



Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



CSIR UDC NET



IBPS PO



UP POLICE



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IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

SSC CHSL 2017 (Tier-I) Previous Year Paper (12-Mar-2018) (Shift 3)

Total Time: 1 Hour

Total Marks: 200

Instructions

Sl No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks
1	English Language	25	50	0.5	2
2	General Intelligence	25	50	0.5	2
3	Quantitative Aptitude	25	50	0.5	2
4	General Awareness	25	50	0.5	2

- 1.) A total of 60 minutes is allotted for the examination.
- 2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.
- 3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

English Language

1. Directions: In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word. (+2, -0.5)

- a. stareotype
- b. stereotype
- c. illiterate
- d. Stareotyp

2. The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph. (+2, -0.5)

The fact that one has

A-to be fiercely independent

B-get accustomed to

C-in this country was hard to

- a. ACB
- b. ABC
- c. CBA
- d. CAB

3. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no (+2, -0.5)

improvement is needed, select "no improvement".

New townships (has coming) up with claims of providing several amenities to the people.

- a. is coming
- b. has come
- c. are coming
- d. no improvement

-
4. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement". (+2, -0.5)

I (have been advocate) moderation in daily physical exercise for nearly half a century in all my writings and books.

- a. have being advocating
- b. has been advocating
- c. have been advocating
- d. no improvement

-
5. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence. (+2, -0.5)

A shake or tremble in a person's voice

- a. Permeate
- b. Rapacious

c. Quaver

d. Grove

6. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence. (+2, -0.5)

Criticize in an abusive or angrily insulting manner

a. Obeisance

b. Veneration

c. Approbation

d. Revile

7. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase. (+2, -0.5)

An axe to grind

a. One cannot cut wood with a blunt axe.

b. To have important jobs to do.

c. Have an ulterior motive.

d. A weapon is useful only when it is sharp.

8. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase. (+2, -0.5)

Ease somebody's mind

- a. Alleviate someone's anxiety.
- b. Listen to somebody's grievances.
- c. Have the capacity to understand the other person's thoughts.
- d. Keep thinking about some person.

9. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

So, in asking you to consider the processes of reasoning we are _____ assuming that you never have reasoned-- _____ the contrary we are fully aware that you in connection _____ every other person, have reasoned all your mature life. That is not the question. While everyone reasons, the fact is _____ true that the majority of persons reason incorrectly. Many persons reason _____ lines far from correct and scientific, and suffer therefor and thereby.

Many persons reason _____ lines far from correct

- a. along
- b. long
- c. besides
- d. at

10. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

So, in asking you to consider the processes of reasoning we are _____ assuming that you never have reasoned-- _____ the contrary we are fully aware that you in connection _____ every other person, have reasoned all your mature life. That is not the question. While everyone reasons, the fact is _____ true that the majority of persons reason incorrectly. Many persons reason _____ lines far from correct and scientific, and suffer therefor and thereby.

reasons, the fact is _____ true that the

- a. equal
- b. equally
- c. equality
- d. equalness

11. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

So, in asking you to consider the processes of reasoning we are _____ assuming that you never have reasoned-- _____ the contrary we are fully aware that you in connection _____ every other person, have reasoned all your mature life. That is not the question. While everyone reasons, the fact is _____ true that the majority of persons reason incorrectly. Many persons reason _____ lines far from correct and scientific, and suffer therefor and thereby.

that you in connection _____ every other person,

- a. with
- b. of

c. for

d. from

12. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

So, in asking you to consider the processes of reasoning we are _____ assuming that you never have reasoned-- _____ the contrary we are fully aware that you in connection _____ every other person, have reasoned all your mature life. That is not the question. While everyone reasons, the fact is _____ true that the majority of persons reason incorrectly. Many persons reason _____ lines far from correct and scientific, and suffer therefor and thereby.

have reasoned-- _____ the contrary we

a. in

b. on

c. into

d. onto

13. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

So, in asking you to consider the processes of reasoning we are _____ assuming that you never have reasoned-- _____ the contrary we are fully aware that you in connection _____ every other person, have reasoned all your mature life. That is not the question. While everyone reasons, the fact is _____ true that the majority of

persons reason incorrectly. Many persons reason _____
lines far from correct and scientific, and suffer therefor and thereby.

reasoning we are _____ assuming that you

- a. no
- b. not
- c. none
- d. nor

14. In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word. (+2, -0.5)

- a. Heirarchy
- b. Hierachy
- c. Hierarchy
- d. Hyrarchy

15. A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech. (+2, -0.5)

Meera said, "I prefer singing to dancing."

- a. Meera said that she preferred singing to dancing.
- b. Meera say that she preferred singing to dancing.
- c. Meera said she prefer singing to dancing.

d. Meera said that I prefer singing to dancing.

16. A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice. (+2, -0.5)

He gathers the apples.

- a. The apples gather by him.
 - b. The apples are gathered by him.
 - c. The apples were gathered by him.
 - d. The apples got gathered by him.
-

17. Rearrange the parts of the sentence in correct order. (+2, -0.5)

Stem cells

P: are being researched

Q: forming blood vessels

R: especially for

- a. RQP
 - b. QRP
 - c. PQR
 - d. PRQ
-

18. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word. (+2, -0.5)

Disarming

- a. Detestable
 - b. Charming
 - c. Silk
 - d. Convincing
-

19. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word. (+2, -0.5)

Preposterous

- a. Ridiculous
 - b. Excessive
 - c. Incredible
 - d. Reasonable
-

20. In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word. (+2, -0.5)

Echelon

- a. Era
- b. Year

c. Echo

d. Rank

-
21. In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word. (+2, -0.5)

Niggard

a. Kind

b. Unselfish

c. Miser

d. Generous

-
22. In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option. (+2, -0.5)

Egoism is _____ or negative pride-the mentality of showing and acting superior to others.

a. surfeit

b. conceit

c. forfeit

d. receipt

-
23. In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and (+2, -0.5)

indicate it by selecting the appropriate option.

My grandmother died five years _____.

- a. ago
- b. since
- c. before
- d. from

-
24. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'. (+2, -0.5)

Seeing the increasing number of female foeticide (1)/ the Prime Minister has come with an initiative (2)/ that is guaranteed to give protection to the girl child. (3)/ No error (4)

- a. 1
- b. 2
- c. 3
- d. 4

-
25. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'. (+2, -0.5)

Dinesh has been (1)/ absence from (2)/ school since last month. (3)/ No error (4)

- a. 1

b. 2

c. 3

d. 4

Prepp

Your Personal Exams Guide

General Intelligence

26. In the following question, select the related word pair from the given alternatives. (+2, -0.5)

Clothes : Tailor :: ? : ?

- a. Shoes : Cobbler
- b. Food : Eat
- c. Furniture : Producer
- d. Mason : Wall

-
27. In the following question, select the related number from the given alternatives. (+2, -0.5)

46 : 52 :: ? : ?

- a. 93 : 99
- b. 44 : 52
- c. 54 : 64
- d. 53 : 58

-
28. In the following question, select the related letter/letters from the given alternatives. (+2, -0.5)

RAM : NWI :: LIP : ?

- a. HEL

- b.** LQV
 - c.** HAP
 - d.** PET
-

29. In the following question, select the odd word pair from the given alternatives. (+2, -0.5)

- a.** Cow - Grass
 - b.** Monkey - Banana
 - c.** Rabbit - Carrot
 - d.** Dog - Bark
-

30. In the following question, four number pairs are given. The number on left side of (–) is related to the number of the right side of (–) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (+2, -0.5)

- a.** 11 - 121
 - b.** 13 - 169
 - c.** 19 - 361
 - d.** 17 - 279
-

31. In the following question, select the odd letter/letters from the given alternatives. (+2, -0.5)

- a.** FDB

- b.** LJI
 - c.** SQO
 - d.** ZXV
-

32. From the given alternatives, according to the dictionary, which word will come at the LAST position? (+2, -0.5)

- 1. Choir
- 2. Choice
- 3. Chunk
- 4. Cheer
- 5. Church

- a.** Choir
 - b.** Church
 - c.** Cheer
 - d.** Chunk
-

33. In the following question, select the missing number from the given series. (+2, -0.5)

12, 17, 34, ?, 78, 83, 166

- a.** 36
- b.** 33
- c.** 39

d. 45

34. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series. (+2, -0.5)

W, T, Q, N, ?

a. K

b. J

c. I

d. L

35. In a row of boys, Amit is ranked 12th from the top and Ratan is 15th from the bottom. They interchange their position. Ratan now becomes 37th from the bottom. How many boys are there in the row? (+2, -0.5)

a. 48

b. 49

c. 100

d. 47

36. From the given alternatives, select the word which CANNOT be formed using the letters of the given word. (+2, -0.5)

EXPENDITURE

a. PEN

b. EXPECT

c. TURN

d. END

37. In a certain code language, "LUNGS" is written as "OWQIV". How is "HEART" written in that code language? (+2, -0.5)

a. GDTJV

b. KGDTW

c. JGDTW

d. GHEWT

38. In a certain code language, '÷' represents '+', '-' represents '×', '+' represents '÷' and '×' represents '-'. Find out the answer to the following question. (+2, -0.5)

$$9 \div 16 - 25 + 10 \times 20 = ?$$

a. 50

b. 29

c. 37

d. 43

39. The following equation is incorrect. Which two signs should be interchanged to correct the equation? (+2, -0.5)

$$4 - 10 \div 5 \times 4 + 12 = 16$$

- a. $\div$ and $-$
- b. $+$ and $\div$
- c. $\times$ and $-$
- d. $+$ and $+$

40. If $70!10 = -7$, $70!5 = -14$ and $40!4 = -10$, then find the value of $20!2 = ?$ (+2, -0.5)

- a. 30
- b. -10
- c. 12
- d. -24

41. Which of the following terms follows the trend of the given list? (+2, -0.5)

α BABABAB, AbABABAB, ABaBABAB, ABAbABAB, ABABaBAB, _____.

- a. ABABABaB
- b. ABABAbAB
- c. α BABABAB
- d. AbABABAB

42. A woman starts from her home and walks 2km North, then she turns East and walks 9 km, then she turns South and walks 1 km, then she turns West (+2, -0.5)

and walks 2 km, then she turns to her left and walks 1 km to reach the well.
Where is her home with respect to the well?

- a. 11 km West
- b. 7 km East
- c. 7 km West
- d. 11 km East

43. In the question below, two statements are given followed by two conclusions I and II. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements. (+2, -0.5)

Statement I: No cigars are cigarettes.

Statement II: All tobacco are cigars.

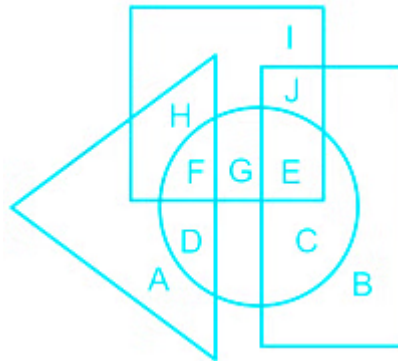
Conclusion I: Some cigarettes are tobacco.

Conclusion II: No tobacco are cigarettes.

- a. Only conclusion I follows
- b. Only conclusion II follows
- c. Both conclusions I and II follow
- d. Neither conclusion I nor conclusion II follows

44. In the following figure, the rectangle represents Therapists, the circle represents floral designers, the triangle represents Poets and the square (+2, -0.5)

represents Football players. Which set of letters represents Therapists who are either floral designers or Football players?



- a. FD
- b. JC
- c. FGE
- d. DC

45. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series. (+2, -0.5)

POT, OMS, NKR, MIQ, ?

