did the World Trade Organization come into existence? (+1, -0.25)

- a. 2000
- b. 2005
- c. 1995
- d. 1990

98. Which place had water harvesting system channeling the flood water of the Ganga river in the first century B.C? (+1, -0.25)

- a. Sringaverapura
 - b. Kanpur
 - c. Mirzapur
 - d. Gorakhpur
-

99. The difference between Revenue Receipts plus Non-debt Capital Receipts (NDCR) and total expenditure is called _____ . (+1, -0.25)

- a. Revenue Deficit
 - b. Fiscal Deficit
 - c. Effective Revenue Deficit
 - d. Primary Deficit
-

100. Nyctalopia, more commonly known as Night Blindness, is caused by the deficiency of which nutrient? (+1, -0.25)

- a. Potassium
- b. Vitamin A
- c. Vitamin C
- d. Magnesium

Answers

1. Answer: d

Explanation:

The correct answer is 'Impervious'

★ Key Points

- Let's see the meanings of the given words-
 - **Irresponsible**- (of a person, attitude, or action) not showing a proper sense of responsibility. (लापरवाह, गैरजिम्मेदार)
 - **Unreliable**- not able to be relied upon. (जिस पर विश्वास नहीं किया जा सकता)
 - **Imprudent**- not showing care for the consequences of an action; rash. (बेपरवाह, असावधान)
 - **Impervious**- If someone is impervious to something, they are not influenced or affected by something (अप्रभावित)
- Hence, according to the meanings of the given words, the correct answer is Option 4.

2. Answer: d

Explanation:

The correct answer is 'Before'

★ Key Points

- According to the given sentence, we need to turn off the mobile phones before entering the hall. Hence, the main clause is the first action and the subordinate clause is the second action.
- So the correct conjunction will be 'Before' it means at or during a time earlier than (the thing mentioned)
 - Let's see an example-

- Before leaving he said goodbye to each of them.
 - So the correct sentence is- **Before** entering the hall, please turn off your mobile phones.
-

3. Answer: a

Explanation:

The correct answer is '**withdraw**'

★ Key Points

- In the given sentence, we need to use a verb that acts as a main verb and it should be in the base form because 'can' is a modal verb hence the correct verb form is '**withdraw**'
- The meaning of the verb 'withdraw' is- *to take something back, or to remove something, or to take money out of an account*
 - Example- He asked that his name be withdrawn from nomination for a Golden Globe Award.
 - Example- This account allows you to withdraw a maximum daily amount of \$500.

Hence, the correct sentence is- *With your new credit card, you can **withdraw** up to Rs. 20,000 in a day.*

4. Answer: d

Explanation:

The correct answer is '**certainly going**'

★ Key Points

- According to grammar, we need to use an adverb in between the auxiliary verb and the main verb.

- In the given sentence we need to use an adverb because 'certain' is an adjective that is incorrect so we need to use 'certainly' also, 'go' is a base form that is incorrect we need to use present continuous tense as 'am' is an auxiliary verb hence, 'going' is the correct verb.

So the correct sentence is- *I'm certainly going to start studying from today.*

★ Hinglish

- व्याकरण (Grammar) के अनुसार, हमें सहायक क्रिया और मुख्य क्रिया के बीच में क्रिया विशेषण (Adjective) का उपयोग करने की आवश्यकता होती है।
- दिए गए वाक्य (Sentence) में हमें एक क्रिया विशेषण का उपयोग करने की आवश्यकता है क्योंकि 'निश्चित' (Certain) एक विशेषण है जो गलत है इसलिए हमें 'निश्चित रूप से' (Certainly) भी उपयोग करने की आवश्यकता है, 'गो' (go) एक आधार रूप है जो गलत है हमें वर्तमान निरंतर काल का उपयोग करने की आवश्यकता है जैसे 'am' एक सहायक क्रिया है इसलिए 'जाना' (going) सही क्रिया है।

तो सही वाक्य है - *I'm certainly going to start studying from today.*

5. Answer: c

Explanation:

The correct answer is **Extravagant**.

★ Key Points

- The correct spelling of the given word is **Extravagant**.
- The meaning of the given word is- spending too much money, or using too much of something.
- Let's see an example- *It was very **extravagant** of you to buy strawberries out of season.*

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

6. Answer: b

Explanation:

The correct answer is 'Extremely happy '

★ Key Points

- The meaning of the given idiom 'Over the moon' is- to be very pleased (बहुत प्रसन्न होना)
- Let's see an example-
 - She was over the moon about/with her new bike.
- Hence, the correct answer is **Option 2.**

7. Answer: b

Explanation:

The error lies in 'up the rat '

★ Key Points

- In the given part, the usage of 'up the rat' is incorrect instead of it use 'on the rat'
- *If someone pounces on you, they come up towards you suddenly and take hold of you.*
- Let's see an example-
 - He pounced on the photographer, beat him up, and smashed his camera.

So the correct sentence is- *Slowly the dog, Spot, went towards it and pounced on the rat.*

★ Hinglish

- दिए गए भाग में 'up the rat' का प्रयोग करने के स्थान पर 'on the rat' का प्रयोग गलत है।
- अगर कोई आप पर झपटता है, तो वे अचानक आपके पास आ जाते हैं और आपको पकड़ लेते हैं।
 - आइए एक उदाहरण देखते हैं- He pounced on the photographer, beat him up, and smashed his camera.

तो सही वाक्य है- *Slowly the dog, Spot, went towards it and pounced on the rat.*

8. Answer: a

Explanation:

The correct answer is 'One who imitates another closely '

★ Key Points

- The meaning of the idiom 'Copycat' is- someone who has few ideas of their own and does or says exactly the same as someone else (कोई व्यक्ति जिसके पास अपने स्वयं के कुछ विचार हैं और वह ठीक वैसा ही करता या कहता है जैसा किसी और के पास होता है)
- Let's see an example-
 - You're just a copycat!
- Hence, the correct answer is **Option 1.**

9. Answer: c

Explanation:

The incorrect spelling is- **Absense**

★ Key Points

- The correct spelling of the word is- **Absence.**
- The meaning of the word is- the fact of not being where you are usually expected to be (वहाँ नहीं होने का तथ्य जहाँ आपसे आमतौर पर होने की उम्मीद की जाती है)
- Let's see an example-
 - A new manager was appointed during/in her absence.

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

10. Answer: d

Explanation:

The correct answer is 'there are'

★ Key Points

- According to the given sentence, the first says that 'there were a dozen eggs in the basket' that means 'previously it was only a dozen eggs' and the second conveys that 'now there are only six'
- 'Now' is an adverb that conveys the present time. (at the present time, not in the past or future)
 - Example- She used to be a teacher, but **now she works in publishing.**
- Hence, in the given sentence, we need to use a present tense so the correct part will be 'there are'

So the correct sentence is- *There were a dozen eggs in the basket, but now **there are** only six.*

★ Hinglish

- दिए गए वाक्य के अनुसार, पहला कहता है कि 'टोकरी में एक दर्जन अंडे थे' जिसका अर्थ है 'पहले यह केवल एक दर्जन अंडे थे' और दूसरा बताता है कि 'अब केवल छह हैं'
- 'अभी' (now) एक क्रिया विशेषण है जो वर्तमान समय का बोध कराता है। (वर्तमान समय में, भूत या भविष्य में नहीं)
 - उदाहरण- She used to be a teacher, but now she works in publishing.
- इसलिए, दिए गए वाक्य में, हमें वर्तमान काल का उपयोग करने की आवश्यकता है, इसलिए सही भाग 'वहाँ हैं' (there are) होगा।

तो सही वाक्य है- *There were a dozen eggs in the basket, but now **there are** only six.*

11. Answer: b

Explanation:

The correct answer is '**conversation**'

★ Key Points

- Let's see the meanings of the given words-
 - **Confidence**- the quality of being certain of your abilities or of having trust in people, plans, or the future (अपनी क्षमताओं के बारे में निश्चित होने या लोगों, योजनाओं या भविष्य में विश्वास रखने का गुण)
 - **Conversation**- talk between two or more people in which thoughts, feelings, and ideas are expressed, questions are asked and answered, or news and information is exchanged (दो या दो से अधिक लोगों के बीच बातचीत जिसमें विचार, भावनाएं और विचार व्यक्त किए जाते हैं, प्रश्न पूछे जाते हैं और उत्तर दिए जाते हैं, या समाचार और सूचनाओं का आदान-प्रदान किया जाता है।)
 - **Conversion**- the process of converting something from one thing to another (किसी चीज़ को एक चीज़ से दूसरी चीज़ में बदलने की प्रक्रिया)
 - **Conviction**- the fact of officially being found to be guilty of a particular crime, or the act of officially finding someone guilty (आधिकारिक तौर पर किसी विशेष अपराध के दोषी पाए जाने का तथ्य, या आधिकारिक तौर पर किसी को दोषी ठहराने का कार्य)
- Hence, according to the meanings of the given words, the correct answer is **Option 2 i.e. conversation.**

12. **Answer: b**

Explanation:

The correct answer is '**Strong**'

★ Key Points

- Let's see the meanings of the given words-
 - **Flimsy**- very thin, or easily broken or destroyed (बहुत पतला, या आसानी से टूटा या नष्ट हो गया)
 - **Clumsy**- A clumsy person often has accidents because they do not behave in a careful, controlled way (एक अनाड़ी व्यक्ति के साथ अक्सर दुर्घटनाएं होती हैं क्योंकि वे सावधान, नियंत्रित तरीके से व्यवहार नहीं करते हैं)

- **Strong**- powerful; having or using great force or control (शक्तिशाली; बहुत अधिक बल या नियंत्रण रखना या प्रयोग करना)
- **Weak**- not physically strong (शारीरिक रूप से मजबूत नहीं)
- **Tiny**- extremely small (अत्यंत छोटा)
- Hence, according to the meanings of the given words, the correct antonym is- **strong i.e. Option 2.**

13. Answer: c

Explanation:

The correct answer is '**elegant**'

★ **Key Points**

- Let's see the meanings of the given words-
 - **Graceful**- moving in a smooth, relaxed, attractive way, or having a smooth, attractive shape (एक सहज, आराम से, आकर्षक तरीके से आगे बढ़ना, या एक चिकना, आकर्षक आकार होना)
 - **Pleasant**- enjoyable, attractive, friendly, or easy to like (सुखद, आकर्षक, मैत्रीपूर्ण, या पसंद करने में आसान)
 - **Elegant**- graceful and attractive in appearance or behaviour (दिखने या व्यवहार में सुंदर और आकर्षक)
 - **Dangerous**- A dangerous person, animal, thing, or activity could harm you (कोई खतरनाक व्यक्ति, जानवर, चीज या गतिविधि आपको नुकसान पहुंचा सकती है)
- Hence, according to the meanings of the given words, the correct answer is **Option 3 i.e. elegant.**

14. Answer: c

Explanation:

The erroneous part is '**in a auditorium**'

★ Key Points

- In the given part, the usage of 'a' is incorrect instead of it we have to use 'an'.
- In the given sentence, 'auditorium' is a countable noun that means 'a theatre or concert hall where the audience sits.'
- The word is pronounced with a vowel sound hence, we need to use 'an' instead of 'a'. The indefinite article 'an' is used with singular, countable nouns that are preceded by a vowel sound.
 - Example- Johnny Depp is **an actor**.

So the correct sentence is- *Vijaya saw the play in **an auditorium** near her house.*

★ Hinglish

- दिए गए भाग में 'a' का प्रयोग गलत है इसके स्थान पर हमें 'an' का प्रयोग करना है ।
- दिए गए वाक्य में, 'ऑडिटोरियम' (auditorium) एक गणनीय संज्ञा है जिसका अर्थ है 'एक थिएटर या कॉन्सर्ट हॉल जहां दर्शक बैठते हैं।'
- शब्द का उच्चारण स्वर ध्वनि के साथ किया जाता है, इसलिए हमें 'ए' के बजाय 'ए' का उपयोग करने की आवश्यकता है। अनिश्चितकालीन लेख 'ए' एकवचन, गणनीय संज्ञाओं के साथ प्रयोग किया जाता है जो एक स्वर ध्वनि से पहले होते हैं।
 - उदाहरण- Johnny Depp is an actor.

तो सही वाक्य है- *Vijaya saw the play in **an auditorium** near her house.*

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15. Answer: c

Explanation:

The correct answer is '**between**'

★ Key Points

- The correct preposition in the given blank is- 'between'
- According to the sentence, the mountain is in between the two towns which they had to cross.
- The preposition 'between' is in or into the space that separates two places, people, or objects

- Example- The town lies halfway between Rome and Florence.
- So the correct sentence is- *Half-way **between** the two towns there was a mountain which had to be crossed.*

★ Hinglish

- दिए गए रिक्त स्थान में सही पूर्वसर्ग है- 'बीच' (between)
- वाक्य के अनुसार पर्वत उन दो नगरों के बीच में है, जिन्हें उन्हें पार करना था।
- पूर्वसर्ग 'बीच' (between) दो स्थानों, लोगों या वस्तुओं को अलग करने वाले स्थान में या अंदर है
 - उदाहरण- The town lies halfway between Rome and Florence.
- तो सही वाक्य है- *Half-way between the two towns there was a mountain which had to be crossed.*

16. Answer: c

Explanation:

The correct answer is 'glowing'

★ Key Points

- Let's see the meanings of the given words-
 - **Fluorescent**- Fluorescent lights are very bright, tube-shaped electric lights, often used in offices (फ्लोरोसेंट रोशनी बहुत उज्ज्वल, ट्यूब के आकार की बिजली की रोशनी होती है, जो अक्सर कार्यालयों में उपयोग की जाती है)
 - **Flowery**- the part of a plant that is often brightly colored and has a pleasant smell, or the type of plant that produces these (पौधे का वह भाग जो अक्सर चमकीले रंग का होता है और जिसमें सुखद गंध होती है, या पौधे का प्रकार जो इन्हें पैदा करता है)
 - **Perfumed**- having a pleasant perfume (एक सुखद इत्र होना)
 - **Glowing**- praising with enthusiasm (उत्साह के साथ स्तुति)
 - **Elaborate**- containing a lot of careful detail or many detailed parts (जिसमें बहुत अधिक सावधानीपूर्वक विवरण या कई विस्तृत भाग हों)
- Hence, according to the meanings of the given words, the correct answer is **Option 3 i.e. glowing.**

17. Answer: a

Explanation:

The correct answer is 'found out that'

★ Key Points

- The correct phrase is 'found out that'
- In the given sentence, the usage of 'as' is incorrect, we need to use 'that'.
- 'as' as a **conjunction** is incorrect in the given sentence, it means 'because', and as an **adverb**, it means 'used in comparisons to refer to the degree of something'
- We don't need both the meanings hence, it is incorrect to use 'as'
- Hence, the correct conjunction is 'that' as a conjunction, it is used to **introduce a clause that reports something or gives further information, although it can often be left out**
- But, if we look at the tense of this whole sentence, we will find it to be simple past tense because of 'was'. Hence, we can't use **find out**, instead, we will use 'Found out' to make it grammatically correct.

So the correct sentence is- *Very soon, the people **found out that** the snake was harmless and the boys began to tease it mercilessly.*

18. Answer: d

Explanation:

The erroneous part is- **to continue on**

★ Key Points

- In the given sentence, the usage of 'on' is incorrect instead of it use 'with'
- The meaning of the phrase 'to continue with' is- To maintain the action that one has been doing.

- Example- After that unexplained crash in the hallway, the professor had a hard time **continuing with** his lecture.

Hence, the correct sentence is- *Obi wanted to continue with his idea of building a modern school.*

19. Answer: d

Explanation:

The correct answer is '**offence**'

★ Key Points

- Let's see the meanings of the given words-
 - **Defence**- the act of protecting someone or something against attack or criticism
 - **Guard**- a person or group of people whose job is to protect a person, place, or thing from danger or attack, or to prevent a person such as a criminal from escaping
 - **Protection**- the act of protecting or state of being protected
 - **Security**- protection of a person, building, organization, or country against threats such as crime or attacks by foreign countries
 - **Offence**- an illegal act; a crime
 - Hence, according to the meanings of the given words, the correct antonym is 'Option 4' i.e. **Offence**.
-

20. Answer: d

Explanation:

The correct answer is '**Ferry**'

★ Key Points

- Let's see the meanings of the given words-
 - **Dinghy**- a small open boat एक छोटी सी खुली नाव
 - **Freighter**- a person whose job is loading goods onto ships or vehicles or transporting goods by ship or on a vehicle एक व्यक्ति जिसका काम जहाजों या वाहनों पर माल लोड करना या जहाज या वाहन पर माल परिवहन करना है
 - **Submarine**- a ship that can travel underwater एक जहाज जो पानी के भीतर यात्रा कर सकता है
 - **Ferry**- a boat or ship for taking passengers and often vehicles across an area of water, especially as a regular service यात्रियों और अक्सर वाहनों को पानी के एक क्षेत्र में ले जाने के लिए एक नाव या जहाज, विशेष रूप से एक नियमित सेवा के रूप में
- Hence, according to the meanings of the given words, the correct answer is **Option 4 i.e. Ferry.**

21. Answer: d

Explanation:

The correct answer is 'were'

★ Key Points

- Long ago in China, at a time when girls (1) _____ expected to stay
- In the given blank, we need to use a verb that is going to be in the past form because the adverb is of past tense i.e. ago.
- Also, the verb is going to be in plural form because the subject is in the plural form i.e. 'girls'

So the correct sentence is- *Long ago in China, at a time when girls **were** expected to stay*

*Now the passage will be read as:- Long ago in China, at a time when girls (1) **were** expected to stay at home and (2) _____ household work while the boys (3) _____ to school, a girl named Zhu had a desire (4) _____ study. Her family was wealthy and Zhu was (5) _____ so she too could have had her wish, but her father did not want to go against tradition.*

22. Answer: b

Explanation:

The correct answer is 'do'

★ Key Points

- to stay at home and (2) _____ household work
- In the given blank, we need to form a parallel structure with the infinitive verb because there is a usage of the conjunction 'and' hence, the parallel structure will be 'to stay and ____' i.e. why we need to use a base form of the verb because the infinitive verb is used only in its base form.
- In the blank, 'do' is a correct verb because there is someone else who makes the girls do the household work. Hence, the correct answer is **Option 2.**

Now the passage will be read as:- Long ago in China, at a time when girls (1) were expected to stay at home and (2) do household work while the boys (3) _____ to school, a girl named Zhu had a desire (4) _____ study. Her family was wealthy and Zhu was (5) _____ so she too could have had her wish, but her father did not want to go against tradition.

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23. Answer: a

Explanation:

The correct answer is 'went'

★ Key Points

- while the boys (3) _____ to school,
- As the passage, is in the past tense hence, we need to use past tense or past verb in the given blank.
- So the correct answer is Option 1 i.e. went.

Now the passage will be read as:- Long ago in China, at a time when girls (1) were expected to stay at home and (2) do household work while the boys (3) went to school, a girl named Zhu had a desire (4) _____ study. Her family was wealthy and Zhu was (5) _____ so she too could have had her wish, but her father did not want to go against tradition.

24. Answer: b

Explanation:

The correct answer is 'to'

★ Key Points

- Zhu had a desire (4) _____ study.
- In the given blank, we need to use a preposition. 'Desire to' is a correct phrase because the action of the verb is not yet performed it is still a wish hence, we need to use the preposition 'to' also it means 'a strong wish to do or have something.'
 - Example- I had a strong desire to help and care for people.

Now the passage will be read as:- Long ago in China, at a time when girls (1) were expected to stay at home and (2) do household work while the boys (3) went to school, a girl named Zhu had a desire (4) to study. Her family was wealthy and Zhu was (5) _____ so she too could have had her wish, but her father did not want to go against tradition.

25. Answer: d

Explanation:

The correct answer is 'pampered'

★ Key Points

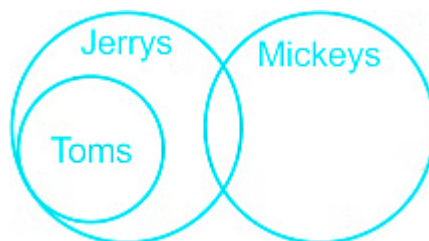
- Let's see the meanings of the given words-
 - **Treated**-to behave towards someone or deal with something in a particular way (किसी के प्रति व्यवहार करना या किसी विशेष तरीके से व्यवहार करना)
 - **Prepared**-ready to deal with a situation स्थिति से निपटने के लिए तैयार
 - **Trained**-having been prepared for a particular job or activity, by learning skills, getting qualifications, etc. कौशल सीखने, योग्यता प्राप्त करने आदि के द्वारा किसी विशेष कार्य या गतिविधि के लिए तैयार किया जाना।
 - **Pampered**-given special treatment that makes you feel as comfortable as possible or gives you whatever you want विशेष उपचार दिया गया है जो आपको यथासंभव सहज महसूस कराता है या आपको वह देता है जो आप चाहते हैं
- Hence, according to the meanings of the given words, the correct answer is **Option 4 i.e. Pampered.**

Now the passage will be read as:- Long ago in China, at a time when girls (1) were expected to stay at home and (2) do household work while the boys (3) went to school, a girl named Zhu had a desire (4) to study. Her family was wealthy and Zhu was (5) pampered so she too could have had her wish, but her father did not want to go against tradition.

26. Answer: d

Explanation:

The least possible Venn diagram for the given statement is as follows :



Conclusions:

- Some Toms are Mickey's → False (No definite relations given hence, false)
- Some Toms are not Mickey's → False (No definite relations given hence, false)

III. Some Jerrys are Toms → True (All Toms are Jerrys, so some Jerrys are Toms is True)

Thus, the correct answer is "Only conclusion III follows".

Conditions of Either-or case:

★ Important Points

1. Individually both the conclusions should be false.
2. One conclusion should be positive and one conclusion should be negative (Complementary pair)

The two complementary pairs are:

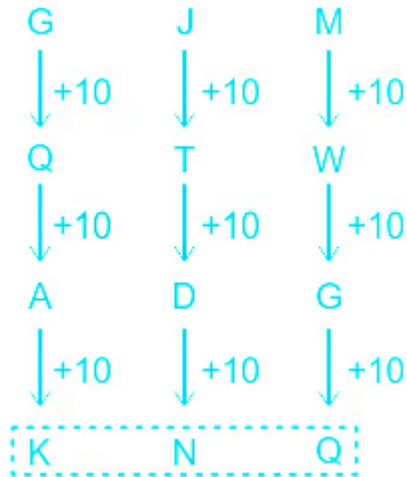
- 1) All + Some not
- 2) No + Some
 - Some + Some not is not a complementary pair.

27. 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 :-



Thus, the correct answer is "KNQ".

28. Answer: c

Explanation:

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



Conclusions:

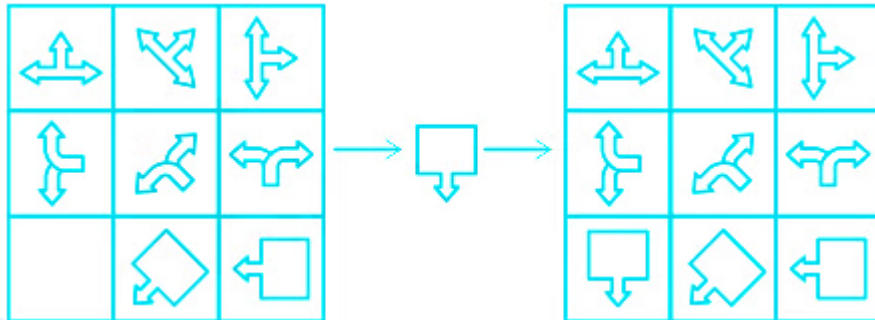
- I. All Sparrows are Eagles → False (All Eagles are Kites and All Kites are Sparrows so some sparrow can be eagle but all sparrow can not be sparrow, hence, false)
- II. All Eagles are Sparrows → True (All Eagles are Kites and All Kites are Sparrows, so All Eagles are Sparrows it is true)

Thus, the correct answer is "Only conclusion II follows".

29. Answer: b

Explanation:

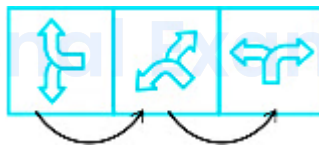
The figure that will replace the question mark (?) in the following figure series is shown below :



1) In first row figures are rotated 45° clockwise :



2) In second row figures are rotated 45° clockwise :



3) In third row figures should rotate 45° in anticlockwise so we get 1st figure:



Thus, the correct answer is "Option 2".

30. Answer: c

Explanation:

The logic follows here is :-

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

Code = Sum of alphabets positional values + 4

ORATORY is coded as 116

Alphabets	O	R	A	T	O	R	Y
Positional values	15	18	1	20	15	18	25

$\Rightarrow 15 + 18 + 1 + 20 + 15 + 18 + 25 = 112$

$\Rightarrow \text{Sum of alphabets positional values} + 4 = 112 + 4 = 116$

And

RAVENOUS is coded as 119

Alphabets	R	A	V	E	N	O	U	S
Positional values	18	1	22	5	14	15	21	19

$\Rightarrow 18 + 1 + 22 + 5 + 14 + 15 + 21 + 19 = 115$

$\Rightarrow \text{Sum of alphabets positional values} + 4 = 115 + 4 = 119$

Similarly,

IRIDOLOGY will be coded as :

Alphabets	I	R	I	D	O	L	O	G	Y
Positional values	9	18	9	4	15	12	15	7	25

$\Rightarrow 9 + 18 + 9 + 4 + 15 + 12 + 15 + 7 + 25 = 114$

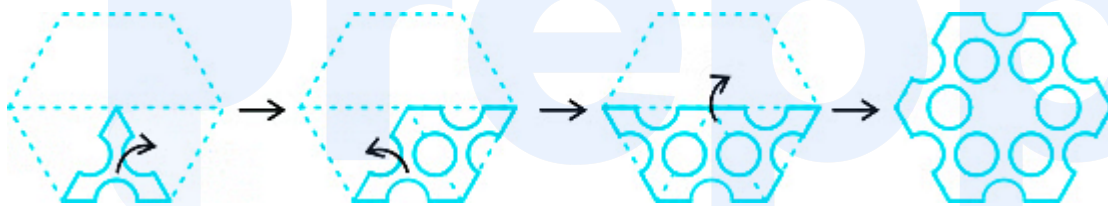
$\Rightarrow \text{Sum of alphabets positional values} + 4 = 114 + 4 = 118$

Thus, the correct answer is "118".