- a. LGP
- b. KGO
- c. LHP
- d. KHO

46. In the following question, select the missing number from the given series. (+2, -0.5)

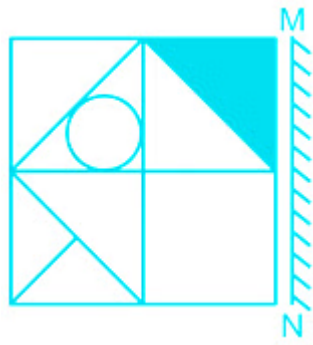
64, 75, 86, 97, ?, 119

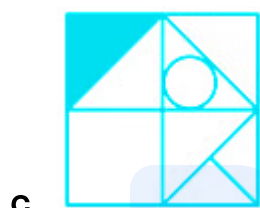
- a. 118
- b. 108
- c. 98
- d. 109

47. In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (+2, -0.5)

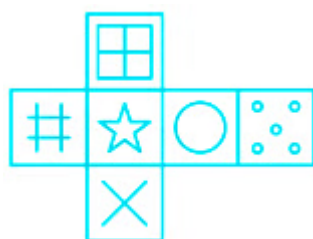
- a. (3, 9, 27)
- b. (6, 18, 56)
- c. (7, 21, 63)
- d. (8, 24, 72)

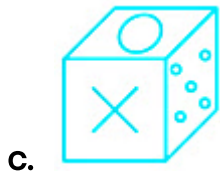
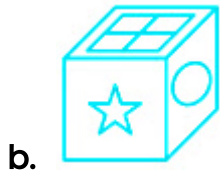
48. If a mirror is placed on the line MN, then which of the answer figure is the right image of the given figure? (+2, -0.5)





49. Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure? (+2, -0.5)





50. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are resented by two classes of alphabets as shown in the given two matrices. The columns and rows of **Matix-I** are numbered from 0 to 4 and that a **Matrix-II** is numbered from 5 to 9. A letter from these matrices can be represented first by its row and row and next by its column, for example, 'E' can be represented by 12, 34 etc., and 'W' can be represented by 56, 97 etc. Similarly, you have to identify the set for the word "SOAK". (+2, -0.5)

Matrix-I						Matrix-II					
	0	1	2	3	4		5	6	7	8	9
0	C	H	E	I	M	5	Z	W	Y	O	Z
1	A	L	E	K	F	6	Q	P	N	P	T
2	B	L	E	M	C	7	Q	O	Z	W	Q
3	G	J	C	K	E	8	S	V	Q	N	O
4	F	C	G	C	I	9	R	Z	W	Z	X

- a. 20,75,20,97
- b. 44, 95, 32, 66
- c. 31, 87, 33, 65
- d. 85, 58, 10, 13

Your Personal Exams Guide

Quantitative Aptitude

51. The addition of a rational number and its reciprocal is $6\frac{1}{30}$. Calculate the number. (+2, -0.5)

a. $\frac{5}{6}, \frac{6}{5}$

b. $\frac{5}{6}, \frac{7}{5}$

c. $\frac{7}{6}, \frac{6}{5}$

d. $\frac{7}{6}, \frac{7}{5}$

52. Find the unit place digit in the expression given below. (+2, -0.5)

$$1! + 2! + 3! + 4! + \dots + 20!$$

a. 5

b. 0

c. 3

d. 9

53. Determine the value of $\frac{a}{b} + \frac{b}{a}$ when $a + b = 8$ and $ab = 4$ (+2, -0.5)

a. 4

b. 8

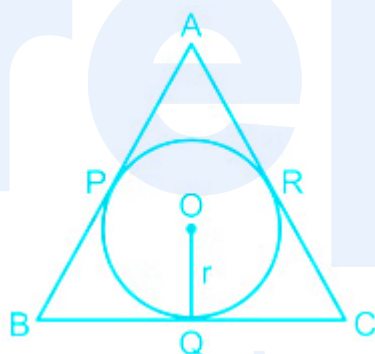
c. 12

d. 14

54. Find the value of $x^3 - y^3$, if $x - y = 4$ and $xy = 12$ (+2, -0.5)

- a. 198
- b. 208
- c. 218
- d. 228

55. A triangle is circumscribed on the circle of centre O in such a way that sides $AB = 12$ cm, $BQ = 7$ cm and $CQ = 5$ cm. Calculate the length (in cm) of side AC. (+2, -0.5)



- a. 8
- b. 10
- c. 12
- d. 14

56. The line parallel to the BC of the triangle ABC divides the other two sides at the point D and E in such a way that $AB = 3AD$. Calculate the ratio of DE and BC. (+2, -0.5)

- a. 1 : 6
- b. 1 : 4
- c. 1 : 3
- d. 3 : 1

57. If A% of A is 196, then what is the value of A? (+2, -0.5)

- a. 170
- b. 160
- c. 120
- d. 140

58. If $\frac{a}{b} = \frac{c}{d} = \frac{e}{f} = \frac{2}{5}$, then what is $(5a + 3c + 2e) : (5b + 3d + 2f)$? (+2, -0.5)

- a. 2 : 5
- b. 3 : 5
- c. 16 : 25
- d. 20 : 33

59. C and D started a business by investing Rs. 4000 and Rs. 5000 respectively. After 3 months, C withdraws Rs. 1000 while D invest Rs. 1000 more after 6 months of the starting of business. At the end of the year C's share is Rs. 3900. What will be the total profit (in Rs.) at the end of year? (+2, -0.5)

- a. 7800

b. 10500

c. 8400

d. 12200

60. The average height of 40 sticks is 154 cm. Some sticks of average height 160 cm are taken out. If the new average height is 150 cm, then how many sticks are remaining? (+2, -0.5)

a. 12

b. 16

c. 24

d. 28

61. Simple interest on a sum for 12 months at the rate of 25% per annum is Rs. 935. What is the value (in Rs.) of sum? (+2, -0.5)

a. 3740

b. 3200

c. 4410

d. 4720

62. The difference between cost price and selling price is Rs. 451. If loss percentage is 11%, then what is the selling price (in Rs)? (+2, -0.5)

a. 3254

b. 3649

c. 3857

d. 4100

63. A shopkeeper marks the price of his table 30% above the cost price. He allows his customers a discount of 12% on the marked price. What is the profit percentage? (+2, -0.5)

a. 14.4

b. 18

c. 16.66

d. 12.5

64. What is the simplified value of $\frac{1}{\sqrt{25}-\sqrt{24}} - \frac{1}{\sqrt{24}-\sqrt{23}} + \frac{1}{\sqrt{23}-\sqrt{22}} - \frac{1}{\sqrt{22}-\sqrt{21}} + \frac{1}{\sqrt{21}-\sqrt{20}}$? (+2, -0.5)

a. $5 + 2\sqrt{5}$

b. $5 - 5\sqrt{2}$

c. $\sqrt{25} + \sqrt{21}$

d. $\sqrt{25} - 4$

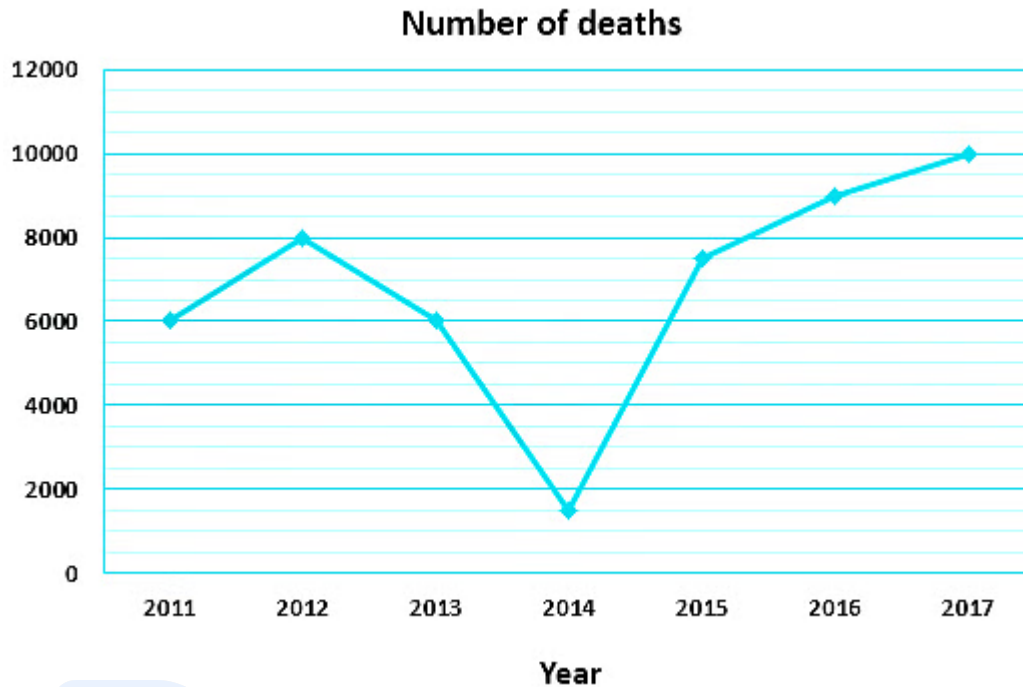
65. X and Y together can do a piece of work in 30 days. Y and Z together can do the work in 20 days. X starts the work and works for 15 days then Y takes that work and works for 27 days. Finally Z finishes the remaining work in 9 days. In how many days Y alone can complete the entire work? (+2, -0.5)

- a. 60
 - b. 45
 - c. 50
 - d. 65
-

66. A 220 metres long train takes 33 seconds to cross a 440 metres long bridge. How much time (in seconds) will the train take to cross a 350 metres long bridge? (+2, -0.5)

- a. 28.5
 - b. 17.5
 - c. 23.5
 - d. 27.5
-

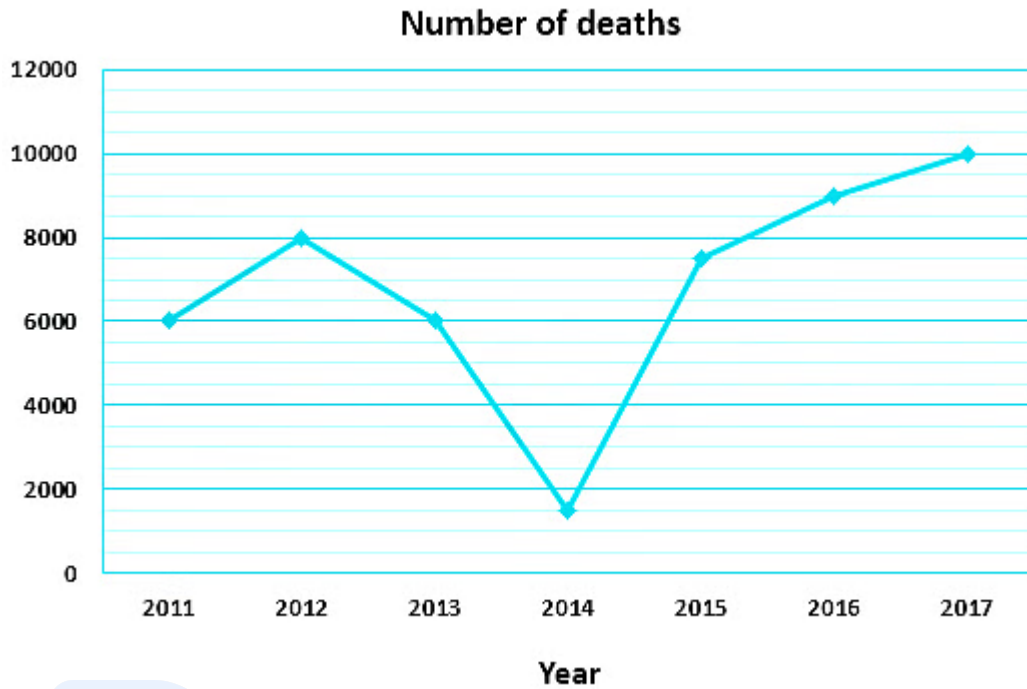
67. **Directions:** The line graph shows the number of deaths due to dengue in a certain state. Study the diagram and answer the following questions. (+2, -0.5)



In which year were the number of deaths lesser than that of the previous year?

- a. 2015
- b. 2016
- c. 2014
- d. 2017

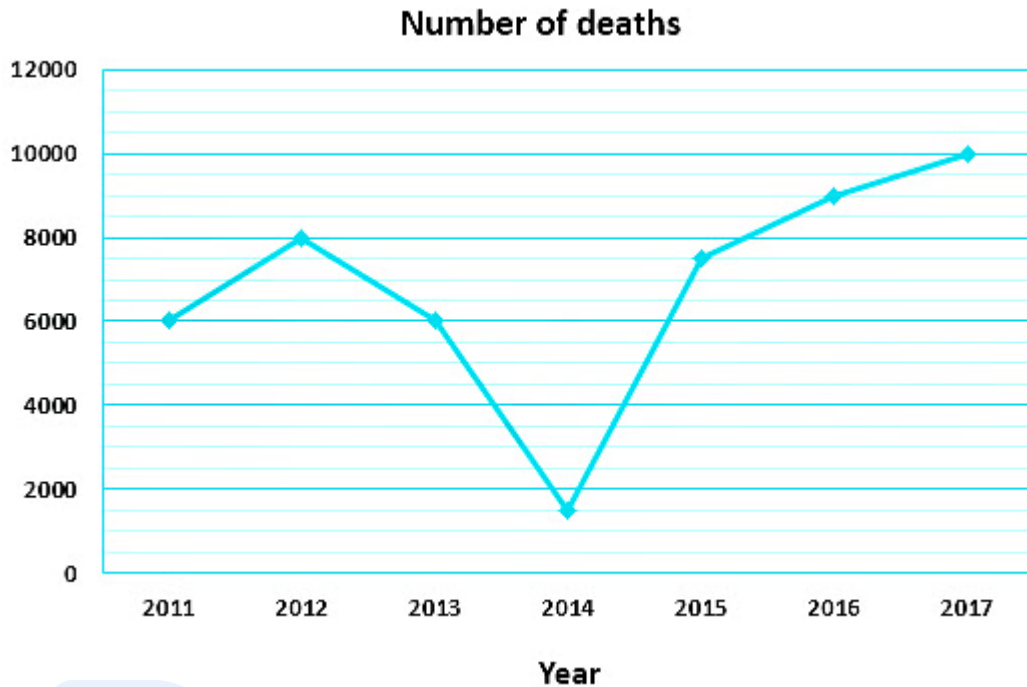
68. **Directions:** The line graph shows the number of deaths due to dengue in a certain state. Study the diagram and answer the following questions. (+2, -0.5)



What was the difference in the number of deaths between the years 2012 and 2014?

- a. 5500
- b. 6000
- c. 5000
- d. 6500

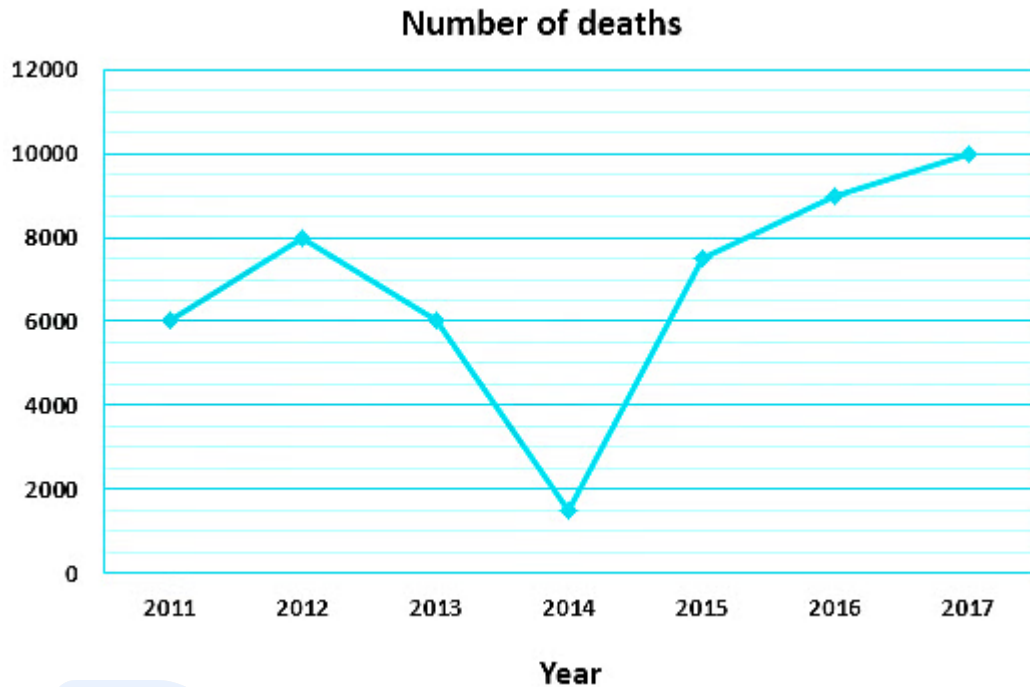
69. **Directions:** The line graph shows the number of deaths due to dengue in a certain state. Study the diagram and answer the following questions. (+2, -0.5)



The number of deaths in 2013 were lesser than that in 2016 by _____%.

- a. 50
- b. 16.66
- c. 33.33
- d. 100

70. **Directions:** The line graph shows the number of deaths due to dengue in a certain state. Study the diagram and answer the following questions. (+2, -0.5)



If on an average Rs 10 lakhs were paid as insurance for each death due to a dengue, then how much insurance was paid (in Rs crore) in the year 2015?

- a. 750
- b. 1250
- c. 1000
- d. 1500

71. The perimeter of a square is 30 cm. Find its area (in cm^2).

(+2, -0.5)

- a. 56.25
- b. 112.5
- c. 60.25
- d. 120.5

72. The area of a circle is 346.5 cm^2 . Find its radius (in cm). (+2, -0.5)

- a. 10.5
- b. 21
- c. 7.5
- d. 15

73. Find the volume (in cm^3) of a hemisphere of diameter 42 cm. (+2, -0.5)

- a. 17832
- b. 153512
- c. 13858
- d. 19404

74. $\triangle ABC$ is right angled at B. If $m\angle A = 60^\circ$, then find the value of $(\sec C + 2)$. (+2, -0.5)

- a. $(2 + 2\sqrt{3})/\sqrt{2}$
- b. $4/3$
- c. $(2 + 2\sqrt{3})/\sqrt{3}$
- d. $4/\sqrt{3}$

75. In $\triangle ABC$ measure of angle B is 90° . If $\cos A = 5/13$, and $AB = 10 \text{ cm}$, then what is the length (in cm) of side BC? (+2, -0.5)

- a. 26
- b. 24
- c. 25
- d. 5

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General Awareness

76. What does cyclical unemployment mean? (+2, -0.5)

- a. Unemployment during recessionary phase of trade cycle
 - b. Disguised unemployment
 - c. Seasonal unemployment
 - d. Voluntary unemployment
-

77. Who represented the first union budget of independent India? (+2, -0.5)

- a. Morarji Desai
 - b. John Mathai
 - c. TT Krishnamachari
 - d. RK Shanmukham Chetty
-

78. Which of the following Harappan sites was not located in Gujarat? (+2, -0.5)

- a. Lothal
 - b. Daimabad
 - c. Surkotda
-

79. In 1852, who published the newspaper 'Satyaprakash' in Gujarati? (+2, -0.5)

- a. Gangadhar Rao

- b. Vishnu Shastri
 - c. Gopal Hari Deshmukh
 - d. Karsandas Mulji
-

80. Which of the following is known as red planet? (+2, -0.5)

- a. Venus
 - b. Saturn
 - c. Mars
 - d. Neptune
-

81. Which of the following countries has the smallest terrestrial border with India? (+2, -0.5)

- a. Pakistan
 - b. Nepal
 - c. Myanmar
 - d. Bhutan
-

82. Where is the Samadhi of Guru Gobind Singh located? (+2, -0.5)

- a. Anandpur sahib
- b. Amritsar
- c. Nanded

d. Ludhiana

83. In August 2017, which bank allowed India to construct Ratle Hydroelectric project which was opposed by Pakistan? (+2, -0.5)

- a. Bank of England
 - b. World bank
 - c. International bank of reconstruction and development (IBRD)
 - d. Asian development bank
-

84. Which of the following IAF Personnel has been posthumously awarded Ashoka Chakra, the country's highest peace time gallantry medal? (+2, -0.5)

- a. Rajinder Kumar
 - b. Jyoti Prakash Nirala
 - c. Harshvardhan Negi
 - d. Anant Thakur
-

85. Official currency of Nepal is called _____. (+2, -0.5)

- a. Nepalese taka
 - b. Loti
 - c. Birr
 - d. Nepalese rupee
-

86. Which of the following causes acid rain?

(+2, -0.5)

I. SO_2

II. NO_2

III. CO_2

a. Only I and II

b. Only II and III

c. Only I and III

d. All I, II and III

87. What is the ratio of masses of hydrogen and oxygen in the water?

(+2, -0.5)

a. 1 : 4

b. 2 : 16

c. 1 : 16

d. 1 : 64

88. The President of India appoints how many chief election commissioner(s)?

(+2, -0.5)

a. One

b. Two

c. Three

d. Four

89. Who is the primary lawyer of Government of India in the Supreme Court? (+2, -0.5)

- a. Comptroller and Auditor General of India
 - b. Advocate General of State
 - c. Attorney General of India
 - d. Chief Election Commissioner of India
-

90. The exit of food from the stomach is regulated by a _____ muscle. (+2, -0.5)

- a. Cardiac
 - b. Sphincter
 - c. Skeletal
 - d. None of the above
-

91. What are the organs similar in basic structure/ shape, modified to perform different functions called? (+2, -0.5)

- a. Analogous organs
 - b. Homologous organs
 - c. Heterogeneous organs
 - d. Homogeneous organs
-

92. Who launched Mata Amritanandamayi Math Project "Jeevamritham" for cleaning drinking water? (+2, -0.5)

- a. Ram Nath Kovind
- b. Narendra Modi
- c. Nitin Gadkari
- d. Uma Bharti

93. What is the name of India's fastest and first multi- petaflops super computer unveiled at Pune- based India Institute of Tropical Meteorology? (+2, -0.5)

- a. Param
- b. Pratyush
- c. Prashant
- d. Paras

94. In August 2017, RBI announced to transfer approximately how much amount for the financial year 2016-17 as a dividend to the government? (+2, -0.5)

- a. Rs. 30,659 crore
- b. Rs. 50,650 crore
- c. Rs. 60,659 crore
- d. Rs. 70,659 crore

95. 'FRDI' Bill, 2017 aims to protect the stability of the financial system. Once enacted, FRDI Bill 2017 will be replacing _____. (+2, -0.5)

- a. Deposit insurance and credit guarantee corporation act, 1961
- b. Deposit guarantee corporation act, 1980
- c. Credit guarantee corporation act, 1990
- d. None of the above

96. A Sonar of a ship sends sounds waves of speed 1600m/s. These waves are reflected back by the ocean floor in 4 seconds. Find the depth (in m) of the ocean floor. (+2, -0.5)

- a. 6400
- b. 3200
- c. 1600
- d. 4800

97. If an object travels in a straight line and its velocity increases or decreases by equal amount in equal intervals of time, then the acceleration of the object is said to be _____. (+2, -0.5)

- a. Linear
- b. Uniform
- c. Translational
- d. Non- uniform

98. Cold air is _____. (+2, -0.5)

- a. Lighter than warm air hence cold air settles down
- b. Heavier than warm air hence cold air rises up
- c. Lighter than warm air hence cold air rises up
- d. Heavier than warm air hence cold air settles down

99. Which of the statements given below are correct? (+2, -0.5)

- a. Alexander Noren won the Golf 2017 BMW PGA Championship.
- b. Canada hosted the Table Tennis 2017 ITTF Women's world cup.
- c. In 2018 IPL auctions, Rajasthan Royals retained Steve Smith.

- a. Only c
- b. B and c
- c. A and b
- d. A, b and c

100. In Microsoft Word, _____ can be used to decide on the spacing between lines of a paragraph. (+2, -0.5)

- a. Alignment
- b. Effects
- c. Indentation

d. Line spacing

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Answers

1. Answer: b

Explanation:

The correct answer is '**stereotype**'

★ Key Points

- The correct spelling of the word is '**Stereotype**'
- The meaning of the word is- View or represent as a stereotype.

2. Answer: a

Explanation:

The correct answer is '**ACB**'

★ Key Points

- *Has get* and *fact that one has in this country* make no grammatical or contextual sense. A has to be first. Rule out 3 and 4. A sentence will be incomplete if it ends with **was hard to**. C can't be last. Option 1. *ACB* is the correct answer.

So the correct sentence is- The fact that one has to be fiercely independent in this country was hard to get accustomed to.

3. Answer: c

Explanation:

The correct answer is '**are coming**'

★ Key Points

- According to grammar, whenever the subject is **singular** then, the verb should be a **singular verb** and when the subject is plural the verb should be plural.
- In the given sentence, 'New' is an adjective, and 'townships' is a noun that is followed by an adjective and it is in a plural form. Hence, use the verb in the plural.
- The use of 'providing several amenities' hints at the fact that the context is in the **present continuous tense**. Hence, 'are coming' should be the correct answer so as to draw parallelism with the latter part of the sentence.

So the correct sentence is—*New townships **are coming** up with claims of providing several amenities to the people.*

4. Answer: c

Explanation:

The correct answer is '**have been advocating**'

★ Key Points

- According to grammar, we use the present perfect continuous tense when something started in the past and is continuing at the present time. The present perfect continuous is formed using the construction has/have been + the present participle (root + -ing).
- '**For nearly half a century**' shows that the completion of the time.
- The action that is 'advocating moderation' is still continuing in the present.
- Let's see an example—
 - I **have been reading** War and Peace for a month now.

So the correct sentence is—*I **have been advocating** moderation in daily physical exercise for nearly half a century in all my writings and books.*

5. Answer: c

Explanation:

The correct answer is '**Quaver**'

★ Key Points

- Let's see the meaning of the given words-
 - **Quaver** → means '*shaking voice*'
 - **Permeate** → spread through.
 - **Rapacious** → aggressively greedy or grasping.
 - **Grove** → group of trees.
- So according to the meaning of the given words, the correct answer is '**Quaver**'

6. Answer: d

Explanation:

The correct answer is '**Revile**'

★ Key Points

- Let's see the meaning of the given words-
 - **Revile** → means '*criticize harshly.*'
 - **Obeisance** → means '*deferential respect*'
 - **Approbation** → means '*approval.*'
 - **Veneration** → means '*regard with great respect.*'
- So according to the meaning of the given words, the correct answer is '**Revile**'

7. Answer: c

Explanation:

The correct answer is '**have an ulterior motive**'

★ Key Points

- The meaning of the given idiom '**An axe to grind**' → means '**they are doing something for selfish reasons.**'
- Let's see an example–
 - He seems like a decent bloke and I've got no axe to grind with him.