31. Answer: a

Explanation:

The folded image after unfolding then the image is as follows :-



Thus, the correct answer is "Option 1".

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32. Answer: b

Explanation:

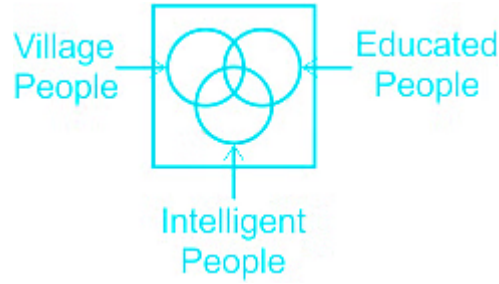
Given relationships are : Village people, Educated people, Intelligent people

Some Village people are Intelligent people and Educated people.

Some Educated people are Intelligent people and Village people.

Some Intelligent people are Village people and Educated people.

The least possible Venn diagram for given relationship is as follows :-



Thus, the correct answer is "Option 2".

33. Answer: d

Explanation:

The logic follows here is :-

Young is antonym of Age.

Similarly,

Short is antonym of "Period".

Thus, the correct answer is "Period".

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34. Answer: a

Explanation:

The mirror image is shown below is as follows :-



Thus, the correct answer is "Option 1".

35. Answer: b

Explanation:

The image shown below is as follows :-



Thus, the correct answer is "Option 2".

36. Answer: c

Explanation:

The logic follows here is :-

Vowels : A, E, I, O, U

The logic followed here is:

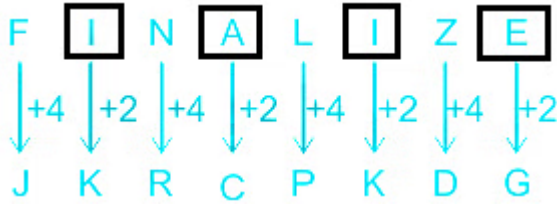
Each vowels are increased by +2.

- Vowel + 2

Each consonants are increased by +4.

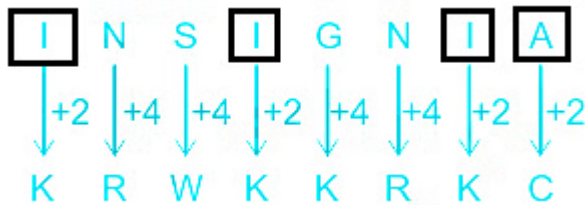
- Consonant + 4

FINALIZE is written as JKRCPKDG is as follows :



Similarly,

INSIGNIA will be written as :



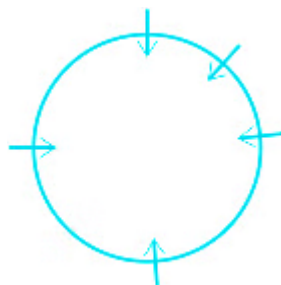
Thus, the correct answer is "KRWKKRKC".

37. Answer: d

Explanation:

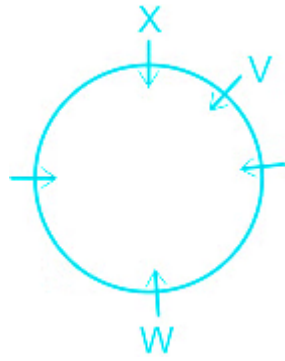
The logic follows here is :-

V, W, X, Y and Z are sitting along a round table facing the center.

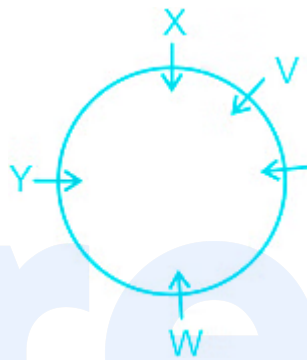


1) V is sitting 2nd to the right of W, who is 2nd to the right of X.

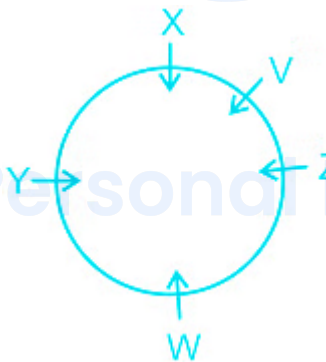
- Here W is sitting 2nd to the right of X.



2) If Y is sitting adjacent to X



Positions of V, W, X, Y, Z is :



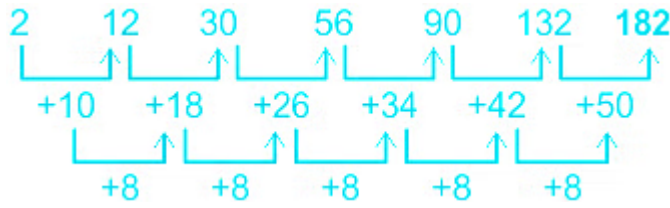
Thus **Z** is the immediate left of **V**.

Hence, immediate left of V is "**Z**".

38. Answer: d

Explanation:

The logic followed here is :-

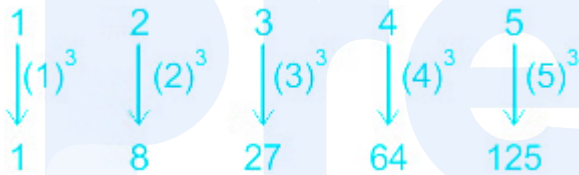


Thus ,the correct answer is "182".

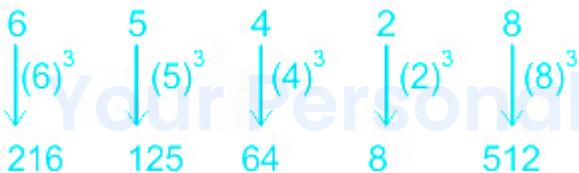
39. Answer: a

Explanation:

The logic follows here is :-



Similarly,



Thus, the correct answer is "216125648512 ".

40. Answer: b

Explanation:

The logic follows here is :-

Q was sitting exactly behind M, who was sitting to the extreme right.

Bench 1: _ _ _ M

Bench 2: _ _ _ Q

S being on the extreme left.

Bench 1: _ _ _ M

Bench 2: S _ _ Q

O & P and L & S were sitting adjacent to each other in diagonally cross positions.

Bench 1: O L _ M

Bench 2: S P _ Q

Eight students were sitting on two benches, L, M, N, O on the front bench and P, Q, R, S on the next one, but not in the same sequence.

Bench 1: O L N M

Bench 2: S P R Q

Thus, Exactly in front of R is sitting position of N.

Hence, the correct answer is "Exactly in front of R".

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41. Answer: c

Explanation:

The logic follows here is :-

By using **BODMAS RULE** :

Option 1) : 2 and 7

Given equation : $76 + 108 \div 9 - 11 \times 2 = 18$

By interchanging 2 and 7 in given equation.

Interchanged equation is :

$$\Rightarrow 26 + 108 \div 9 - 11 \times 7 = 18$$

$$\Rightarrow 26 + 12 - 11 \times 7 = 18$$

$$\Rightarrow 26 + 12 - 77 = 18$$

$$\Rightarrow 38 - 77 = 18$$

$$\Rightarrow 38 - 77 = 18$$

$$\Rightarrow -39 \neq 18$$

LHS \neq RHS

Option 2) : 1 and 7

Given equation : $76 + 108 \div 9 - 11 \times 2 = 18$

By interchanging 1 and 7 in given equation.

Interchanged equation is :

$$\Rightarrow 16 + 108 \div 9 - 11 \times 2 = 18$$

$$\Rightarrow 16 + 12 - 11 \times 2 = 18$$

$$\Rightarrow 16 + 12 - 22 = 18$$

$$\Rightarrow 28 - 22 = 18$$

$$\Rightarrow 6 \neq 18$$

LHS \neq RHS

Option 3) : 6 and 2

Given equation : $76 + 108 \div 9 - 11 \times 2 = 18$

By interchanging 6 and 2 in given equation.

Interchanged equation is :

$$\Rightarrow 72 + 108 \div 9 - 11 \times 6 = 18$$

$$\Rightarrow 72 + 12 - 11 \times 6 = 18$$

$$\Rightarrow 72 + 12 - 66 = 18$$

$$\Rightarrow 84 - 66 = 18$$

$$\Rightarrow 18 = 18$$

LHS = RHS

Option 4) : 8 and 7

Given equation : $76 + 108 \div 9 - 11 \times 2 = 18$

By interchanging 6 and 2 in given equation.

Interchanged equation is :

$$\Rightarrow 86 + 107 \div 9 - 11 \times 2 = 18$$

$$\Rightarrow 86 + 11.88 - 11 \times 2 = 18$$

$$\Rightarrow 86 + 11.88 - 22 = 18$$

$$\Rightarrow 97.88 - 22 = 18$$

$$\Rightarrow 75.88 \neq 18$$

LHS \neq RH

Thus, the correct answer is "6 and 2".

42. Answer: a

Explanation:

The logic followed here is :-

Kohima is the capital of Nagaland.

Similarly,

Shillong is the capital of "Meghalaya".

Thus, the correct answer is "**Meghalaya**".

43. Answer: d

Explanation:

The logic followed here is:-

Six special lectures are to be organised on Banking system, Quality circles, Work motivation, Decision making, Current affairs, and Personality development. One lecture on each day from Monday to Sunday.

2. Quality circle should be organised on Wednesday and should not be followed by Personality development.

Days	Lectures
Monday	
Tuesday	
Wednesday	Quality circle
Thursday	
Friday	
Saturday	
Sunday	

3. Decision making should be organised on Friday

Days	Lectures
Monday	
Tuesday	
Wednesday	Quality circle
Thursday	
Friday	Decision making
Saturday	
Sunday	

4. Work motivation should be organised immediately after Decision making.

Days	Lectures
Monday	
Tuesday	
Wednesday	Quality circle
Thursday	
Friday	Decision making
Saturday	Work motivation
Sunday	

5. On one day, other than Saturday, there should be no lecture.

6. Current affairs should be on previous day of holiday.

7. There should be a gap of two days between Banking system and Current affairs.

Days	Lectures
Monday	Current affairs
Tuesday	
Wednesday	Quality circle
Thursday	Banking system
Friday	Decision making
Saturday	Work motivation
Sunday	

8. Quality circle should be organised on Wednesday and should not be followed by Personality development.

Days	Lectures
Monday	Current affairs
Tuesday	Holiday
Wednesday	Quality circle
Thursday	Banking system
Friday	Decision making
Saturday	Work motivation
Sunday	Personality development

Hence, "Current affairs will be organised on first day (Monday)".

44. Answer: c

Explanation:

The logic followed here is :-

Figure 1 to figure 2:

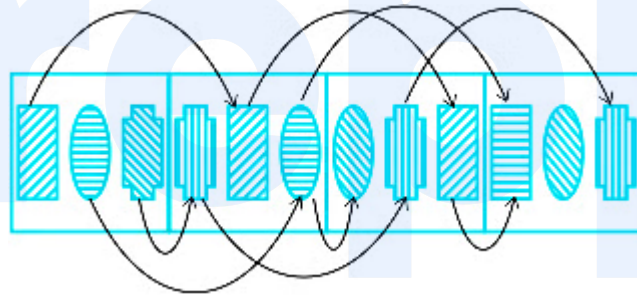
Shape of position 1 moves to position 2, shape of position 2 moves to position 3, shape of position 3 moves to position 1 by changing slant lines to vertical lines.

Figure 2 to figure 3:

Shape of position 1 moves position 2, shape of position 2 moves to position 3, shape of position 3 moves to position 1 by changing horizontal lines to slant lines.

Figure 3 to figure 4:

Shape of position 1 moves position 2, shape of position 2 moves to position 3, shape of position 3 moves to position 1 by changing slant lines to horizontal lines.



Thus, the correct answer is "Option 3".

45. Answer: b

Explanation:

The logic followed here is :-

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

Code = Sum of place value × Number of letter

HOUSE is coded as 340

Alphabets	H	O	U	S	E
Positional values	8	15	21	19	5

Sum of place values = $8 + 15 + 21 + 19 + 5$

Sum of place values = 68

Number of letters = 5

Code = $68 \times 5 = 340$

And

FOETUS is coded as 516

Alphabets	F	O	E	T	U	S
Positional values	6	15	5	20	21	19

Sum of place values = $6 + 15 + 5 + 20 + 21 + 19$

Sum of place values = 86

Number of letters = 6

Code = $86 \times 6 = 516$

Similarly,

CONSENT will be coded as :

Alphabets	C	O	N	S	E	N	T
Positional values	3	15	14	19	5	14	20

Sum of place values = $3 + 15 + 14 + 19 + 5 + 14 + 20$

Sum of place values = 90

Number of letters = 7

Code = $90 \times 7 = 630$

Thus, the correct answer is "630".

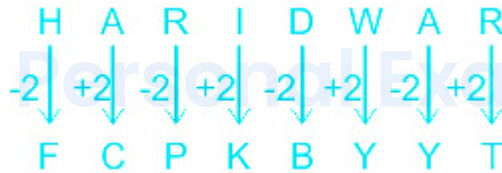
46. Answer: a

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 follows here is :-

HARIDWAR is written as FCPKBYT



Similarly,

BIKANER will be written as :



Thus, the correct answer is "ZKICLGP".