★ Additional Information

Ultrior ⇒ existing beyond what is obvious or admitted; intentionally hidden.

8. Answer: a

Explanation:

The correct answer is '**Alleviate someone's anxiety**'

★ Key Points

- The meaning of the given idiom '**Ease somebody's mind**' is '**to make someone feel less worried about something**'
 - Let's see an example–
 - It would **ease my mind** to know you had arrived safely.
-

9. Answer: a

Explanation:

The correct answer is '**along**'

★ Key Points

- '**Along**' is a **preposition** and an adverb that means 'in or into a company with others.'

- So according to the meaning, the correct answer is '**along**'
-

10. Answer: b

Explanation:

The correct answer is '**Equally**'

★ Key Points

- In the given blank, we need an adverb because there is a question of 'how it is true' the reply of 'how? when? where?' is always an adverb.
 - So in the given options, there is only one adverb that is '**equally**' that means '**in an equal manner**'
-

11. Answer: a

Explanation:

The correct answer is '**with**'

★ Key Points

- '**Connection**' is a noun that means 'relationship between two things, people, or groups.'
- '**With**' is a **preposition** that means 'in relation to' hence use this preposition with the noun 'connection'
- Let's see an example-
 - The police say he had no **connection with** the security forces.

So the correct answer is '**Option 1**'

12. Answer: b

Explanation:

The correct answer is 'on'

★ Key Points

- Before the blank, the word 'reasoned' is given that is an adjective, and the preposition 'on' means 'about, concerning, or having as a basis.'
- So, always **use the preposition 'on' with this adjective.**

13. Answer: b

Explanation:

The correct answer is 'not'

★ Key Points

- **In the given sentence**, we are trying to give a negative sense. So, we need to use the negative word here.
- **According to grammar**, 'not' is an adverb and we know that adverb is placed in-between the helping verb and the main verb.

So the correct answer is 'option 2'

14. Answer: c

Explanation:

The correct answer is 'Hierarchy'

★ Key Points

- The correct spelling of the given word is 'Hierarchy'

- The meaning of the given word is- *A ranking system ordered according to status or authority.*

15. Answer: a

Explanation:

The correct answer is '**Meera said that she preferred singing to dancing.**'

★ Key Points

The given sentence is in 'Direct speech' we need to follow the following steps while changing Direct speech.

- # The first person of reported speech is changed according to the pronoun of the reporting verb.
- Let's see an example-
 - She said, "I will go to London." (Direct speech)
 - She said that she would go to London. (Indirect speech)
- # The first-person pronoun of reported speech is not changed if the pronoun of the reporting verb is also the first person.
- Let's see an example-
 - I said, "I had applied for a job." (Direct speech.)
 - I said I had applied for a job. (Indirect speech.)
- # The second person pronoun of the reported speech is changed according to the 'object' of the reporting verb.
- Let's see an example-
 - She said to me, "You are a brilliant student." (Direct Speech)
 - She told me that I was a brilliant student. (Indirect Speech)
 - She said to them, "You are brilliant students" (Direct speech)
 - She told them that they are brilliant students. (Indirect speech)
- # The third person pronoun of the reported speech will not be changed in indirect speech.
- Let's see an example-
 - He said, "She will buy a pen." (Direct speech.)

- He said that she would buy a pen. (Indirect speech.)
- In the given sentence, the verb 'prefer' is in the present simple tense hence, use the past simple in the indirect speech.

So the correct answer is 'option 1'

16. Answer: b

Explanation:

The correct answer is **'The apples are gathered by him.'**

★ Key Points

- In Active Voice, a sentence emphasizes the subject, performing an action.
- In Passive Voice, a sentence emphasizes the action or the object of the sentence.
- In the given sentence, the object is 'the apples', and the subject is 'He'
- Also, the verb of the sentence is in the present tense. So the passive of the sentence is going to be in the present tense.

★ Additional Information

Verbs of passive format have a different set of tenses (*V3 - Past participle or Third form of the Verb) as given below in the table:

TENSE	ACTIVE	PASSIVE	PASSIVE CONVERSION
Present Simple	He plays football	am/is/are + V3	Football is played by him
Present Continuous	He is/am/are playing football	am/is/are + being + V3	Football is being played by him
Present Perfect	He has played football	Has/have + been + V3	Football has been played by him
Present Perfect Continuous	He has been playing football	Not used and unusual.	Not used and unusual
Past Simple	He played football	Was/were + V3	Football was played by him
Past Continuous	He was playing football	Was/were + being + V3	Football was being played by him
Past Perfect	He had played football	Had + been + V3	Football had been played by him
Past Perfect Continuous	He had been playing football	Not used and unusual	Not used and unusual
Future Simple	He will play football	Will + be + V3	Football will be played by him
Future Continuous	He will be playing football	Not used and unusual	Not used and unusual
Future Perfect	He will have played football	Will have been + V3	Football will have been played by him
Future Perfect Continuous	He will have been playing football	Not used and unusual	Not used and unusual

17. Answer: d

Explanation:

The correct answer is 'PRQ'

★ Key Points

- A sentence can't end with **especially for** → R can't be last. Rule out 3). *Especially for are* will make no sense. P can't follow R. Rule out 2). Option 4) *PRQ* is the correct answer.

Stem cells are being researched especially for forming blood vessels.

18. Answer: a

Explanation:

The correct answer is '**Detestable**'

★ Key Points

- Let's see the meanings of the given words-
- Disarming → means 'take a weapon or weapons away from'
 - For e.g- I am humbled further by the family's **disarming** kindness.
- Detestable- deserving intense dislike.
 - For e.g.- Selfishness is a most **detestable** thing

Let's look at the meaning of other options-.

- **Charming** → means 'delightful and attractive'
- **Silk** → means 'thread or fabric made from this fiber.'
- **convincing** → means 'able to convince'

19. Answer: d

Explanation:

The correct answer is '**Reasonable**'

★ Key Points

The meaning of '**Preposterous**' is ridiculous; illogical; unreasonable.
Hence, Option 4) *Reasonable* is an antonym.

- The meaning of the rest of the words is:
 - **Ridiculous** → illogical; unreasonable.
 - **Excessive** → more than it is necessary, normal, or desirable.
 - **Incredible** → Impossible to believe.

So the correct answer is Option 4.

20. Answer: d

Explanation:

The correct answer is '**Rank**'

★ Key Points

- Let's see the meaning of the given words-
 - Echelon → means level or rank.
 - Era → means time; period.
 - Echo → means bouncing back of sound from the mountains etc.
 - Rank → means 'a position within a fixed hierarchy'
- So the correct answer is 'Option 4'

21. Answer: c

Explanation:

The correct answer is '**Miser**'

★ Key Points

- Let's see the meaning of the given words-
 - **Niggard** → a mean or ungenerous person; a miser.
 - **Kind** → means 'a class or type of people'
 - **Unselfish** → means 'not selfish'
 - **Miser** → means 'a person who hoards wealth and spends very little.'
- So according to the meaning of the given words, the correct answer is '**Option 3**'

22. Answer: b

Explanation:

The correct answer is '**Conceit**'.

★ Key Points

- Let's see the meaning of the given words -
 - **Conceit** → the state of being too proud of yourself and your actions
 - **Forfeit** → lose or be deprived of (property or a right or privilege) as a penalty for wrongdoing.
 - **Surfeit** → an overabundant supply; excess
 - **Receipt** → a written acknowledgment of having received
- So according to the meaning of the given words, the correct answer is '**conceit**'

23. Answer: a

Explanation:

The correct answer is '**ago**'

★ Key Points

- According to grammar, 'ago' is an adverb of time and it is used with the past simple tense.
- Let's see an example-
 - He was killed a few days **ago** in a skiing accident.

So the correct sentence is- *My grandmother died five years **ago**.*

24. Answer: b

Explanation:

The correct answer is '2' i.e. error lies in part 2 of the sentence.

★ Key Points

In part 2 of the sentence the usage of 'come with' is incorrect. Instead, use 'come up with'.

- The phrasal verb 'come up with' means 'If you come up with a plan or idea, you think of it and suggest it.'
- Let's see an example-
 - Several of the members have **come up with** suggestions of their own.

So the correct sentence is- *Seeing the increasing number of female foeticide the Prime Minister has **come up with** an initiative that is guaranteed to give protection to the girl child.*

25. Answer: b

Explanation:

The correct answer is '2' i.e. error lies in part 2 of the sentence.

★ Key Points

- In part 2 of the sentence, the usage of '**absence**' is incorrect. Instead, use '**absent**'
- According to grammar, '**absence**' is a noun that means 'the state of being away from a place or person' and **absent** is an adjective that means 'not present'
- Let's see an example-
 - He has been **absent** from his desk for two weeks.

So the correct sentence is- *Dinesh has been **absent** from school since last month.*

26. Answer: a

Explanation:

Just as clothes are repaired by Tailor, similarly shoes are repaired by cobbler.

Hence, 'Shoes: cobbler' is the correct answer.

27. Answer: a

Explanation:

$$46 + 6 = 52$$

Similarly,

$$93 + 6 = 99$$

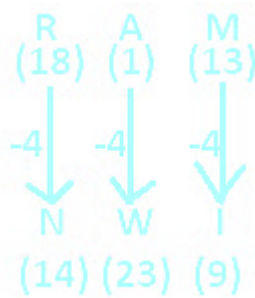
Hence, 93 : 99 is the correct answer.

28. Answer: a

Explanation:

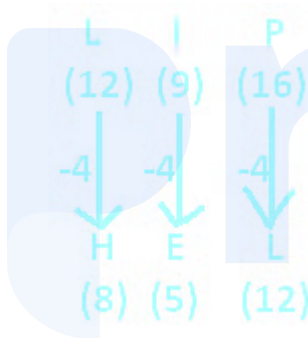
The pattern followed here is:-

RAM is related to NWI as:-



Similarly,

LIP is related to HEL as:-



Hence, the correct answer is "HEL".

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29. Answer: d

Explanation:

The pattern followed here is:-

Animal - Famous for eating

1) Cow - Grass

Cow is famous for eating grass.

2) Monkey - Banana

Monkey is famous for eating banana.

3) Rabbit – Carrot

Rabbit is famous famous for eating carrot.

4) Dog – Bark

Dog is famous for eating meat, vegetables, fruits etc.

As can be clearly seen from the above all except Dog – Bark follows the pattern.
So, Dog – Bark is the odd word pair.

Hence, the correct answer is **"Dog – Bark"**.

30. Answer: d

Explanation:

$$11 \times 11 = 121$$

$$13 \times 13 = 169$$

$$19 \times 19 = 361$$

$$17 \times 17 = 289$$

Hence, 17 – 279 is the correct answer.

31. Answer: b

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 used here,

→ 2 has been subtracted from each term to get the next term.

Let's check each option as per the logic,

1) FDB

→ $F - 2 = D$, $D - 2 = B$

2) LJI

→ $L - 2 = J$, $J - 2 = H$ → (Doesn't satisfy the logic).

3) SQO

→ $S - 2 = Q$, $Q - 2 = O$

4) ZXV

→ $Z - 2 = X$, $X - 2 = V$

Clearly, LJI does not follow the same pattern.

Hence, the correct answer is "LJI".

32. Answer: b

Explanation:

The dictionary arrangement would be:

1. Che er

2. Choic e

3. Choir

4. Chun k

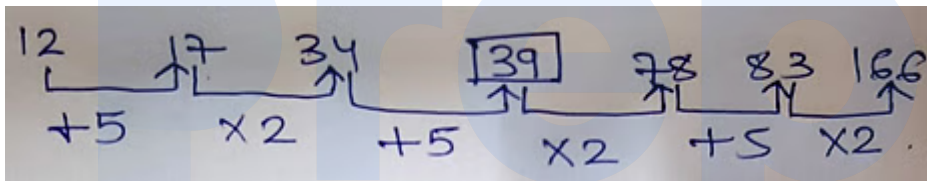
5. Chur ch

Hence, the correct answer is " Church " .

33. Answer: c

Explanation:

The logic followed here,



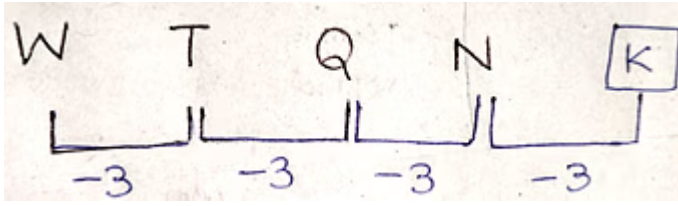
Hence, the correct answer is " 39 " .

34. 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,

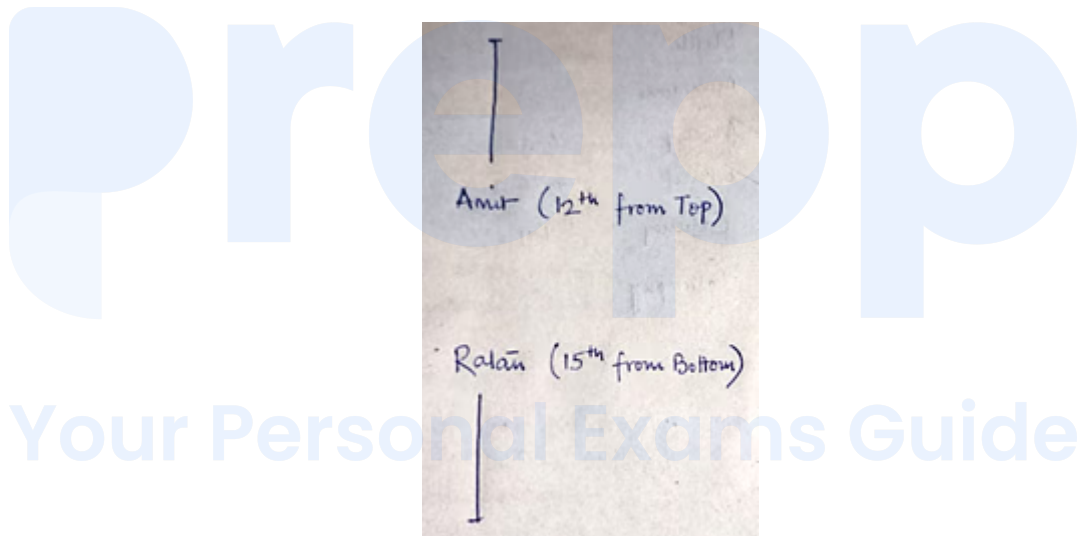


Hence, the correct answer is "K".

35. Answer: a

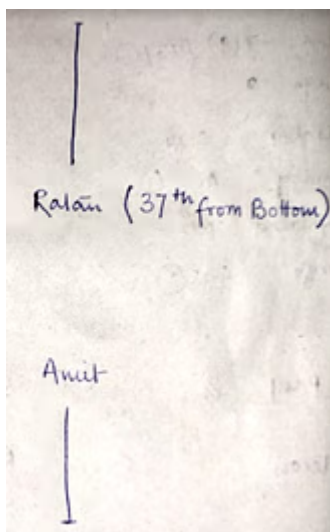
Explanation:

1) In a row of boys, Amit is ranked 12th from the top and Ratan is 15th from the bottom.



(It implies that there are 11 people above Amit and 14 people below Ratan in rank).

2) They interchange their position. Ratan now becomes 37th from the bottom.



(It implies that there are 36 people below Ratan and 11 above him (as he is on the same position where Amit was), which means there are 48 people ($36 + 11 + 1$) in total).

Hence, the correct answer is "48".

36. Answer: b

Explanation:

Given word → EXPENDITURE

1) PEN → EX **PEN** DITURE → Can be formed (all the letters are present so, the word PEN can be formed)

2) EXPECT → **EXPE** NDI TURE → Cannot be formed (Letter 'C' is not present in the given word 'EXPENDITURE')

3) TURN → EXPE **NDI TUR** E → Can be formed (all the letters are present so, the word TURN can be formed)

4) END → EXP **END** ITURE → Can be formed (all the letters are present so, the word END can be formed)

Hence, the correct answer is "EXPECT".

37. Answer: b

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 pattern followed here,

L	U	N	G	S
+3 ↓	+2 ↓	+3 ↓	+2 ↓	+3 ↓
O	W	Q	I	V

Similarly,

H	E	A	R	T
+3 ↓	+2 ↓	+3 ↓	+2 ↓	+3 ↓
K	G	D	T	W

Hence, the correct answer is " KGDTW " .

38. Answer: b

Explanation:

$$\text{Given} \rightarrow 9 \div 16 - 25 + 10 \times 20$$

Symbols	-	+	÷	×
Code	×	÷	+	-

After changing the symbol with their code.

New equation $\rightarrow 9 + 16 \times 25 \div 10 - 20$

Now, after applying BODMAS Rule and solving the new equation, we get:-

$$9 + 16 \times \underline{25 \div 10} - 20$$

$$9 + \underline{16 \times 2.5} - 20$$

$$\underline{9 + 40} - 20$$

$$49 - 20 = 29$$

Hence, the correct answer is "29".

39. Answer: c

Explanation:

Given equation $\rightarrow 4 - 10 \div 5 \times 4 + 12 = 16$

Checking options one by one by interchanging signs

1) $\div$ and $-$

After interchanging, new equation $\rightarrow 4 \div 10 - 5 \times 4 + 12 = 16$

By solving the equation using BODMAS Rule, we get:-

$$\underline{4 \div 10} - 5 \times 4 + 12 = 16$$

$$0.4 - \underline{5 \times 4} + 12 = 16$$

$$\underline{0.4} - 20 + \underline{12} = 16$$

$$12.4 - 20 = 16$$

$$-7.6 \neq 16$$

Left hand side is not equal to right hand side

2) + and ÷

After interchanging, new equation $\rightarrow 4 - 10 + 5 \times 4 \div 12 = 16$

By solving the equation using BODMAS Rule, we get:-

$$4 - 10 + 5 \times \underline{4 \div 12} = 16$$

$$4 - 10 + \underline{5 \times 0.333} = 16$$

$$\underline{4} - 10 + \underline{1.665} = 16$$

$$5.665 - 10 = 16$$

$$-4.335 \neq 16$$

Left hand side is not equal to right hand side

3) × and -

After interchanging, new equation $\rightarrow 4 \times 10 \div 5 - 4 + 12 = 16$

By solving the equation using BODMAS Rule, we get:-

$$4 \times \underline{10 \div 5} - 4 + 12 = 16$$

$$\underline{4 \times 2} - 4 + 12 = 16$$

$$\underline{8} - 4 + \underline{12} = 16$$

$$20 - 4 = 16$$

$$16 = 16$$

Left hand side is equal to right hand side

4) - and +

After interchanging, new equation $\rightarrow 4 + 10 \div 5 \times 4 - 12 = 16$

By solving the equation using BODMAS Rule, we get:-

$$4 + \underline{10 \div 5} \times 4 - 12 = 16$$

$$4 + \underline{2 \times 4} - 12 = 16$$

$$\underline{4 + 8} - 12 = 16$$

$$12 - 12 = 16$$

$$0 \neq 16$$

Left hand side is not equal to right hand side

Hence, the correct answer is " **$\times$ and $-$** ".

40. Answer: b

Explanation:

$$1) 70!10 = (70 \div 10 \times (-1)) = -7$$

$$2) 70!5 = (70 \div 5 \times (-1)) = -14$$

$$3) 40!4 = (40 \div 4 \times (-1)) = -10$$

Similarly,

$$20!2 = (20 \div 2 \times (-1)) = -10$$

Hence, the correct answer is " **-10** ".

41. Answer: b

Explanation:

The pattern followed here is:-

In the first term first letter is lowercase and in the second term second letter is lowercase and so on.

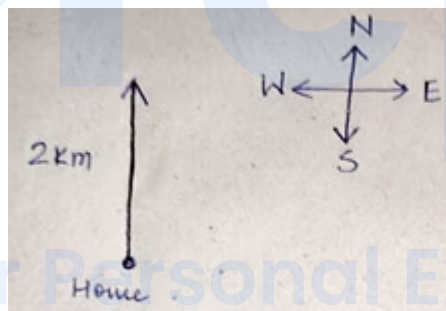
aBABABAB → AbABABAB → ABaBABAB → ABABbABAB → ABABaBAB

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

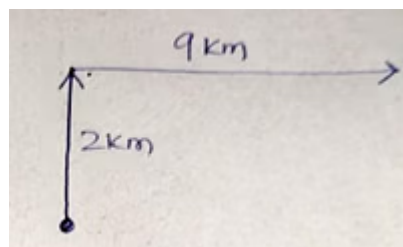
42. Answer: c

Explanation:

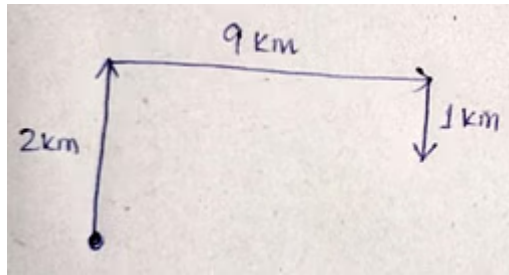
- 1) A woman starts from her home and walks 2 km North.



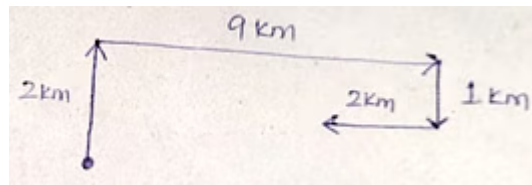
- 2) Then she turns East and walks 9 km.



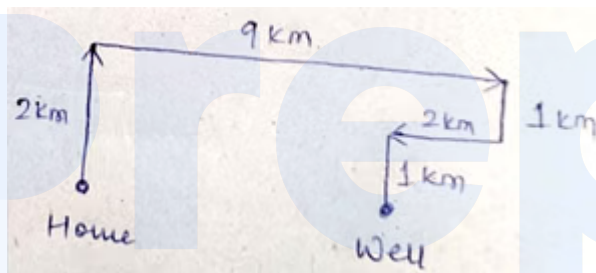
- 3) Then she turns south and walks 1 km.



4) Then she turns West and walks 2 km.



5) Then she turns to her left and walks 1 km to reach the well.



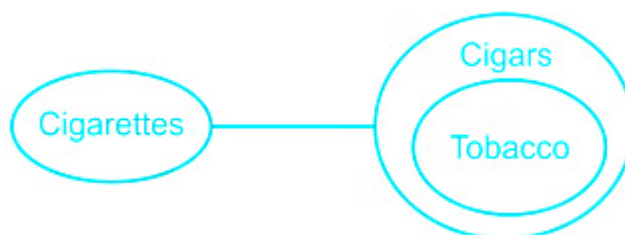
Here, we can see that Home is 7 km west from the well.

Hence, the correct answer is "7 km West".

43. Answer: b

Explanation:

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



I. Some cigarettes are tobacco → Doesn't follow (No direct relationship establish between Cigarettes and Tobacco)

II. No tobacco are cigarettes → **Follows**(No direct relationship establish between Cigarettes and Tobacco)

Hence, the correct answer is "**only conclusion II follows**".

44. Answer: b

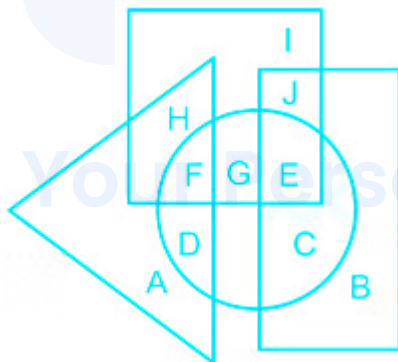
Explanation:

Rectangle = Therapists.

Circle = floral designers

Triangle = Poets

Square = Football players



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

45. Answer: a

Explanation:

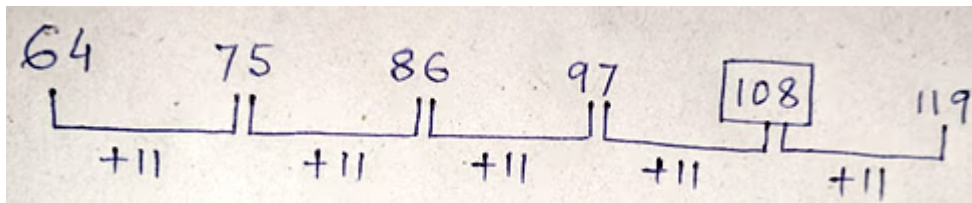
The pattern followed here is:-

Hence, the correct answer is "LPG".

46. Answer: b

Explanation:

The pattern followed here,



Hence, the correct answer is "108".

47. Answer: b

Explanation:

The logic used here,

→ Second Number = (First Number $\times$ 3)

→ Third Number = (Second Number $\times$ 3)

Let's check each option as per the logic,

1) (3, 9, 27)

→ $(3 \times 3 = 9, 9 \times 3 = 27)$

2) (6, 18, 56)

→ $(6 \times 3 = 18, 18 \times 3 \neq 56)$ → Doesn't satisfy the logic.