47. Answer: c

Explanation:

The logic follows here is :-

Given statement is : $38 A 56 B 8 C 15 D (36 E 28) = 151$

By using **BODMAS RULE:**

Option 1): Replace alphabets with signs given as : + ÷ × - +

Alphabets	A	B	C	D	E
Signs	+	÷	×	-	+

$$\Rightarrow 38 + 56 \div 8 \times 15 - (36 + 28) = 151$$

$$\Rightarrow 38 + 56 \div 8 \times 15 - 64 = 151$$

$$\Rightarrow 38 + 7 \times 15 - 64 = 151$$

$$\Rightarrow 38 + 105 - 64 = 151$$

$$\Rightarrow 143 - 64 = 151$$

$$\Rightarrow 79 \neq 151$$

LHS \neq RHS

Option 2): Replace alphabets with signs given as : × - ÷ + -

Alphabets	A	B	C	D	E
Signs	×	-	÷	+	-

$$\Rightarrow 38 \times 56 - 8 \div 15 + (36 - 28) = 151$$

$$\Rightarrow 38 \times 56 - 8 \div 15 + 8 = 151$$

$$\Rightarrow 38 \times 56 - 0.533 + 8 = 151$$

$$\Rightarrow 2016 - 0.533 + 8 = 151$$

$$\Rightarrow 2024 - 0.533 = 151$$

$$\Rightarrow 2024 - 0.533 = 151$$

$$\Rightarrow 2023.467 \neq 151$$

LHS \neq RHS

Option 3): Replace alphabets with signs given as : - \div + \times -

Alphabets	A	B	C	D	E
Signs	-	\div	+	\times	-

$$\Rightarrow 38 - 56 \div 8 + 15 \times (36 - 28) = 151$$

$$\Rightarrow 38 - 56 \div 8 + 15 \times 8 = 151$$

$$\Rightarrow 38 - 7 + 15 \times 8 = 151$$

$$\Rightarrow 38 - 7 + 120 = 151$$

$$\Rightarrow 158 - 7 = 151$$

$$\Rightarrow 151 = 151$$

LHS = RHS

Option 4): Replace alphabets with signs given as : - \times + \div -

Alphabets	A	B	C	D	E
Signs	-	\times	+	\div	-

$$\Rightarrow 38 - 56 \times 8 + 15 \div (36 - 28) = 151$$

$$\Rightarrow 38 - 56 \times 8 + 15 \div 8 = 151$$

$$\Rightarrow 38 - 56 \times 8 + 1.875 = 151$$

$$\Rightarrow 38 - 448 + 1.875 = 151$$

$$\Rightarrow 39.875 - 448 = 151$$

$$\Rightarrow - 408.125 \neq 151$$

LHS \neq RHS

Thus, the correct answer is "- \div + \times -".

48. Answer: b

Explanation:

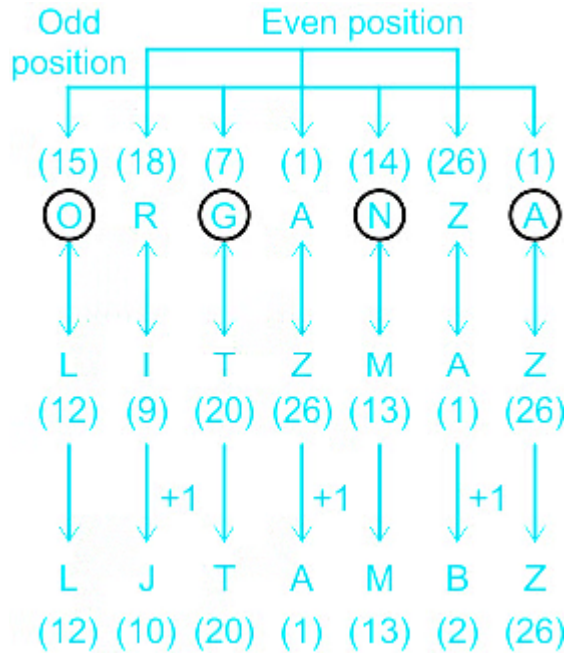
The logic follows here is :-

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

Code : Odd positions letters of given word ORGANZA are given opposite alphabet and Even position letters of given word are opposite alphabet +1.

ORGANZA : LJTAMBZ

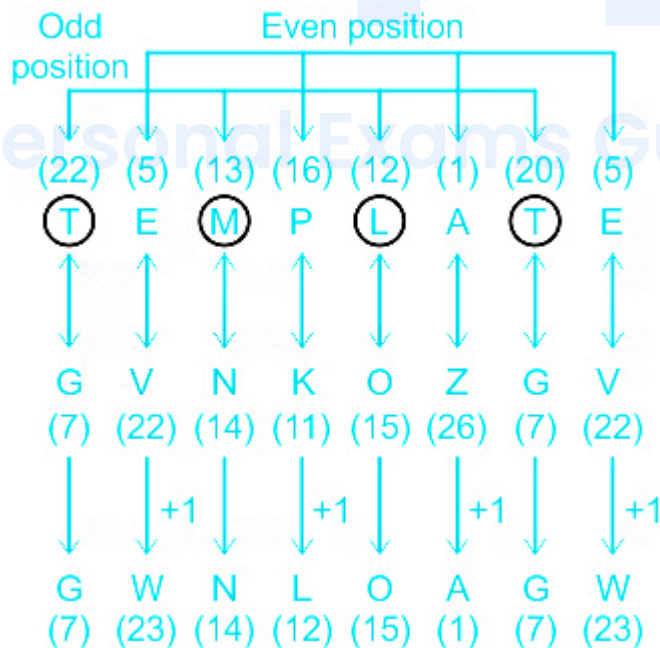
- Odd position \Leftrightarrow opposite alphabet
- Even Position \Leftrightarrow opposite alphabet + 1



Similarly,

Code : Odd positions letters of given word **TEMPLATE** are given opposite alphabet and Even position letters of given word are opposite alphabet +1.

TEMPLATE : **GWNLOAGW**



Thus, the correct answer is "GWNLOAGW".

49. Answer: a

Explanation:

The logic followed here is:

$$(1\text{st number} \times 2\text{nd number}) + (1\text{st number} + 2\text{nd number}) = 3\text{rd number}$$

Row 1: 9, 7, 79

$$(9 \times 7) + (9 + 7) = 63 + 16 = 79$$

Row 2: 7, 8, 71

$$(7 \times 8) + (7 + 8) = 56 + 15 = 71$$

Similarly,

Row 3: 6, 9, ?

$$(6 \times 9) + (6 + 9) = 54 + 15 = 69$$

Hence, the correct answer is "69".

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50. Answer: d

Explanation:

The logic follows here is :-



Thus the correct answer is "82".

51. Answer: d

Explanation:

Given

$x\%$ of 180 is 25% less than $(x + 350)$

Calculation

$x\%$ of 180 = 75% of $(x + 350)$

$\Rightarrow 180x/100 = 75x/100 + 26250/100$

$\Rightarrow (180x/100) - (75x/100) = 26250/100$

$\Rightarrow (180x - 75x)/100 = 26250/100$

$\Rightarrow 105x = 26250$

$\Rightarrow x = 250$

18% of $(x + 50) = 18\% \times (250 + 50)$

$\Rightarrow (18 \times 300)/100$

$\Rightarrow 54$

12% of $x = (12 \times 250)/100$

$\Rightarrow 30$

Required percentage = $[(54 - 30)/30] \times 100$

$\Rightarrow (24/30) \times 100$

$\Rightarrow 80$

\therefore 18% of $(x + 50)$ is 80% more than 12% of x .

52. Answer: b

Explanation:

Given

The Average of the 2-digit numbers 49, 6x, x4, and 70 is 65

Concept

Average = sum of all observation/Number of observation

Two digit number is written in the form of $10x + y$, where x is ten's digit and y is unit's digit.

Calculation

6x can be written as $6 \times 10 + x$

and x4 can be written as $10x + 4$

so, two digit numbers are 49, $(60 + x)$, $(10x + 4)$ and 70

$$(49 + 60 + x + 10x + 4 + 70)/4 = 65$$

$$\Rightarrow (183 + 11x)/4 = 65$$

$$\Rightarrow 183 + 11x = 260$$

$$\Rightarrow 11x = 260 - 183$$

$$\Rightarrow 11x = 77$$

$$x = 7$$

$$(x + 8) = 7 + 8$$

$$\Rightarrow 15$$

$$(x + 12) = 7 + 12$$

⇒ 19

Required average = $(15 + 19)/2$

⇒ $34/2$

⇒ 17

∴ The average of $(x + 8)$ and $(x + 12)$ is 17.

53. Answer: a

Explanation:

Given

84 persons take 56 days to complete a work.

Concept

Man- day work

Total work = number of men × Number of days taken to complete the work

Efficiency of men = work done/number of men

Calculation

Total units of work = 84×56

⇒ 4704

one fourth of work = $4704/4$

⇒ 1176

Number of days taken to complete 1176 units = $1176/84$

⇒ 14

$$\text{Work left} = 4704 - 1176$$

$$\Rightarrow 3528$$

$$\text{Number of workers left} = 84/7$$

$$\Rightarrow 12$$

$$\text{Number of workers remaining} = 84 - 12$$

$$\Rightarrow 72$$

$$\text{Numbers of days taken by remaining workers to complete the remaining work} = 3528/72$$

$$\Rightarrow 49$$

$$\text{Total days taken to complete a work} = 49 + 14$$

$$\Rightarrow 63 \text{ days}$$

\therefore 63 days take to complete the entire task.

54. Answer: d

Explanation:

Concept

Amount = Principal + Simple interest

$$\text{Simple interest} = (P \times R \times T)/100$$

where P, R and T are principal, rate and time respective ly

Calculation

let the Principal is Rs. P

$$\text{Amount} = P + (P \times R \times T)/100$$

$$\Rightarrow P + (P \times r \times 3)/100$$

$$\Rightarrow P + 3Pr/100$$

$$\Rightarrow (100 P + 3Pr)/100$$

$$\text{Simple interest} = (P \times r \times 13)/100$$

$$\Rightarrow 13Pr/100$$

$$\Rightarrow (100 P + 3Pr)/100 = 13Pr/100$$

$$\Rightarrow 100P + 3Pr = 13Pr$$

$$\Rightarrow 100 P = 10 Pr$$

$$\Rightarrow r = 10$$

\therefore The value of r is 10.

55. Answer: c

Explanation:

Given **Your Personal Exams Guide**

$$79 - [128 - \{75 - (72 \div 16 \times 4) + (18 \div 2 \text{ of } 6) \times 4\}]$$

Concept

BODMAS

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

Calculation

$$79 - [128 - \{75 - (72 \div 16 \times 4) + (18 \div 2 \text{ of } 6) \times 4\}]$$

$$\Rightarrow 79 - [128 - \{75 - (4.5 \times 4) + (18 \div 12) \times 4\}]$$

$$\Rightarrow 79 - [128 - \{75 - (18) + (1.5) \times 4\}]$$

$$\Rightarrow 79 - [128 - \{75 - 18 + 6\}]$$

$$\Rightarrow 79 - [128 - 63]$$

$$\Rightarrow 79 - 65$$

$$\Rightarrow 14$$

$$\therefore 79 - [128 - \{75 - (72 \div 16 \times 4) + (18 \div 2 \text{ of } 6) \times 4\}] \text{ is } 14.$$

56. Answer: d

Explanation:

Given

Average of 18 numbers is 65.

Average of the first 10 numbers is 72

Average of the last 9 numbers is 58.

Concept

Average = sum of all observation/Number of observation

Calculation

Sum of 18 numbers = 65×18

⇒ 1170

Sum of first 10 numbers = 72×10

⇒ 720

Sum of last 9 numbers = 9×58

⇒ 522

let the 10th number is x

sum of 18 numbers = sum of first 10 numbers + sum of last 9 numbers - value of 10th number

⇒ $1170 = 720 + 522 - x$

⇒ $1170 = 1242 - x$

⇒ $x = 1242 - 1170$

⇒ $x = 72$

Sum of remaining numbers = $1170 - 72$

⇒ 1098

Remaining number = 17

Average of remaining number = $1098/17$

⇒ 64.58 or 64.6

∴ The average of the remaining numbers (correct to one decimal place) is 64.6

57. Answer: a

Explanation:

Given

Ratio of A and B is 2 : 3

and $B = A + 8$

Calculation

$$A/B = 2/3$$

$$B = A + 8$$

$$\Rightarrow A/(A + 8) = 2/3$$

$$\Rightarrow 3A = 2A + 16$$

$$A = 16$$

$$B = 16 + 8$$

$$\Rightarrow B = 24$$

k is added to A and B

$$A = 16 + k$$

$$B = 24 + k$$

$$(16 + k)/(24 + k) = 7/9$$

$$\Rightarrow 9(16 + k) = 7(24 + k)$$

$$\Rightarrow 144 + 9k = 168 + 7k$$

$$\Rightarrow 9k - 7k = 168 - 144$$

$$\Rightarrow 2k = 24$$

$$\Rightarrow k = 12$$

\therefore The value of k is 12

58. Answer: b

Explanation:

Given

Pipe A fills a tank in 8 hours

Pipe B fills a tank in 12 hours

Concept

Find the tank filled by A and B in one hour and tank empty by C in one hour.