3) (7, 21, 63)

→ $(7 \times 3 = 21, 21 \times 3 = 63)$

4) **(8, 24, 72)**

→ $(8 \times 3 = 24, 24 \times 3 = 72)$

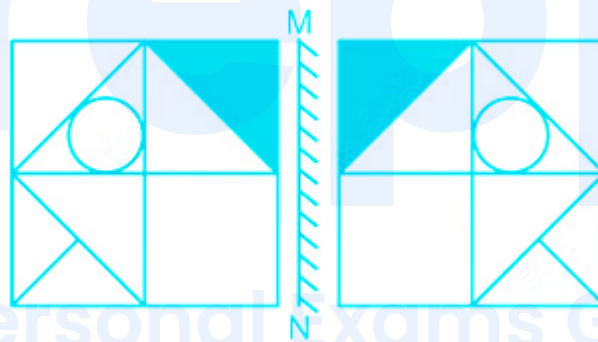
Here, we can see that Option 2 doesn't satisfy the logic.

Hence, the correct answer is "(6, 18, 56)".

48. Answer: c

Explanation:

The correct mirror image of the given figure when the mirror is held on the right side is as shown below:-



Hence, the correct answer is "Option 3".

★ Additional Information

In the Mirror image left side and right side changed vice-versa where the top and bottom remain the same.

The reflection of an object into the water is its water image. It appears by inverting an object vertically i.e. upside down.

The water image of the figure looks like the mirror image of the figure in case the mirror is horizontally at the bottom of the figure.

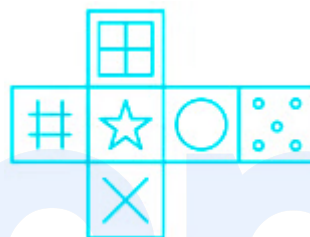
The water image is just a reflection where the top and bottom parts of the images changed while the left and right sides of the image remain the same.

49. Answer: d

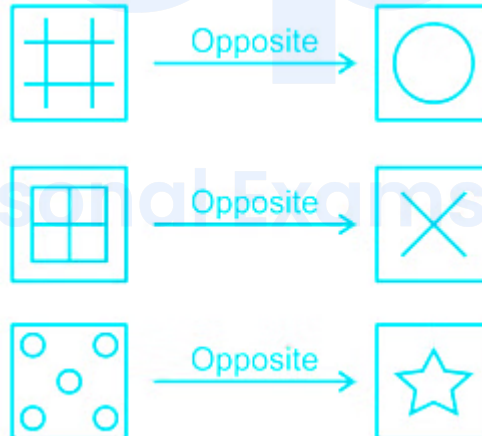
Explanation:

Given →

Unfolded cube



The opposite sides of the cube when the unfolded cube will be folded are:-



Checking option one by one:-

- 1) Cube in option figure (1) one can be formed as no two opposite faces of the cube are present adjacent to each other.
- 2) Cube in option figure (2) one can be formed as no two opposite faces of the cube are present adjacent to each other.

3) Cube in option figure (3) one can be formed as no two opposite faces of the cube are present adjacent to each other.

4) Cube in option figure (4) Cannot be formed as two opposite faces of the cube i.e.



and



must be opposite, but they are adjacent to each other.

Hence, the correct answer is "Option 4".

50. Answer: d

Explanation:

The pattern followed here is:-

A letter is represented first by its row number of the matrix then by its column number of the matrix.

1) In 20,75,20,97

20 → B; 75 → Q; 20 → B; 97 → W (So, the word formed is 'BQBW')

2) In 44, 95, 32, 66

44 → I; 95 → R; 32 → C; 66 → P (So, the word formed is 'IRCP')

3) In 31, 87, 33, 65

31 → J ; 87 → Q ; 33 → K ; 65 → Q (So, the word formed is 'JQKQ ')

4) In 85, 58, 10, 13

85 $\rightarrow$ S ; 58 $\rightarrow$ O ; 10 $\rightarrow$ A ; 13 $\rightarrow$ K (So, the word formed is 'SOAK')

Hence, the correct answer is **"85, 58, 10, 13"**.

51. Answer: a

Explanation:

Given:

Let the rational number be x

$$x + (1/x) = 61/30$$

Calculation:

$$\Rightarrow x + (1/x) = 61/30$$

$$\Rightarrow 30x^2 - 61x + 30 = 0$$

$$\Rightarrow 30x^2 - 25x - 36x + 30 = 0$$

$$\Rightarrow 5x(6x - 5) - 6(6x - 5) = 0$$

$$\Rightarrow (6x - 5)(5x - 6) = 0$$

$$\Rightarrow x = 5/6, 6/5$$

$\therefore$ The correct answer is **5/6, 6/5**.

52. Answer: c

Explanation:

Given:

We have to find the unit digit of $1! + 2! + 3! + 4! + \dots + 20!$

Concept used:

$5! = 1 \times 2 \times 3 \times 4 \times 5$ will have 0 as its unit digit because of the presence of (2×5) . Hence all factorials above it will have 0 as their unit digit.

Calculations:

$$\Rightarrow 1! + 2! + 3! + 4! = 1 + 2 + 6 + 24 = 33$$

$$\Rightarrow \text{Unit digit of } (1! + 2! + 3! + 4! + \dots + 20!) = \text{Unit digit of } (1! + 2! + 3! + 4!) = 3$$

$\therefore$ The correct answer is 3.

53. Answer: d

Explanation:

Given:

$$a + b = 8; ab = 4$$

Calculation:

$$\Rightarrow \frac{a}{b} + \frac{b}{a}$$

$$\Rightarrow \frac{a^2 + b^2}{ab}$$

$$\Rightarrow \frac{(a+b)^2 - 2ab}{ab}$$

$$\Rightarrow \{(8)^2 - 2 \times 4\} / 4$$

$$\Rightarrow \{64 - 8\} / 4$$

$$\Rightarrow 56 / 4 = 14$$

$\therefore$ The correct answer is 14.

54. Answer: b

Explanation:

Given:

$$\Rightarrow x - y = 4; xy = 12$$

Formula used :

$$\Rightarrow x^3 - y^3 = (x - y)(x^2 + xy + y^2)$$

$$\Rightarrow (x + y)^2 = (x - y)^2 + 4xy$$

Calculation:

According to the question:

$$\Rightarrow x - y = 4 \quad \text{-----(1)}$$

$$\Rightarrow (x + y)^2 = (x - y)^2 + 4xy$$

$$\Rightarrow (x + y)^2 = 4^2 + 4 \times 12$$

$$= (x + y)^2 = 16 + 48 = 64$$

$$\Rightarrow x + y = 8 \quad \text{-----(2)}$$

Adding 1 and 2 equation we get,

$$\Rightarrow 2x = 12$$

$$\Rightarrow x = 6$$

By (2) we get,

$$\Rightarrow y = 8 - x = 8 - 6 = 2$$

$$\Rightarrow x^3 - y^3 = (x - y)(x^2 + xy + y^2) = 4 \times \{(6)^2 + (12) + (2)^2\} = 4 \times 52 = 208$$

$\therefore$ The correct answer is 208.

★ Alternate Method

Calculation:

Put, $x = 6$ and $y = 2$,

$$x^3 - y^3 = 6^3 - 2^3$$

$$\Rightarrow 216 - 8 = 208$$

$\therefore$ The value is 8.

55. Answer: b

Explanation:

Given:

$AB = 12$ cm, $BQ = 7$ cm and $CQ = 5$ cm

Concept used:

The length of two tangents drawn from an external point to a circle are equal

Calculation:

Length of two tangents drawn from an external point to a circle are equal.

$$\Rightarrow AP = AR$$

$$\Rightarrow BP = BQ = 7 \text{ cm}$$

$$\Rightarrow CQ = CR = 5 \text{ cm}$$

Now,

$$\Rightarrow AB = AP + BP$$

$$\Rightarrow 12 = AP + 7$$

$$\Rightarrow AP = 5 \text{ cm}$$

$$\Rightarrow AR = 5 \text{ cm}$$

Now,

$$\Rightarrow AC = AR + CR = 5 + 5 = 10 \text{ cm}$$

$\therefore$ The correct answer is 10 cm.

56. Answer: c

Explanation:

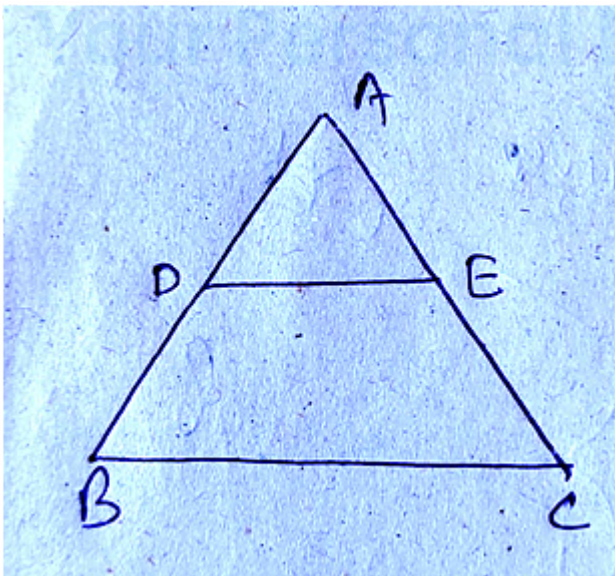
Given:

$$AB \parallel DE$$

$$\Rightarrow AB = 3AD$$

$$\Rightarrow AB : AD = 3 : 1$$

Calculation:



In $\triangle ABC$ and $\triangle ADE$,

$$\angle ABC = \angle ADE \text{ (AB || DE; Corresponding angle)}$$

$$\angle ACB = \angle AED \text{ (AB || DE; C orresponding angle)}$$

$$\triangle ABC \sim \triangle ADE \text{ (By AA)}$$

So, Ratio of corresponding sides are equal

$$\Rightarrow DE/BC = AD/AB$$

$$\Rightarrow DE/BC = AD/3AD$$

$$\Rightarrow DE/BC = 1/3$$

$\therefore$ The correct answer is $DE : BC = 1 : 3$.

57. Answer: d

Explanation:

Calculation:

$$\Rightarrow A\% \text{ of } A = 196$$

$$\Rightarrow A^2/100 = 196$$

$$\Rightarrow A^2 = 19600$$

$$\Rightarrow A = 140$$

$\therefore$ The correct answer is 140.

58. Answer: a

Explanation:

Given:

$$a/b = c/d = e/f = 2/5$$

Calculation:

According to the question:

$$a/b = c/d = e/f = 2/5$$

$$\Rightarrow a = (2/5)b$$

$$\Rightarrow c = (2/5)d$$

$$\Rightarrow e = (2/5)f$$

Now,

$$\begin{aligned} &\therefore (5a + 3c + 2e) : (5b + 3d + 2f) \\ &= \{5(2b/5) + 3(2d/5) + 2(2f/5)\} : (5b + 3d + 2f) \\ &= 2(5b + 3d + 2f) : 5(5b + 3d + 2f) \\ &= 2 : 5 \end{aligned}$$

$\therefore$ The correct answer is 2 : 5.

★ Alternate Method

Calculation:

$$\text{Put } a = c = e = 2, b = d = f = 5$$

Now,

$$\begin{aligned} &(5a + 3c + 2e) : (5b + 3d + 2f) \\ &\Rightarrow (5 \times 2 + 3 \times 2 + 2 \times 2) : (5 \times 5 + 3 \times 5 + 2 \times 5) \\ &\Rightarrow 2 \times 10 / 5 \times 5 \\ &\Rightarrow 2/5 = 2 : 5 \end{aligned}$$

$\therefore$ The correct answer is 2 : 5 .

59. Answer: b

Explanation:

Calculation:

Total investment value of C = $(4000 \times 3) + (3000 \times 9) = 12000 + 27000 = \text{Rs. } 39000$

Total investment value of D = $(5000 \times 6) + (6000 \times 6) = 30000 + 36000 = \text{Rs. } 66000$

Investment ratio = $39000 : 66000 = 13 : 22$

As, profit ratio is same as investment ratio,

$\Rightarrow \{13 / (13 + 22)\} \times \text{total profit} = \text{Share of C in profit}$

$\Rightarrow (13/35) \times \text{total profit} = 3900$

$\Rightarrow \text{Total profit} = \text{Rs. } 10500$

$\therefore$ The correct answer is Rs. 10500 .

60. Answer: c

Explanation:

Given:

The average height of 40 sticks is 154 cm

Calculation:

Average of 40 sticks = $(\text{Sum of Length of 40 sticks}) / 40$

$\Rightarrow 154 = (\text{sum of length 40 sticks}) / 40$

$\Rightarrow \text{Sum of length 40 sticks} = 6160$

Let x sticks are taken out

Average of x sticks = (sum of length of x stick) / x

$$\Rightarrow 160 = (\text{sum of length of } x \text{ sticks}) / x$$

$$\Rightarrow \text{Sum of length of } x \text{ sticks} = 160x$$

Now, Remaining sticks = $40 - x$

Average of $(40 - x)$ sticks = {sum of length of $(40 - x)$ stick} / $(40 - x)$

$$\Rightarrow 150 = \{\text{sum of length of } (40 - x) \text{ sticks}\} / (40 - x)$$

$$\Rightarrow \text{Sum of length of } (40 - x) \text{ sticks} = 150(40 - x) = 6000 - 150x$$

According to question,

$$\Rightarrow 160x + 6000 - 150x = 6160$$

$$\Rightarrow 10x = 160$$

$$\Rightarrow x = 16$$

$$\text{Remaining sticks} = 40 - x = 40 - 16 = 24$$

$\therefore$ The correct answer is 24.

★ Alternate Method

Calculation:

$$\text{Combined average} = (n_1x_1 + n_2x_2) / (n_1 + n_2)$$

$$\Rightarrow 154 = [160n + 150(40 - n)] / 40$$

$$\Rightarrow 6160 = 160n - 150n + 6000$$

$$\Rightarrow 10n = 160$$

$$\Rightarrow n = 16$$

$$\text{Remaining sticks} = 40 - n = 40 - 16 = 24$$

∴ The correct answer is 24.

61. Answer: a

Explanation:

Given:

$$\text{S.I} = \text{Rs. } 935$$

Calculation:

As, 12 months = 1 year

Let principle be Rs. P

$$(\text{Principle} \times \text{rate} \times \text{time})/100 = \text{Simple interest}$$

$$\Rightarrow (P \times 25 \times 1)/100 = 935$$

$$\Rightarrow P/4 = 935$$

$$\Rightarrow P = \text{Rs. } 3740$$

∴ The correct answer is Rs. 3740 .

62. Answer: b

Explanation:

GIVEN:

$$\text{CP} - \text{SP} = \text{Rs. } 451$$

$$\text{Loss\%} = 11\%$$

FORMULA USED:

$$\text{Loss percentage} = \{(\text{Cost price} - \text{selling price})/\text{cost price}\} \times 100$$

CALCULATION:

$$\text{Loss percentage} = \{(\text{Cost price} - \text{selling price})/\text{cost price}\} \times 100$$

$$\Rightarrow 11 = (451/\text{cost price}) \times 100$$

$$\Rightarrow \text{Cost price} = 4100$$

$$\text{Selling price} = \text{cost price} - 451 = 4100 - 451 = \text{Rs. } 3649$$

$\therefore$ The correct answer is Rs. 3649 .

★ Alternate Method**Calculation:**

The difference between C.P and S.P is called loss.

$$\text{Let C.P be } 100\% \text{ then S.P} = 100 - 11 = 89\%$$

$$11\% = 451$$

$$\Rightarrow 1\% = 41$$

$$\text{S.P} = 89\% = 41 \times 89 = 3649$$

$\therefore$ The correct answer is Rs. 3649.

63. Answer: a**Explanation:****Calculation:**

Let the cost price be Rs. 100

So, Marked price = $100 + 30\% \text{ of } 100 = \text{Rs. } 130$

Discount = $12\% \text{ of marked price} = 12\% \text{ of } 130 = \text{Rs. } 15.6$

Thus, Selling price = $130 - 15.6 = \text{Rs. } 114.4$

Profit % = $\{(\text{selling price} - \text{cost price})/\text{cost price}\} \times 100 = \{(114.4 - 100)/100\} \times 100 = 14.4\%$

$\therefore$ The correct answer is 14.4%.

★ Shortcut Trick

Calculation:

Marked up(+ 30%)	10	13
Discount(- 12%)	25	22
Overall	250	286

Profit percent = $\{(286 - 250)/250\} \times 100$

$\Rightarrow \{36/250\} \times 100$

$\Rightarrow 14.4\%$

$\therefore$ The correct answer is 14.4% .

64. Answer: a

Explanation:

Calculation:

$$\frac{1}{\sqrt{25}-\sqrt{24}} - \frac{1}{\sqrt{24}-\sqrt{23}} + \frac{1}{\sqrt{23}-\sqrt{22}} - \frac{1}{\sqrt{22}-\sqrt{21}} + \frac{1}{\sqrt{21}-\sqrt{20}},$$

$$\Rightarrow \frac{25-24}{\sqrt{25}-\sqrt{24}} - \frac{24-23}{\sqrt{24}-\sqrt{23}} + \frac{23-22}{\sqrt{23}-\sqrt{22}} - \frac{22-21}{\sqrt{22}-\sqrt{21}} + \frac{21-20}{\sqrt{21}-\sqrt{20}},$$

$$\frac{(\sqrt{25}-\sqrt{24})(\sqrt{25}+\sqrt{24})}{\sqrt{25}-\sqrt{24}} - \frac{(\sqrt{24}-\sqrt{23})(\sqrt{24}+\sqrt{23})}{\sqrt{24}-\sqrt{23}} + \frac{(\sqrt{23}-\sqrt{22})(\sqrt{23}+\sqrt{22})}{\sqrt{23}-\sqrt{22}} - \frac{(\sqrt{22}-\sqrt{21})(\sqrt{22}+\sqrt{21})}{\sqrt{22}-\sqrt{21}} + \frac{(\sqrt{21}-\sqrt{20})(\sqrt{21}+\sqrt{20})}{\sqrt{21}-\sqrt{20}}$$

$$\Rightarrow (\sqrt{25} + \sqrt{24}) - (\sqrt{24} + \sqrt{23}) + (\sqrt{23} + \sqrt{22}) - (\sqrt{22} + \sqrt{21}) + (\sqrt{21} + \sqrt{20}),$$

$$\Rightarrow \sqrt{25} + \sqrt{20},$$

$$\Rightarrow 5 + 2\sqrt{5}$$

65. Answer: a

Explanation:

Given:

X and Y together can do a piece of work in 30 days.

Y and Z together can do the work in 20 days

Calculation:

As X works for 15 days and Y works for 27 days.

So, X and Y work together for 15 days

Work done by X and Y in 15 days = $15 \times (1/30) = 1/2$

Now, Y work for $27 - 15 = 12$ days more and Z works for 9 days.

So, Y and Z together work for 9 days

Work done by Y and Z together in 9 days = $9 \times (1/20) = 9/20$

Remaining work = $1 - (1/2) - (9/20) = 1/20$

Now, Y alone works for = $12 - 9 = 3$ days

Work rate of Y = $(1/20) \times (1/3) = 1/60$

$\therefore$ Y alone can finish the work in 60 days

★ Alternate Method

Calculation:

Let the total work be 60 units.

Efficiency of $(x + y) = 60/30 = 2$

Efficiency of $(y + z) = 60/20 = 3$

Let the efficiency of $x = k, y = 2 - k, z = 1 + k$

Total work = 60

$$\Rightarrow 15 \times 2 + 3(2 - k) + 9 \times 3 = 60$$

$$\Rightarrow 30 + 6 - 3k + 27 = 60$$

$$\Rightarrow 3k = 3$$

$$\Rightarrow k = 1$$

Efficiency of $y = 2 - 1 = 1$

Time required = $60/1 = 60$

$\therefore$ The required time is 60.

66. Answer: a

Explanation:

Given:

Length of train (L) = 220 m

Calculation:

Total distance = length of train + length of bridge = $220 + 440 = 660$ m

Time = 33 second

So, Speed of train = Distance/time = $660/33 = 20$ m/sec

Total distance to be covered = length of train + length of bridge = $220 + 350 = 570$ m

Time taken to cross it = distance/speed = $570/20 = 28.5$ sec

∴ The correct answer is 28.5 sec .

★ Alternate Method

Concept used:

When speed is constant.

$$D_1/T_1 = D_2/T_2$$

Calculation:

$$D_1/T_1 = D_2/T_2$$

$$\Rightarrow 660/33 = 570/t$$

$$\Rightarrow t = 570/20$$

$$\Rightarrow t = 28.5s$$

∴ The required time is 28.5s .

67. **Answer: c**

Explanation:

Calculation:

According to the graph in year 2013 and 2014 the number of deaths was less than that of the previous year

∴ The correct option is 3.

68. Answer: d

Explanation:

Calculation:

Number of deaths in 2012 = 8000

Number of deaths in 2014 = 1500

Required difference = $8000 - 1500 = 6500$

∴ The correct answer is 6500.

69. Answer: c

Explanation:

Calculation:

Number of deaths in 2013 = 6000

Number of deaths in 2016 = 9000

Required % = $\{(9000 - 6000)/9000\} \times 100 = 33.33\%$

∴ The correct answer is 33.33% .

70. Answer: a

Explanation:

Calculation:

Number of deaths in year 2015 = 7500

Insurance on 1 death = Rs. 10 lakhs

Total insurance paid = $7500 \times 10 = 75000$ lakhs = 750 crore

$\therefore$ The correct answer is 750 crore .

71. Answer: a

Explanation:

Given:

Perimeter of a square = 30 cm

Formula used:

Perimeter of a square = $4 \times \text{side}$

Calculation:

Let side of square be a cm

We know that,

$$\Rightarrow 4a = \text{Perimeter}$$

$$\Rightarrow 4a = 30$$

$$\Rightarrow a = 15/2$$

$$\text{Area} = \text{side}^2$$

$$\Rightarrow (15/2)^2$$

$$\Rightarrow 225/4 = 56.25 \text{ cm}^2$$

∴ The correct answer is 56.25 cm².

72. Answer: a

Explanation:

Given:

Area of circle = 346.5 cm²

Calculation:

Let radius of circle be r cm

$$\Rightarrow \pi \times \text{radius}^2 = \text{Area of circle}$$

$$\Rightarrow (22/7) \times r^2 = \text{Area of circle}$$

$$\Rightarrow (22/7) \times r^2 = 346.5$$

$$\Rightarrow r^2 = 110.25$$

$$\Rightarrow r = 10.5 \text{ cm}$$

∴ The correct answer is 10.5 cm.

73. Answer: d

Explanation:

Given:

Diameter (D) = 42 cm

Calculation:

$$\text{Radius} = \text{Diameter}/2 = 42/2 = 21 \text{ cm}$$

Now,

$$\text{Volume of hemisphere} = \left(\frac{2}{3}\right) \times \pi \times (\text{radius})^3$$

$$\Rightarrow \left(\frac{2}{3}\right) \times \left(\frac{22}{7}\right) \times (21)^3 = 19404 \text{ cm}^3$$

$\therefore$ The correct answer is 19404 cm³.

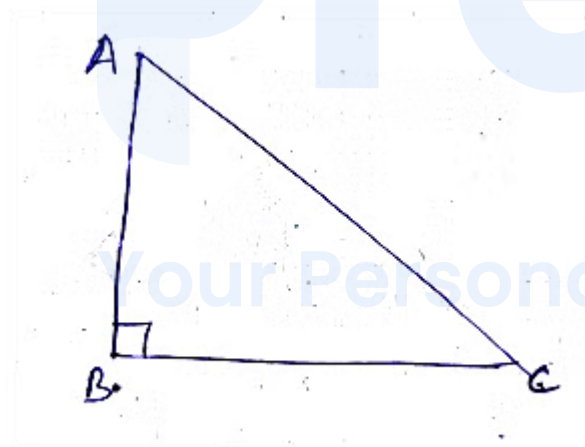
74. Answer: c

Explanation:

Given:

$$\angle B = 90^\circ; \angle A = 60^\circ$$

Calculation:



$$\angle B = 90^\circ, \angle A = 60^\circ$$

Now, by angle sum property,

$$\Rightarrow \angle A + \angle B + \angle C = 180^\circ$$

$$\Rightarrow \angle C = 180^\circ - (\angle A + \angle B)$$

$$\Rightarrow 180^\circ - (90^\circ + 60^\circ) = 30^\circ$$

Now,

$$\sec C + 2$$

$$\Rightarrow \sec 30^\circ + 2$$

$$\Rightarrow \left(\frac{2}{\sqrt{3}}\right) + 2 = \frac{(2 + 2\sqrt{3})}{\sqrt{3}}$$

$\therefore$ The correct answer is $\frac{(2 + 2\sqrt{3})}{\sqrt{3}}$.