Calculation

Let C alone takes x hours to empty the tank

Tank filled by A in 1 hour = $1/8$

Tank filled by B in 1 hour = $1/12$

Tank empty by C in 1 hour = $1/x$

According to question

$$(1/8) + (1/12) - (1/x) = 3/40$$

$$\Rightarrow (15 + 10 - 9)/120 = 1/x$$

$$\Rightarrow (25 - 9)/120 = 1/x$$

$$\Rightarrow 16/120 = 1/x$$

$$\Rightarrow 120/16 = x$$

$$\Rightarrow x = 7.5$$

\therefore C alone can empty the tank in $7 \frac{1}{2}$ hours

59. Answer: b

Explanation:

Given

sum divided between A, B and C is 3780

Calculation

let the share of A, B and C is $5x$, $2x$ and $4x$ after decrease

so, original share of A, B and C is $(5x + 130)$, $(2x + 150)$ and $(4x + 200)$

$$5x + 130 + 2x + 150 + 4x + 200 = 3780$$

$$\Rightarrow 11x + 480 = 3780$$

$$\Rightarrow 11x = 3780 - 480$$

$$\Rightarrow 11x = 3300$$

$$\Rightarrow x = 300$$

Original share of C = $(4x + 200)$

$$\Rightarrow (4 \times 300 + 200)$$

$$\Rightarrow 1200 + 200$$

$$\Rightarrow 1400$$

∴ The original share of C is 1400.

60. Answer: a

Explanation:

Given

Ratio of acid and water in solution A = 4 : 5

Ratio of acid and water in solution B = 5 : 1

Calculation

Ratio of acid and water in the new solution

as 5 litres of acid is taken water is taken from solution A and 4 litres of acid and water is taken from solution B.

$$\Rightarrow [(4/9) \times 5 + (5/6) \times 4] : [(5/9) \times 5 + (1/6) \times 4]$$

$$\Rightarrow [(20/9) + (20/6)] : [(25/9) + (4/6)]$$

$$\Rightarrow [(40 + 60)/18] : [(50 + 12)/18]$$

$$\Rightarrow (100/18) : (62/18)$$

$$\Rightarrow 50 : 31$$

∴ The ratio of acid and water in the new solution is 50 : 31.

61. Answer: b

Explanation:

Given

$$\frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5}\right)} - \left(2\frac{2}{3} \text{ of } 1\frac{1}{2}\right)$$

Calculation

$$\left[\frac{13}{4} - \left(\frac{4}{5} \times \frac{5}{6}\right)\right] \div \left[\left(\frac{13}{3} \times 5\right) - \left[\frac{3}{10} + \frac{106}{5}\right] - \frac{8}{3} \times \frac{3}{2}\right]$$

$$\Rightarrow \left[\left(\frac{13}{4} - \frac{2}{3}\right) \div \left\{\left(\frac{65}{3}\right) - \frac{(3+212)}{10}\right\}\right] - 4$$

$$\Rightarrow \left[\frac{31}{12} \div \left[\frac{(650-645)}{30}\right]\right] - 4$$

$$\Rightarrow \left[\frac{31}{12} \times \frac{30}{5}\right] - 4$$

$$\Rightarrow \frac{31}{2} - 4$$

$$\frac{(31-8)}{2}$$

$$\Rightarrow \frac{23}{2}$$

$$\Rightarrow 11\frac{1}{2}$$

$$\therefore \text{The value of } \frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5}\right)} - \left(2\frac{2}{3} \text{ of } 1\frac{1}{2}\right) \text{ is } 11\frac{1}{2}$$

62. Answer: b

Explanation:

Given

Train length = 270 m

Time = 24 seconds

Formula used

speed = distance/time

1 min = 60 seconds

Calculation

Speed of train = $270/24$

$\Rightarrow 11.25$ m/s

let the length of tunnel is x m

Total Distance travel by train = $270 + x$

$$11.25 = (270 + x)/60$$

$$\Rightarrow 675 = 270 + x$$

$$\Rightarrow 675 - 270 = x$$

$$\Rightarrow 405 = x$$

\therefore The length of the tunnel is 405 m

63. Answer: d

Explanation:

Given

Principal = Rs. 5760

Amount = Rs. 7200

Time = 4 years

Formula used

$$A = P(1 + r\%)^t$$

Calculation

$$7200 = 5760(1 + r\%)^4$$

$$\Rightarrow 7200/5760 = (1 + r\%)^4 \quad \text{----- (1)}$$

let the Principal 5760 becomes x amount in 12 years.

$$\text{then, } x = 5760(1 + r\%)^{12}$$

$$\Rightarrow x/5760 = [(1 + r\%)^4]^3$$

$$\Rightarrow x/5760 = (7200/5760)^3 \text{ (from 1)}$$

$$\Rightarrow x = (7200 \times 7200 \times 7200 \times 5760)/(5760 \times 5760 \times 5760)$$

$$\Rightarrow x = 11,250$$

\therefore The value of x is 11,250

64. Answer: c

Explanation:

Given

Selling price = Rs. 2604

loss = 7%

Formula used

Profit = Selling price - cost price

selling price = cost price - loss

Calculation

let the cost price is x

$$2604 = x - 7\% \text{ of } x$$

$$\Rightarrow 2604 = 93x/100$$

$$\Rightarrow x = (2604 \times 100)/93$$

$$x = 2800$$

$$\text{Selling price} = 3094$$

$$\text{Profit} = 3094 - 2800$$

$$\Rightarrow 294$$

$$\text{profit \%} = (294/2800) \times 100$$

$$\Rightarrow 10.5\%$$

\therefore The profit percentage is 10.5%

65. Answer: a

Explanation:

Given

$$\text{Area of circle} = 2\frac{17}{30} \text{ (sum of the area of two triangles)}$$

Concept

if the sum of the squares of the two sides of a triangle is equal to the square of hypotenuse side, then triangle is right angled triangle.

$$(H)^2 = (P)^2 + (B)^2$$

Calculation

$$(20)^2 + (21)^2 = (29)^2$$

$$400 + 441 = 841$$

$$841 = 841$$

$$\text{Area of triangle} = (1/2) \times \text{base} \times \text{height}$$

$$\Rightarrow (1/2) \times 20 \times 21$$

$$\Rightarrow 210 \text{ cm}^2$$

$$(11)^2 + (60)^2 = (61)^2$$

$$121 + 3600 = 3721$$

$$3721 = 3721$$

$$\text{Area of triangle} = (1/2) \times 60 \times 11$$

$$\Rightarrow 330 \text{ cm}^2$$

$$\text{Area of circle} = 77/30 \times (210 + 330)$$

$$\Rightarrow (77/30) \times 540$$

$$\Rightarrow 1386 \text{ cm}^2$$

$$(22/7) \times r^2 = 1386$$

$$r^2 = 1386 \times (7/22)$$

$$r^2 = 9702/22$$

$$r^2 = 441$$

$$r = 21$$

\therefore Radius of circle is 21 cm

66. Answer: b

Explanation:

Given

Selling price = Rs 768

Profit = x%

Selling Price = Rs. 896

Profit % = $(x + 20)$

Formula used

Profit = Selling Price - Cost price

Calculation

let the cost price is Rs. y

Profit = $768 - y$

$\Rightarrow x\%$ of $y = 768 - y$

$\Rightarrow xy/100 = 768 - y$ ----- (1)

$\Rightarrow y = 768 - xy/100$

$(x + 20)\%$ of $y = 896 - y$

$\Rightarrow (xy + 20y)/100 = 896 - y$

$\Rightarrow y = 896 - (xy/100) - (20y/100)$

$768 - (xy/100) = 896 - (xy/100) - (20y/100)$

$\Rightarrow 768 = 896 - (20y/100)$

$\Rightarrow 20y/100 = 896 - 768$

$\Rightarrow y/5 = 128$

$\Rightarrow y = 128 \times 5$

$\Rightarrow y = 640$

$(x \times 640)/100 = 768 - 640$ (from 1)

$\Rightarrow 640x/100 = 128$

$\Rightarrow x = (128 \times 100)/640$

$$\Rightarrow x = 20$$

\therefore The value of x is 20

67. Answer: a

Explanation:

$$\text{Number of students in school B} = (117/360) \times 5400$$

$$\Rightarrow 1755$$

$$\text{Number of boys in school B} = (6/13) \times 1755$$

$$\Rightarrow 810$$

$$\text{Number of girls in school B} = (7/13) \times 1755$$

$$\Rightarrow 945$$

$$\text{Number of students in school D} = (52/360) \times 5400$$

$$\Rightarrow 780$$

$$\text{number of boys in school D} = 40\% \text{ of } 780$$

$$\Rightarrow 312$$

$$\text{Number of girls in school D} = 780 - 312$$

$$\Rightarrow 468$$

$$\text{Total number of girls in school B and D} = 945 + 468$$

$$\Rightarrow 1413$$

\therefore The total number of girls in school B and D is 1413

68. Answer: b

Explanation:

Given

11, 16, 14, 7, 11, 23, 10, 30, 20, 33, 19, 12, 17, 14

concept used

To find the median, first arrange the given data in ascending or descending order

range = upper value - lower value

median = $\{(n/2)\text{th term} + [(n/2)\text{th term} + 1]\}/2$, where n is the number of observation respectively.

calculation

Arrange the data in ascending order = 7, 10, 11, 11, 12, 14, 14, 16, 17, 19, 20, 23, 30, 33

Range = $33 - 7$

$\Rightarrow 26$

median = $\{(14/2)\text{th term} + [(14/2) + 1]\text{th term}\}/2$

$\Rightarrow (7\text{th term} + 8\text{th term})/2$

$\Rightarrow (14 + 16)/2$

$\Rightarrow 30/2$

$\Rightarrow 15$

Mean = $(26 + 15)/2$

$\Rightarrow 41/2$

$\Rightarrow 20.5$

∴ The mean of the range and median of the given data is 20.5

69. Answer: d

Explanation:

Given

side of cube = 12 cm

radius of cylinder = 20 cm

Formula used

Volume of cube = (side)³

Volume of cylinder = $\pi r^2 h$, where r and h are radius and height of cylinder respectively .

Concept

Rise in water level of cylindrical vessel is equal to the volume of cube

Calculation

Volume of cylinder = Volume of cube

$$\pi r^2 h = (\text{side})^3$$

$$\Rightarrow (22/7) \times (20) \times (20) \times h = (12)^3$$

$$\Rightarrow h = (12 \times 12 \times 12 \times 7) / (22 \times 20 \times 20)$$

$$\Rightarrow h = (6 \times 6 \times 6 \times 7) / (11 \times 10 \times 10)$$

$$\Rightarrow h = 1.37 \text{ (approx) or } 1.4$$

∴ The height (in cm) by which the water will rise in the vessel is 1.4 cm

70. Answer: c

Explanation:

$$\text{Number of students in school B} = (117/360) \times 5400$$

$$\Rightarrow 1755$$

$$\text{Number of students in School D} = (52/360) \times 5400$$

$$\Rightarrow 780$$

$$\text{Number of students in school E} = (50/360) \times 5400$$

$$\Rightarrow 750$$

$$\text{Total number of students in school D and E} = 780 + 750$$

$$\Rightarrow 1530$$

$$\text{Required difference} = 1755 - 1530$$

$$\Rightarrow 225$$

\therefore The value of p lies between 220 and 230

71. Answer: b

Explanation:

Given

$$\frac{3}{7} + \frac{1}{14} \times 2\frac{4}{5} - \left(\frac{1}{4} \div \frac{2}{7} \text{ of } 2\frac{1}{3}\right) \times \left(5\frac{1}{5} \div 3\frac{1}{2} \times \frac{5}{13}\right)$$

Concept:

BODMAS

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

Calculation

$$\frac{3}{7} + \frac{1}{14} \times \frac{14}{5} - \left(\frac{1}{4} \div \frac{2}{7} \times \frac{7}{3} \right) \times \left(\frac{26}{5} \div \frac{7}{2} \times \frac{5}{13} \right)$$

$$\Rightarrow \frac{3}{7} + \frac{1}{5} - \left(\frac{1}{4} \times \frac{3}{2} \right) \times \left(\frac{26}{5} \times \frac{2}{7} \times \frac{5}{13} \right)$$

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

$$\Rightarrow \frac{3}{7} + \frac{1}{5} - \frac{3}{14}$$

$$\frac{(30+14-15)}{70}$$

$$\Rightarrow \frac{29}{70}$$

∴ The value of $\frac{3}{7} + \frac{1}{14} \times 2\frac{4}{5} - \left(\frac{1}{4} \div \frac{2}{7} \text{ of } 2\frac{1}{3} \right) \times \left(5\frac{1}{5} \div 3\frac{1}{2} \times \frac{5}{13} \right)$ is $\frac{29}{70}$

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72. Answer: b

Explanation:

Number of students in school A = $(75/360) \times 5400$

⇒ 1125

Number of students in school B = $(117/360) \times 540$

⇒ 1755

Number of students in school C = $(66/360) \times 540$

⇒ 990

Average number of students in school A, B and C = $(1125 + 1755 + 990)/3$

⇒ 1290

Number of students in school E = $(50/360) \times 5400$

⇒ 750

Required percentage = $[(1290 - 750)/750] \times 100$

⇒ $(540/750) \times 100$

⇒ 72%

∴ The average number of students in schools A, B, and C is 72% more than the number of students in school E.

73. Answer: a

Explanation:

Given

Two given numbers are 70,000 and 75,000

Calculation

L.C.M of 225, 250 and 275 is 24,750 i.e. $(5 \times 5 \times 3 \times 3 \times 10 \times 11)$

If 24,750 is multiply by 2 then it will be 49,500 which is less than 70,000

if 24,750 is multiply by 3, then it will be 74250. it is between the 70,000 and 75,000

so, Required number will be $74250 + 61 = 74,311$

sum of the digits of x is $7 + 4 + 3 + 1 + 1 = 16$

∴ The sum of the digits of x is 16

74. Answer: d

Explanation:

Given

$$S_1 = 4\frac{1}{6} \text{ m/sec and } S_2 = 12 \text{ km/h}$$

Concept used

$$1 \text{ m/s} = 18/5 \text{ km/h}$$

$$\text{Average speed} = (2s_1s_2)/(s_1 + s_2)$$

Calculation

$$\text{Speed} = 4\frac{1}{6} \text{ m/s}$$

$$\Rightarrow \frac{25}{6} \times \frac{18}{5} \text{ km/h}$$

$$\Rightarrow 15 \text{ km/h}$$

$$\text{Average speed} = (2 \times 15 \times 12)/(15 + 12)$$

$$\Rightarrow 360/27 = 120/9 = 40/3 = 13\frac{1}{3}$$

∴ Average speed (in km/h) is $13\frac{1}{3}$ km/h

75. Answer: c

Explanation:

Given

Market Price = cost price + 24% of cost price

Discount = 15%

Formula used

Selling price = Market Price - Discount

Profit = Selling price - Cost Price

when Selling price > Cost price

Calculation

Let the cost price is Rs.x

Market price = x + 24% of x

$$\Rightarrow 124x/100$$

Discount = 15% of (124x/100)

$$\Rightarrow 1860x/10000$$

Selling price = (124x/100) - (1860x/10000)

$$\Rightarrow (12400x - 1860x)/10000$$

$$\Rightarrow 10540x/10000$$

Profit = selling price - cost price

$$27 = (10540x/10000) - x$$

$$\Rightarrow 27 = (10540x - 10000x)/10000$$

$$\Rightarrow 27 = 540x/10000$$

$$x = (27 \times 10000)/540$$

$$x = 500$$

Selling price = 500 + 27

$$\Rightarrow \text{Rs. } 527$$

∴ The selling price of the article is Rs.527

76. Answer: d

Explanation:

The correct answer is Narsimhadeva I.

★ Key Points

- **Sun Temple of Konark was built by King Narasimhadeva I** of the Eastern Ganga Dynasty about **1250 CE**. This temple is dedicated to the Hindu god Surya and is located **35 km northeast of Puri**.
- The temple complex consists of a 100-foot high chariot with immense wheels and horses which is mainly in ruins.
- This temple complex was declared a **UNESCO World Heritage Site in 1984** for its architectural greatness and also for the sophistication and abundance of sculptural work.
- This temple also is known as the "**Black Pagoda**".
- Built-in the 13th century, the Konark temple was conceived as a gigantic chariot of the Sun God, with 12 pairs of exquisitely ornamented wheels pulled by seven horses.
- The temple is a perfect blend of Kalinga architecture, heritage, exotic beach, and salient natural beauty.
- It is protected under the **National Framework of India by the Ancient Monuments and Archaeological Sites and Remains (AMASR) Act (1958) and its Rules (1959)**.



77. Answer: a

Explanation:

The correct answer is Calcium.

★ Key Points

- Calcium is not a component of baking soda.
- **Sodium Bicarbonate** is the chemical name of **Baking Soda** .
- The other name for Sodium Bicarbonate is **Sodium Hydrogen Carbonate**. It is popularly called **cooking soda**.
- The chemical formula of **Baking Soda** is **NaHCO₃**.
- Sodium bicarbonate is non flammable.
- Baking soda is basic in nature.

★ Additional Information

- Uses of Sodium bicarbonate are following:-

- It acts as an antacid that is used to treat the stomach.
- It is used in fire extinguishers due to the formation of soapy foam.
- It acts as a pesticide.
- It neutralizes the effect of acid as a neutralizer.
- In the stomach, Reduces the acidity.
- Baking soda was first manufactured by **French chemist Nicolas Leblanc** .
- It was first manufactured in **1971**.

78. Answer: d

Explanation:

The correct answer is Laffer Curve.

★ Key Points

- Ronald Reagan, the 40th President of the US, signed the largest tax cut in the history of their country in 1981. Laffer Curve's economic theory was centred around.
- **Laffer curve explains the relationship between tax rate and tax revenue.**
- **According to the Laffer Curve:**
 - At lower as well as higher rates of tax, the tax revenue is low. Tax revenue is high at the optimal rate of tax.
 - A lower rate leads to lower tax collection.
 - At a higher rate of tax, there is high tax evasion and tax revenue is also low.
 - At an optimal rate of tax, there is no tax evasion and so the tax revenue reaches the maximum.
- The Laffer Curve describes the relationship between tax rates and total tax revenue, **with an optimal tax rate that maximizes total government tax revenue.**
- Typically, it has an **inverted-U shape** .
- If taxes are too high along the Laffer Curve, then they will discourage the taxed activities, such as work and investment, enough to actually reduce total tax revenue.

- In this case, cutting tax rates will both stimulate economic incentives and increase tax revenue.
- The curve supports the notion in supply-side economics that tax and regulatory burdens can impede growth.

★ Additional Information

- **Kuznets curve:**
 - It shows the relationship between economic growth and inequality.
 - It is inverted U-shaped meaning that initially economic growth leads to greater inequality, followed later by the reduction of inequality.
- **The Lorenz Curve:**
 - It indicates income distribution.
 - It is a **graphical representation of the distribution of wealth or of income.**
 - It was developed in **1905 by Max O. Lorenz to represent the inequality of wealth distribution.**
- **Kinked demand curve:**
 - A kinked demand curve occurs when the demand curve is not a straight line but has a different elasticity for higher and lower prices.
 - One example of a kinked demand curve is the model for an oligopoly.
 - This model of oligopoly suggests that prices are rigid and that firms will face different effects for both increasing price or decreasing price.
 - The kink in the demand curve occurs because rival firms will behave differently to price cuts and price increases.

79. Answer: a

Explanation:

The correct answer is Jaime Ferran.

★ Key Points

- **Ferrán** was the original developer of the preparation of the cholera vaccine.
- In **1885**, a vaccine composed of live attenuated bacteria was first inoculated in humans. This event took place in Valencia during an epidemic of cholera and

was carried out by Jaime Ferran.

- Jaime Ferrán y Clúa was a **Spanish–French bacteriologist and sanitarian**, contemporary of **Robert Koch**, and said by his fellows to have made some of the discoveries attributed to Koch.

★ Additional Information

- **Jonas Salk:**
 - Jonas Salk first invented the vaccine against **poliomyelitis**.
 - He used the **dead polioviruses as a vaccine** and their entry into any organism lead to the formation of useful antibodies.
 - These antibodies are effective for all **counter-attacks against viral attacks**.
- **Edward Jenner:**
 - Edward Jenner is considered the founder of **vaccinology in 1796, after he inoculated a 13-year-old boy with vaccinia virus (cowpox), and demonstrated immunity to smallpox**.
 - He was the first who introduced the **concept of immunization** to the medical world.

80. Answer: c

Explanation:

The correct answer is Madras(Chennai).

★ Key Points

- Veda Samaj was established by Keshab Chandra Sen and K. Sridharalu Naidu.
- Established in Madras (Chennai) in 1864.
- The Veda Samaj was inspired by the **Brahmo Samaj**.
- It worked to abolish caste distinctions and promote widow remarriage and women's education.
- Its members believed in one God.
- They condemned the superstitions and rituals of orthodox Hinduism.

- An important ideology of the members of **Veda Samaj** was regarding marriage and the funeral rituals as matters of routine, destitute of all religious significance.

★ Additional Information

- **Brahmo Samaj:**
 - It was started at Calcutta on **20 August in 1828** by **Raja Ram Mohan Roy**.
 - It was a **monotheistic sect of Hinduism**.
 - **Brahmo samaj** had no faith in any scripture as an authority.
 - It rejects incarnation.
 - It was against caste restrictions and propounded a mix of west-east religious qualities.
 - It denounced polytheism and idol worship opposed idolatry.
 - It denied the need for a priestly class for interpreting religious texts.
 - Brahmo Samaj spread the religious treasure and teachings of Vedas but never claimed that Vedas are infallible.

81. **Answer: a**

Explanation:

The correct answer is Ireland.

★ Key Points

- The nomination of members in the Rajya Sabha by the President was borrowed by the constitution of India from **Ireland**.
- Indian President nominates **12 persons** having special knowledge in various fields.
- 12 members are nominated by the President from amongst person having special knowledge or practical experience in:
 - Arts.
 - Literature.
 - Science.
 - Social service.

- The constitution of India has borrowed most of its features from the constitutions of various other countries in the world.
- More than half of the provisions of the Indian constitution are identical to the **Government of India act 1935** . Important provisions borrowed from **Ireland are:**
 - **Directive Principles of State Policy.**
 - **Nomination of members to Rajya Sabha.**
 - **Presidential election.**

★ Additional Information

- Important provisions borrowed from **Russia** are:
 - Fundamental duties.
 - Five-year plans.
- Important provisions borrowed from the **US** are:
 - Fundamental rights.
 - Independence of Judiciary.
 - Judicial Review.
 - Impeachment of the President.
 - Removal of the Supreme court and High Court judges.
 - Post of Vice-President.
- Important provisions borrowed from **Germany** are:
 - The feature of suspension of Fundamental Rights during Emergency is taken from the Weimar Constitution of Germany.
 - In Part XVIII of the Constitution, from Articles 352 to 360, the Emergency provisions are there.
 - Such provisions help and enable the Central government to meet any abnormal situation effectively.
 - The reason behind the incorporation of these provisions in the Constitution is to safeguard the sovereignty, unity, integrity, security of the country, the democratic political system, and the Constitution.
 - The Central government becomes all-powerful and the states go into total control of the Centre and it converts the federal structure into a unitary one without a formal amendment of the Constitution, during an Emergency.
 - A unique feature of the Indian Constitution is the kind of transformation of the political system from federal during normal times to unitary during

Emergencies.

82. Answer: b

Explanation:

The correct answer is Ten Degree Channel.

★ Key Points

- The Ten Degree Channel separates the Andaman Islands and the Nicobar Islands from each other.
- It lies on the 10-degree line of latitude, north of the equator.
- A channel is a broad open waterway that passes through two landmasses that lie close to each other.
- Other passes in Andaman and Nicobar Islands are:-
 - South Andaman and Little Andaman are separated by Duncan Passage.
 - The Grand is between the Great Nicobar islands and the Sumatra Channel islands of Indonesia.
 - The Coco is between the North Andaman islands and the Coco Islands Strait of Myanmar.
 - The map depicting 10-degree channel:

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★ Additional Information

- **The Palk Strait:**
 - It is a **strait between India and Srilanka.**
 - It connects the **Bay of Bengal** in the northeast with the **Gulf of Mannar** in the southwest.
 - This chain extends between **Dhanushkodi on Pamban (Rameswaram) Island in Tamil Nadu** and **Mannar Island in Sri Lanka.**
- **The Duncan Pass:**
 - It is located between **South Andaman and Little Andaman.**
 - The Duncan Pass is a strait located in the Indian Ocean, it is about **48 kilometres wide .**
- **Eight Degree Channel:**
 - The maritime boundary between the Maldives and India runs through the Eight Degree Channel.
 - It separates the islands of Minicoy and Maldives.
 - **Maliku Kandu and Māmalē Kandu Divehi** are the traditional names of the Eight Degree Channel.

83. Answer: b

Explanation:

The correct answer is Rugby.

★ Key Points

- The European Champions Cup or Heineken Cup is associated with Rugby Sport

★ Additional Information

- The cups associated with Rugby and other sports are as follows:

Prepp

Your Personal Exams Guide

Sport	Trophy/Cup
Rugby	<ul style="list-style-type: none"> • Webb Ellis Cup. • Derby Cup. • Quilter Cup. • Gordon Hunter Memorial Trophy
Football	<ul style="list-style-type: none"> • Rovers Cup. • Bandodkar Trophy. • Merdeka Cup. • Confederation Cup. • DCM Trophy. • Durand Cup. • B.C. Raj Trophy(National Championship). • FIFA World cup. • Jules Rimet Trophy. • Indian Super League. • Kalinga Cup. • Santosh Trophy. • IFA Shield. • Scissor Cup. • Subroto Cup. • Sir Ashutosh Mukherjee Trophy. • Todd Memorial Trophy. • Vittal Trophy. • UEFA Champions League.
Cricket	<ul style="list-style-type: none"> • Ashes Cup. • Asia Cup. • C.K Naidu Trophy. • Cooch Behar Trophy. • Deodhar Trophy.

	<ul style="list-style-type: none"> • Duleep Trophy. • Gavaskar Border Trophy. • G.D Birla Trophy. • ICC World Cup. • Irani Trophy. • Jawaharlal Nehru Cup. • Rani Jhansi Trophy. • Ranji Trophy. • Rohinton Baria Trophy. • Rothmans Cup. • Sahara Cup. • Sharjah Cup. • Singer Cup. • Titan Cup. • Vijay Hazare Trophy. • Vijay Marchent Trophy. • Wisden Trophy. • Wills Trophy
<p>Hockey</p>	<ul style="list-style-type: none"> • Agha Khan Cup. • Maharaja Rajit. • Singh Gold Cup. • Dhyanchand Trophy. • Sultan Azlan Shah Cup. • Wales Trophy. • Stanley Cup. • Sindhia Gold Cup. • Wellington Cup.

84. Answer: a

Explanation:

The correct answer is the Study of birds.

★ Key Points

- Ornithology deals with the study of birds.
- The word Ornithology comes from two Greek words- 'Ornis' (Birds) and 'logos' (theory).
- It deals with the scientific study of all aspects of birds like body shape, appearance, habitat, migration pattern, mating behaviours, warning
- predators, flock movement, voice, ability to mimic, etc.
- A person who studies birds is known as an **Ornithologist**.
- There are two essentially different kinds of ornithology: **systematic or scientific, and popular**.
- **Systematic or scientific deals** with the structure and classification of birds, their synonymies, and technical descriptions.
- **Popular deals** with the habits, songs, nesting, and other facts pertaining to their life histories.
- Ornithologists closely examine the behaviors of birds to understand them well enough to develop solutions to conserve and protect them from endangerment or extinction.

★ Additional Information

- The Ichthyology Branch of Zoology deals with the **study of fish**.
- Herpetology is the **study of reptiles and amphibians**.
- Entomology is a branch of zoology dealing with the scientific **study of insects**.
 - The Greek word "entomon", meaning "notched" refers to the segmented body plan of the insect.
 - In the 4th century BCE, the Greek philosopher and scientist Aristotle provided descriptions of insect anatomy, establishing the groundwork for modern entomology.

85. Answer: b

Explanation:

The correct answer is Sarojini Naidu.

★ Key Points

- **Sarojini Naidu is the author of the book 'The Golden Threshold'.**
- Sarojini Naidu became the first Indian women president of the Congress at the **Kanpur session in 1925.**
- She was the first woman to become the governor of **Uttar Pradesh.**
- She began writing at the age of 13. Known as the **Nightingale of India**, she eulogised India in her poems published in three collections, **The Golden Threshold (1905), The Bird of Time (1912) and the Broken Wing (1917).**

★ Additional Information

- **Rajendra Prasad:**
 - He was the longest-serving President of India (1950 to 1962).
 - Rajendra Prasad was elected as the first President of India on 24th January 1950.
 - He was one of the prominent leaders of the Indian independence movement and played a prominent role as the President of the Indian National Congress.
 - During his tenure, H.C. Mookerjee was the Vice-President.
 - He was a lawyer by profession, and also an influential leader during the Indian freedom struggle.
 - He served as the president of the Constituent Assembly that drafted the first constitution of the Republic of India, which lasted from 1948 to 1950.
 - He also became the first Minister of Food and Agriculture in 1946 in the Interim National Government.
- **Jawaharlal Nehru:**
 - He is the Prime Minister who has had the longest term in office.
 - He served as the prime minister of India from 15th August 1947 to 1964.
 - He is the architect of the Preamble of the Indian constitution.
 - He was the Prime Minister of India during the Indo-China war in 1962.
 - He served as the first chairman of the planning commission of India.
 - He was honoured with the Bharat Ratna in 1955.
 - The name Panchayati raj was given by Jawaharlal Nehru.

- National herald is the newspaper started by Jawaharlal Nehru.
- He is the first prime minister to die in harness.
- Shantivan is the cremation ground of Jawaharlal Nehru .
- **Zulfikar Ali Bhutto:**
 - He was the President of Pakistan and the founder of the Pakistan People's party.
 - The Great Tragedy is written by the former Prime Minister of Pakistan Zulfikar Ali Bhutto.
 - This book was published in 1971.

86. Answer: a

Explanation:

The correct answer is 40.

★ Key Points

- 40 seats are allocated to Bihar in the Lok Sabha as per the state-wise list of the 17th Lok Sabha.
- Speaker is the presiding officer in Lok Sabha. The present speaker is **Om Birla** .
- To constitute the Lok Sabha, the whole country has been divided into **543 Parliamentary Constituencies** , each one of which elects one member.
- The members of the Lok Sabha are elected directly by the eligible voters.
- Some seats are reserved in Lok Sabha for the members of the Scheduled Castes and Scheduled Tribes.
- As per the order issued by **the Delimitation Commission in 2008, 412 are general, 84 seats are reserved for Scheduled Castes and 47 seats** for the Scheduled Tribes.
- Earlier it was **79 and 41 for Scheduled Castes and Scheduled Tribes** respectively.

★ Additional Information

- The additional information of the Bihar state are as follows:

Name of State	Bihar (Feb 2022)
Chief Minister of State	Nitish Kumar
Governor of State	Phagu Chauhan
Number of seats in Lok Sabha	40
Number of seats in Legislative Assembly	243
Number of seats in Legislative Council	75
Capital of State	Patna
Area	94,163 sq km
Population	10.41 crore (2011 census)
Lowest Literacy rate	61.8%
Highest Population Density	1106

87. Answer: b

Explanation:

The correct answer is Bibi ka Maqbara.

★ Key Points

- "Bibi ka Maqbara" is also known as the 'Taj of the Deccan'.
- 'Bibi ka Maqbara' is a tomb situated in **Aurangabad, Maharashtra, India** .
- The Bibi-Ka-Maqbara is a beautiful mausoleum of **Rabia-ul-Daurani alias Dilras Banu Begum, the wife of the Mughal Emperor Aurangzeb (1658-1707 A.D.)**.
- This mausoleum is believed to be constructed by **Prince Azam Shah in memory of his mother from 1651 to 1661 A.D** . An inscription found on the main entrance door mentions

★ Additional Information

- **Qutub Minar:**
 - Qutub Minar in red and buff sandstone is the highest tower in India.
 - It has been declared as a UNESCO world heritage site.
 - The construction of the Qutub Minar was started by Qutub-ud-Din Aibak and was completed by Iltutmish.
 - Qutub Minar is a soaring, 73 m-high tower of victory, built-in 1193 by Qutub-ud-din Aibak immediately after the defeat of Delhi's last Hindu kingdom.
 - The tower has five distinct stories.
 - The first three storeys are made of red sandstone; the fourth and fifth storeys are of marble and sandstone.
 - At the foot of the tower is the Quwwat-ul-Islam Mosque, the first mosque to be built in India.
- **Chand Minar:**
 - It is at Daulatabad. It was built in the Turkish style in 1435 by Ala-ud-din Bahmani to celebrate his occupation of the fort. This minaret is an outstanding example of Islamic art.
 - The last King of Golconda was imprisoned in 1687 for 13 years are the important attractions of the tomb. There is also a 6.6m long Kila Shikan (Fort Breaker) iron cannon on the bastion.
- **Mahabat Maqbara:**

- It is one of the major tourist attractions in Gujarat and especially in Junagadh.
- The architecture of the tomb is a blend of Hindu, Islamic and European architectures.
- Bahauddin Makbara was constructed by Sheikh Bahauddin with his own funds during the period A.D 1891-1896.
- The monument is located inside the city in a very busy area.

88. Answer: b

Explanation:

The correct answer is Maharashtra.

★ Key Points

- **Paithani Saree:**
 - This type of saree is named after the Paithan town in **Aurangabad Maharashtra** state where they are woven by hand.
 - They are made up of the very finest silk and therefore they are the most expensive saris in India.
 - It is named after the Paithan village in which it is woven.
 - The sari has the work of Zari (gold or silver).

★ Additional Information

- List of traditional sarees of the state of India:

Saree	State
Ashavali, Patola	Gujarat
Baluchari, Batik, Garad, Jamdani Dhakai, Tant	West Bengal
Banarasi, Chikan	Uttar Pradesh
Bomkai, Sambalpuri	Orissa
Guntur, Uppada, Venkatgiri	Andhra Pradesh
Eri silk	Assam
Paithani	Maharashtra
Bandhani / Bhandej	Gujarat & Rajasthan

89. Answer: a

Explanation:

The correct answer is Hicky's Bengal Gazette.

★ Key Points

- The Bengal Gazette was a weekly magazine.
- It was started in the year 1780 by James Augustus Hickey.
- It described itself as 'a commercial paper open to all, but influenced by none'.
- Various other weekly magazines were published after Bengal Gazette.
- It was the first English newspaper published in the Indian Subcontinent.

★ Additional Information

Some important newspapers and journals are-

Newspaper	Editor/Founder
Hindoo Patriot	Madhusudan
Rast Goftar	Dadabhai Naroji
Indian Mirror	Devendranath Tagore
Amrita Bazar Patrika	Sisir Kumar Ghosh and Motilal Ghosh
Sudharak	GG Agarkar

90. Answer: c

Explanation:

The correct answer is Loss of ability to write.

★ Key Points

- **Agraphia is an acquired neurological disorder causing a loss in the ability to communicate through writing**, either due to some form of motor dysfunction or an inability to spell.
- Agraphia can be broadly divided into central and peripheral categories. Central agraphia typically involves language areas of the brain, causing difficulty spelling or with spontaneous communication, and is often accompanied by other language disorders.
- **Peripheral agraphia** usually targets motor and visuospatial skills in addition to language and tends to involve motoric areas of the brain, causing difficulty in the movements associated with writing.

★ Additional Information

- **Hearing impairment:**
 - A person having difficulty in hearing is said to have a hearing impairment.
 - "Deaf" means persons having 70 DB hearing loss in speech frequencies in both ears.

- "Hard of hearing" means a person having 60 DB to 70 DB hearing loss in speech frequencies in both ears.

91. Answer: b

Explanation:

The correct answer is Kalidas.

★ Key Points

- The two epics, 'Raghuvamsha' and 'Kumarasambhava' are works of **Kalidas**.
- **Raghuvamsha:**
 - It is one of the great court epic poems (mahakavyas) written in Sanskrit by Kalidasa about the 5th century CE.
 - It consists of 19 cantos composed of some 1,570 verses.
 - It describes the line of kings of the Raghu dynasty.
 - The Raghuvamsha is famous for its beautiful descriptions and incidental narratives, which give the poem a somewhat episodic character.
- **Kumarasambhava:**
 - It is an epic poem by Kalidasa written in the 5th century CE.
 - The work describes the courting of the ascetic Shiva, who is meditating in the mountains, by Parvati, the daughter of the Himalayas.
 - The wedding and lovemaking of Shiva and Parvati; and the subsequent birth of Kumara (Kartikeya), the war god.
 - The original poem is in eight cantos, but a sequel was added by an imitator.

★ Additional Information

- **Samarth Ramdas (C.1608 – C. 1681),**
 - He is also known as Sant (saint) Ramdas or Ramdas Swami or simply Ramdas was an Indian Hindu saint, philosopher, poet, writer, and spiritual master.
 - His earlier name was Narayan.
 - He was a devotee of the Hindu deities Rama and Hanuman.

- Dasbodh, Manache shloka, Karunashtake were written by Samarth Ramdas.
- **Valmiki:**
 - He is recognized as the author of the Sanskrit Ramayana.
 - Ramayana consists of 24,000 shlokas and seven cantos (kandas).
 - The epic Ramayana, dated variously from the 5th century BCE to the first century BCE.
 - Valmiki was a Sanskrit poet and celebrated as Adi Kavi.

92. Answer: d

Explanation:

The correct answer is Karnataka.

★ Key Points

- **Veeragase is the dance form of Karnataka.**
- It is a vigorous dance based on Hindu mythology and includes very aggressive energy-sapping dance movements performed by the Jangama.
- It is one of the dances seen in the Dasara procession that took place in Mysore.
- This dance is done at festivals and often during Shravana and Karthika's Hindu months.
- It is carried out on all essential **Lingayat functions**.

★ Additional Information

- **Sikkim:**
 - **Chu-Faat:** The meaning of Chu is the Snowy Range and that of Faat is Worship.
 - It is a group folk dance of Sikkim performed in honour of Mount Khangchendzonga.
- **Odisha:**
 - **Chhau Dance** is a traditional dance form of Odisha.
 - It is found in three styles named after the place where they are performed, i.e. Bengal's Purulia Chau, Jharkhand's Seraikella Chau, and

Odisha's Mayurbhanj Chau.

- The dance ranges from celebrating martial arts, acrobatics, and athletics performed in folk dance festive themes, to a formal dance with religious themes found in Shaivism, Shaktism, and Vaishnavism.
- The costumes vary from one style to another, with Purulia and Serakeilla using masks to identify characters.
- The tales of Chhau dancers include those from the Hindu epics of Ramayana and Mahabharata, Puranas, and other Indian literature.
- **Assam:**
 - Bagurumba originated from the Bodo tribe in Assam and Northeast India.

93. Answer: c

Explanation:

The correct answer is Jharkhand.

★ Key Points

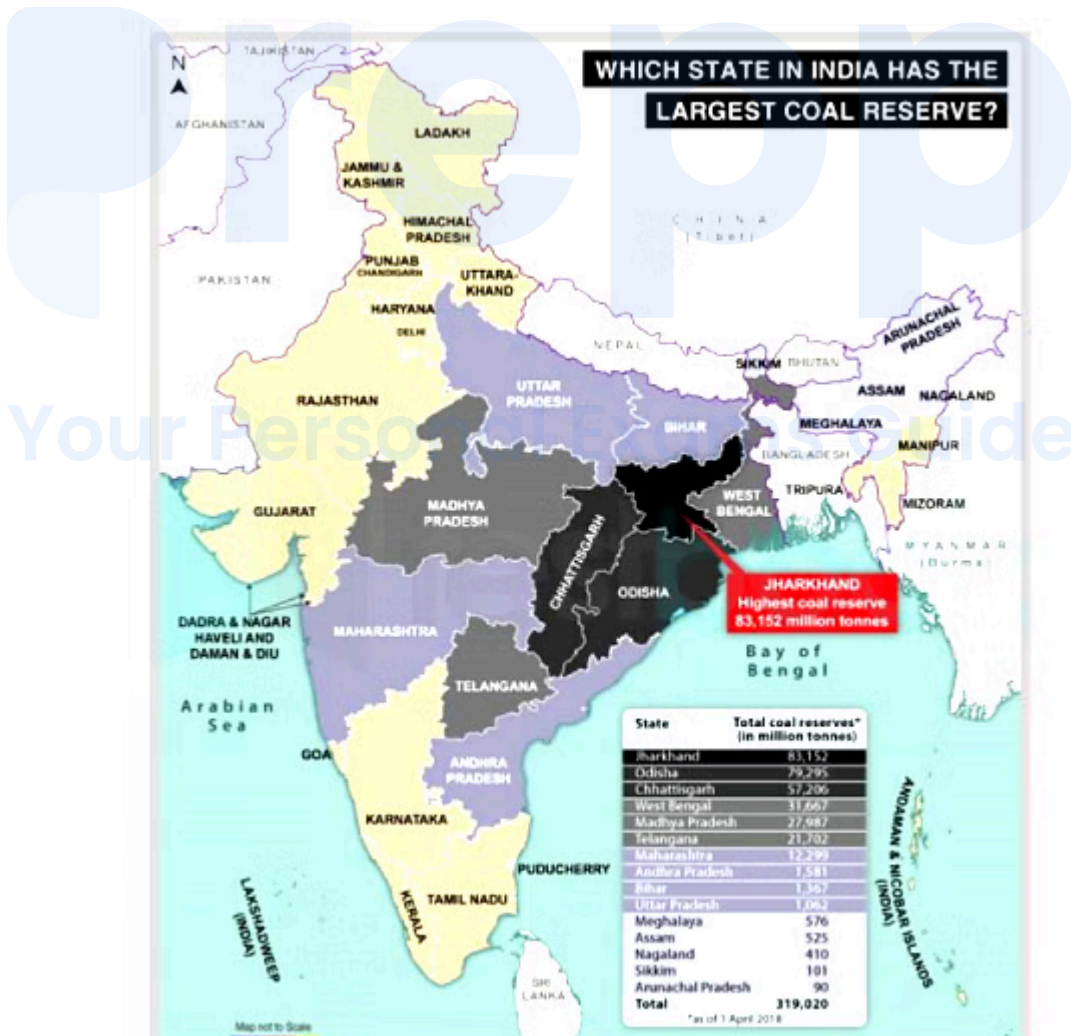
- Jharkhand has the largest reserves of coal in India followed by Odisha and Chhattisgarh .
- **The Coal Resources of India:**
 - It is mainly available in older Gondwana Formations of peninsular India and younger Tertiary formations of the north-eastern region.
 - About 80 per cent of the coal deposits in India are of the bituminous type and are of non-coking grade.
 - The most important Gondwana coal fields of India are located in Damodar Valley.
 - They lie in the Jharkhand-Bengal coal belt and the important coalfields in this region are Raniganj, Jharia, Bokaro, Giridih, and Karanpura. Jharia is the largest coalfield followed by Raniganj.
 - The other river valleys associated with coal are the Godavari, Mahanadi, and Sone.
 - The most **important coal-mining centre** is Singrauli in Madhya Pradesh (part of Singrauli coalfield lies in Uttar Pradesh), Korba in Chhattisgarh,

Talcher, and Rampur in Odisha, Chanda-Wardha, Kamptee, and Bander in Maharashtra, and Singareni in Telangana and Pandur in Andhra Pradesh.

- **Tertiary coals** occur in Assam, Arunachal Pradesh, Meghalaya, and Nagaland. It is extracted from Darangiri, Cherrapunji, Mewlong, and Langrin (Meghalaya); Makum, Jaipur, and Nazira in upper Assam, Namchik - Namphuk (Arunachal Pradesh), and Kalakot (Jammu and Kashmir).
- The lignite reserves stand at a level of around 36 billion tons, of which 90 % occur in the southern State of Tamil Nadu.

★ Additional Information

- The map depicting the highest coal reserve:



94. Answer: c

Explanation:

The correct answer is Shooting.

★ Key Points

- Anjum Moudgil has been awarded the prestigious Arjuna Award for Shooting in 2019.
- Arjuna Awards:
 - The Arjuna Awards are given by the Ministry of Youth Affairs and Sports, Government of India to recognize outstanding achievements in sports.
 - The award started in 1961, the award carries a cash prize of 15lakh, a bronze statue of Arjuna, and a scroll.
 - **Ronjan Sodhi:**
 - He has been awarded the prestigious **Arjuna Award for Shooting in 2013**.
 - He won two silver medals at the 2010 Commonwealth Games and a gold medal at the 2010 Asian Games in 2011.
 - He is also the recipient of the Rajiv Gandhi Khel Ratna award in 2013.
 - **Rupesh Shah** has been awarded the prestigious Arjuna Award for Billiards & Snooker in 2013.

95. Answer: b

Explanation:

The correct answer is Banabhatta.

★ Key Points

- The Harshacharita is a biography of Harshavardhana, the ruler of Kannauj, composed in Sanskrit by his court poet, Banabhatta .
- Harsha is known mainly through the works of Banabhatta named Harsacharita ("Deeds of Harsha").
- The work depicts the court and times of the Buddhist emperor Harsha of northern India.
- Bana's biography of Harsha provides valuable information about the period, though with some exaggeration in the emperor's favour.
- Written in the ornate kavya style, involving extremely lengthy constructions, elaborate descriptions, and poetic devices, the work has great vitality and a wealth of keenly observed detail.
- Himself a poet, Harsha composed three Sanskrit works: **Nagananda, Ratnavali, and Priyadarsika.**

★ Additional Information

- **Rabindranath Tagore:**
 - A signed hardcover copy of Nobel laureate Rabindranath Tagore's 'The King of the Dark Chamber' – the English translation of his famous Bengali play 'Raja' – has been sold for USD 700 at an auction in the US.
 - The play revolves around a mysterious, unseen, omniscient king, who is both benevolent and efficient. Tagore became the first Indian to win a Nobel Prize (Literature) in 1913.

96. Answer: a

Explanation:

The correct answer is Financial emergency.

★ Key Points

- **Article 360 of the Constitution of India empowers the president to proclaim a financial emergency on the following ground :**
 - If the president is satisfied that a situation has arisen due to which the financial stability or credibility of India is threatened or in danger.

- The **38th Constitutional Amendment Act 1975** made the satisfaction of the president in declaring a financial emergency final and conclusive.
- The satisfaction of the president is held up in any court on any ground. However 44th Constitutional Amendment Act 1978 deleted this provision.
- This means the satisfaction of the president is under Judicial review.
- The President may issue directions for the reduction of salaries and allowances to the judges of the Supreme Court and the High Courts and of all or any class of persons serving the Union.
- Till now, the Financial Emergency has never been invoked in India.

★ Additional Information

- **Article 21:**

- It lays down that, "No person shall be deprived of his life or personal liberty except according to a procedure established by law".
- It assures every person the right to life and personal liberty.

- **Fundamental duties:**

- In the Constitution of India, fundamental duties are mentioned in article 51A.
- There was no list of fundamental duties in the original constitution.
- Fundamental duties were added into the Indian constitution by the 42nd constitutional amendment act 1976.
- the 42nd constitutional amendment added part IV A and Article 51A to the Indian constitution.
- Fundamental duties were added into the Indian constitution on the recommendation of the Swaran Singh Committee.
- Initially, there were only 10 fundamental duties in the constitution.
- The 86th constitutional amendment act 2002 added one more fundamental duty to the constitution.
- Currently, there are 11 fundamental duties in the Indian constitution.
- The idea of fundamental duties was borrowed from the Russian constitution.
- Fundamental duties are non-justiciable in nature.

- **The right to property:**

- It was deleted from the list of Fundamental Rights by the 44th Amendment Act, 1978.

- It is made a legal right under Article 300-A in Part XII of the Constitution. So at present, there are only six Fundamental Rights.
- Article 19 provided to all citizens the right to acquire, hold, and dispose of the property whereas Article 31 provides that "no person shall be deprived of his property save by authority of law."
- Later, in 44th Amendment of 1978 deleted the right to property from the list of fundamental rights.
- Hence, the right to property is no longer a fundamental right, however, it is still a constitutional right.

97. Answer: c

Explanation:

The correct answer is 1995.

★ Key Points

- **WTO (World Trade Organization) was established in 1995.**
- The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations.
- It acts as a forum for negotiating trade agreements, it settles trade disputes between its members and it supports the needs of developing countries.
- The WTO has over 160 members representing 98 per cent of world trade. **Over 20 countries** are seeking to join the WTO.
- **Ngozi Okonjo-Iweala is the seventh Director-General of the WTO** . She took office on 1 March 2021, becoming the first woman and the first African to serve as Director-General.
- **The World Trade Organization (WTO)** is the only global international organization dealing with the rules of trade between nations.
- At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business.

- Over the past 20 years, WTO members have agreed with major updates to the WTO rulebook to improve the flow of global trade. The WTO's membership has expanded to **164 members, representing over 98% of international trade**.
- In 2015, The WTO reached a significant milestone with the receipt of its **500th trade dispute** for settlement.

★ Additional Information

- The **headquarters** of WTO is in Geneva, Switzerland.
- The **Director-General** of WTO is Ngozi Okonjo-Iweala.
- The **main objective** of WTO is - Reduction of tariffs and other barriers to trade.
- The **official languages** of WTO are English, French, Spanish.

98. Answer: a

Explanation:

The correct answer is Sringaverapura.

★ Key Points

- At **Sringaverapura near Allahabad in Uttar Pradesh**, India, there exists an extraordinary example of hydraulic engineering dating back to the end of the 1st century BC.
- It comprises three percolation-cum-storage tanks, fed by an 11 m wide and 5 m deep canal that used to skim the floodwaters off the monsoon-swollen Ganga.
- During the reign of **Chandragupta Maurya**, dams, irrigation systems, and harvesting systems were extensively built throughout his kingdom.

★ Additional Information

- Other important **water harvesting systems**:
 - **Pyne** is at least 5000 years old irrigation system in **Bihar**, the traditional irrigation system well managed by the Magadhi Kingdom.

- Pynes are diversion channels laid from the river for the water in **Ahar** and the channels.
 - Ahars are reservoirs with embankments on three sides.
 - It helps control droughts as it makes water available for a year in reservoirs and floods by distributing surplus water in its system.

99. Answer: b

Explanation:

The correct answer is Fiscal Deficit.

★ Key Points

- The difference between Revenue Receipts plus Non-debt Capital Receipts (NDCR) and total expenditure is called Fiscal Deficit.
- It occurs when the government's expenditure exceeds its income.
- This difference is calculated both in absolute terms and also as a percentage of the Gross Domestic Product (GDP) of the country.
- A recurring high fiscal deficit means that the government has been spending beyond its means.
- Similarly, the government describes the fiscal deficit of India as "the excess of total disbursements from the Consolidated Fund of India, excluding repayment of the debt, over total receipts into the Fund (excluding the debt receipts) during a financial year".
- **Fiscal Deficit = Total expenditure of the government (capital and revenue expenditure) - Total income of the government (Revenue receipts + recovery of loans + other receipts).**
- A high fiscal deficit is not always bad, it can also be good for the economy if the money spent goes into the creation of productive assets like highways, roads, ports, and airports that boost economic growth and result in job creation.
- The government meets the fiscal deficit by borrowing money. In a way, the total borrowing requirements of the government in a financial year are equal to the fiscal deficit in that year.

- If interest payments are included in the **primary deficit**, it is equal to the fiscal deficit.

★ Additional Information

- **Revenue deficit:**
 - It arises when the government's revenue expenditure exceeds the total revenue receipts.
 - This deficit includes those transactions that have a direct impact on a government's current income and expenditure.
 - The deficit represents that the government's own earnings are not sufficient to meet the day-to-day operations of its departments.
- **Effective Revenue Deficit:**
 - $\text{Effective Revenue Deficit} = \text{Revenue Deficit} - \text{Grants in aid for the creation of capital assets.}$

100. Answer: b

Explanation:

The correct answer is Vitamin A.

★ Key Points

- **Night blindness or Nyctalopia is caused due to the deficiency of Vitamin A.**
- Vitamin A is also called Retinol. In this disease, the patient suffers from poor vision at night. Also, it may cause premature death in children below the **age of 5**.
- Food rich in Vitamin A are **Carrots, Spinach, Sweet potatoes, Lettuce, etc** .

★ Additional Information

- **Vitamin C is also known as Ascorbic acid** . Its deficiency leads to the disease "Scurvy".
- **Potassium:**
 - It is the most common electrolyte for the human body.

- **Hypokalaemia** is a disease caused by a lower level of potassium.
- **Potassium** is a very important electrolyte required in the formation of **Adenosine triphosphate(ATP) and Na-K ATPase pump**.
- **Magnesium:**
 - When the citrus tree has a magnesium deficiency, yellow irregularly shaped blotches appear at the base of the leaves growing close to the fruit.
 - These blotches will enlarge and eventually cover all but the tip of the leaf.

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