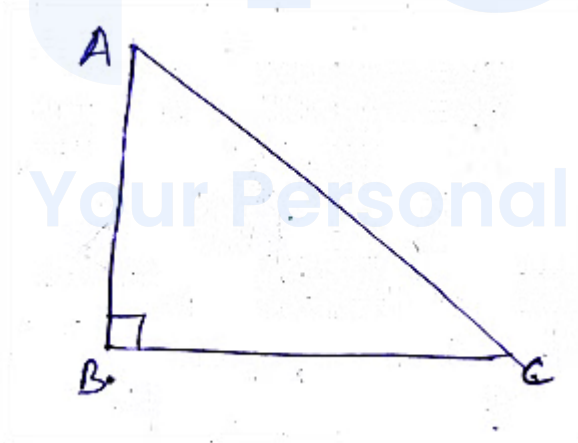
75. Answer: b

Explanation:

Given:

$$\cos A = \frac{5}{13}; AB = 10 \text{ cm}$$

Calculation:



$$\cos A = \frac{5}{13}$$

$$\Rightarrow \frac{AB}{AC} = \frac{5}{13}$$

$$\Rightarrow AB = 5k \text{ and } AC = 13k$$

$$\text{As, } AB = 10 \text{ cm}$$

$$\Rightarrow 5k = 10$$

$$\Rightarrow k = 2$$

$$\Rightarrow AC = 13k = 13 \times 2 = 26 \text{ cm}$$

Now, by Pythagoras theorem in triangle ABC,

$$AB^2 + BC^2 = AC^2$$

$$\Rightarrow (10)^2 + BC^2 = (26)^2$$

$$\Rightarrow 100 + BC^2 = 676$$

$$\Rightarrow BC^2 = 576$$

$$\Rightarrow BC = 24 \text{ cm}$$

$\therefore$ The correct answer is 24 cm .

76. Answer: a

Explanation:

The correct answer is Unemployment during the recessionary phase of the trade cycle

★ Key Points

- Unemployment occurs when a person who is actively searching for employment is unable to find work.
- It is often used as a measure of the health of the economy.
- Types of Unemployment
- Disguised Unemployment:
 - The phenomenon when more people are employed than actually needed. Hence statement 1 is correct.
 - Example : agricultural and the unorganized sectors of India.
- Seasonal Unemployment:
 - Unemployment occurs during certain seasons of the year.

- Example: Agricultural laborers.
- Structural Unemployment:
 - Unemployment arising from the mismatch between the jobs and the skills of the available workers in the market. Hence statement 2 is correct.
 - Many people do not get jobs due to a lack of requisite skills and due to the poor educational level.
- Cyclical Unemployment:
 - It is the result of the business cycle. Hence statement 3 is not correct.
 - Unemployment rises during recessions and declines with economic growth.
- Technological Unemployment:
 - It is the loss of jobs due to changes in technology.
- Frictional Unemployment:
 - Frictional Unemployment is also known as Search Unemployment. Hence statement 4 is not correct.
 - It refers to the time lag between the jobs when an individual is searching for a new job or is switching between the jobs.
- Vulnerable Employment:
 - This means people are working informally without proper job contracts.
 - These persons are deemed 'unemployed' since records of their work are never maintained.

77. Answer: d

Explanation:

Morarji Desai	Morarji Desai was an Indian independence activist and served between 1977 and 1979 as the 4th Prime Minister of India and led the government formed by the Janata Party.
John Mathai	John Mathai CIE was an economist who served as India's first Railway Minister and subsequently as India's Finance Minister, taking office shortly after the presentation of India's first Budget, in 1948.
TT Krishnamachari	Tiruvellore Thattai Krishnamachari was the Indian Finance Minister from 1956– 1958 and from 1964–1966.
RK Shanmukham Chetty	Sir Ramasamy Chetty Kandasamy Shanmukham Chetty KCIE was an Indian lawyer, economist and politician who served as independent India's first finance minister from 1947 to 1949 and represented the first union budget of independent India.

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78. Answer: b

Explanation:

The correct answer is Daimabad.

★ Key Points

- **Daimabad** is an archaeological site on the left bank of the **Pravara River**, a tributary of the Godavari River in Srirampur taluka in the **Ahmednagar district of Maharashtra**.
- This site was discovered by **B. P Bopardikar** in 1958.

- It has been excavated 3 instances up to now with the aid of using the Archaeological Survey of India teams.
- Discoveries at Daimabad recommend that the Late Harappan lifestyle prolonged into the Deccan Plateau in India.
- It is well-known for the healing of many bronze goods, a number of which had been motivated with the aid of using the Harappan lifestyle.

★ Additional Information

- Lothal:
 - Excavated by S.R Rao in 1953 .
 - It was situated in **Gujarat** on the Bhogva river near the Gulf of Cambay.
 - Important findings are the first manmade port, dockyard, rice husk, fire altars, chess playing.
- Dholavira:
 - Located on the bank of Luni river in Rann of Kutch, **Gujarat** .
 - Discovered by JP Joshi (1967-68) .
 - Important finding – Exclusive water management.
- Surkotada:
 - Located between the rivers **Sabarmati** and the **Bhogavo** in **Gujarat** .
 - Discovered by J.P. Joshi (1966).
 - Important findings – Horse bone remains, declining Harappan phase.

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79. Answer: d

Explanation:

Karsandas Mujli published the newspaper 'Satyprakash' in Gujarati, the newspaper was received as a game changer against the various social evils like Sati Pratha and Child marriage.

Gangadhar Rao	He was the Maharaja of Jhansi in northern India, a vassal of Maratha Empire. He was the son of Shiv Rao Bhau and a descendent of Raghunath Hari Newalkar.
Vishnu Shastri	He was a Marathi writer, whose writings have had a decisive influence on modern Marathi prose style. He was the son of the writer and scholar Krushnashastri Chiplunkar.
Gopal Hari Deshmukh	He was an Indian activist, thinker, social reformer and writer from Maharashtra. His original surname was Shidhaye. Because of 'Vatan' that the family had received, the family was later called Deshmukh.
Karsandas Mulji	He was an Indian journalist, writer and social reformer from Gujarat. He was repudiated by his family because of his views on widow remarriage

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80. Answer: c

Explanation:

- Mars is called the red planet because it appears in the sky as a red star and also its surface is covered with fine sand and dust full of iron oxide.
- Mars is the fourth planet from the Sun and the second-smallest planet in the solar system after Mercury.

81. Answer: d

Explanation:

Bhutan, a Buddhist kingdom on the Himalayas' eastern edge, is known for its monasteries, fortresses (or dzongs) and dramatic landscapes that range from subtropical plains to steep mountains and valleys. It is the smallest country to have a terrestrial border with India.

82. Answer: c**Explanation:**

Samadhi of Guru Gobind Singh is located in the city of Nanded in Maharashtra because it is considered that he attained martyrdom in the same place. There is a Gurudwara built in the city which also has the Samadhi and goes by the name 'Hazur Sahib'.

83. Answer: b**Explanation:**

The World Bank is an international financial institution that provides loans to countries of the world for capital projects and allowed India to construct the long stood up Hydroelectric project on Chenab river in Kishwar district of Jammu and Kashmir.

84. Answer: b**Explanation:**

The Correct Answer is Jyoti Prakash Nirala.

★ Key Points

- The Ashok Chakra for the year 2018 was awarded posthumously to Indian Air Force Garud Commando Corporal Jyoti Prakash Nirala.
- Corporal Nirala was killed after he shot down three terrorists in Jammu and Kashmir in 2017.

★ Important Points

- Ashok Chakra is India's highest peacetime military honour which is awarded for valour, courageous efforts, and self-sacrifice.
- The following categories of persons are eligible for the Ashoka Chakra:
 - Men and women of all ranks of the Army, the Navy and the Air Force, any of the Reserve Forces, the Territorial Army, Militia, and any other lawfully constituted forces.
 - Members of the Nursing Services of the Armed Forces.
 - Civilian citizens of either sex in all walks of life and members of Police Forces including Central Para-Military Forces and Railway Protection Force.

★ Additional Information

- The order of precedence of gallantry awards is
 - Param Vir Chakra
 - Ashoka Chakra
 - Mahavir Chakra
 - Kirti Chakra
 - Vir Chakra
 - Shaurya Chakra

85. Answer: d

Explanation:

The Nepalese rupee is the official currency of the Federal Democratic Republic of Nepal. The Nepalese rupee is subdivided into 100 paisa. The issuance of the currency is controlled by the Nepal Rastra Bank, the central bank of Nepal.

86. Answer: a

Explanation:

- Acid rain results when sulfur dioxide (SO_2) and nitrogen oxides (NO_2) are emitted into the atmosphere
- Acid rain is a rain or any other form of precipitation that is unusually acidic, meaning that it has elevated levels of hydrogen ions. It can have harmful effects on plants, aquatic animals and infrastructure.

87. Answer: b

Explanation:

The atomic mass of Hydrogen is 1 u. The atomic mass of oxygen is 16u. Since, there are 2 atoms of hydrogen and 1 atom of oxygen in a water molecule, the ratio of their masses is 2:16 or 1:8.

88. Answer: a

Explanation:

The correct answer is One.

★ Key Points

- **Article 324(2)** :- The Election Commission shall consist of the Chief Election Commissioner and a such number of other Election Commissioners, if any, as the President may from time to time fix and the appointment of the Chief Election Commissioner and other Election Commissioners shall, subject to the provisions of any law made in that behalf by Parliament, be made by the President.

- **There is one Chief Election Commissioner who** heads the Election Commission of India.
- Along with Chief Election Commissioner, there are **2 other commissioners in the body.**
- They all are appointed by **the President of India.**
- They are **not eligible for reappointment.**
- They have the **same powers as the judges of the Supreme Court.**
- It is a body constitutionally empowered to conduct free and fair elections to the national and state legislatures and of President and Vice-President.

★ Additional Information

- **Article 324** of the Constitution deals with the Election Commissions.
- The tenure of Election Commissioners is **6 years** or up to **65 years of age** , whichever is earlier

89. **Answer: c**

Explanation:

The correct answer is option **3**, i.e. Attorney General of India.

- The Attorney General of India is the Indian government's **chief legal adviser** and its primary lawyer in the Supreme Court of India.
- He is appointed by the President of India under **Article 76(1)** of the Constitution and holds office during the pleasure of the President.

90. **Answer: b**

Explanation:

A sphincter is a circular muscle that normally maintains constriction of a natural body passage or orifice and which relaxes -as required by normal physiological functioning. Sphincters are found in many animals.

91. Answer: b

Explanation:

The correct answer is Homologous organs.

★ Key Points

- A homologous organ, **system, or body part** that shares a **common ancestry** in **multiple organisms**.
- Homologous organs are **described as the organs of various animals** with a **similar structure**, but with **different functions**.

★ Additional Information

- **Analogous organs**– Analogous organs, **which have identical functions** but distinct origins, are the **opposite of homologous organs**.
 - The wings of **insects, bats, and birds** that **developed independently** in each lineage separately after diverging from an ancestor without wings will be an example of an **analogous trait**.

92. Answer: a

Explanation:

- President Ram Nath Kovind launched the project Jeevamritham in Amrithapuri in Kollam in Kerala.
- It was allotted Rs. 100 crore for the purpose of providing filtration system for cleaning drinking water to 5000 villages across India.

93. Answer: b

Explanation:

The correct answer is Pratyush

★ Key Points

- Pratyush or Prathyush is a supercomputer established at the Indian Institute of Tropical Meteorology (IITM), Pune in India. As of January 2018, Pratyush is the fastest supercomputer in India with a maximum speed of 6.8 PetaFlops.
- The system was inaugurated by Dr. Harsh Vardhan, Union Minister for science and technology, on 8 January 2018.

94. Answer: a

Explanation:

The Reserve Bank of India is India's central banking institution, which controls the monetary policy of the Indian rupee. The Reserve Bank of India also acts as the investor of the government funds and announced Rs. 30,659 crore as dividend for financial year 2016-17.

95. Answer: a

Explanation:

Deposit Insurance and Credit Guarantee Corporation (DICGC) is a subsidiary of Reserve Bank of India. It was established on 15 July 1978 under Deposit Insurance and Credit Guarantee Corporation Act, 1961 for the purpose of providing insurance of deposits and guaranteeing of credit facilities.

96. Answer: b

Explanation:

Sonar is a technique that uses sound propagation to navigate, communicate or detect. The sonar hydrophones may be towed behind the ship or submarine in order to reduce the effect of noise generated by the watercraft itself.

Given,

Speed = 1600 m/s

time = 4s

Distance = Speed $\times$ Time

$$= 1600 \times 4 = 6400 \text{ m.}$$

Now according to the question statement, These waves are reflected back by the ocean floor in 4 seconds. But this is the total distance traveled by sound. So the depth of the ocean floor is half of the total distance i.e $6400/2 = 3200\text{m}$.

97. Answer: b

Explanation:

The correct answer is option 2 i.e. Uniform

- **Uniform acceleration** is a type of motion in which the velocity of an object changes by an equal amount in every equal time period.
- Uniform motion is defined as the motion of an object in which the object travels in a straight line and its velocity remains constant along that line as it covers equal distances in equal intervals of time, irrespective of the length of the time.

98. Answer: d

Explanation:

The absorbed energy makes the molecules in air move and expand, therefore decreasing the air density. The opposite is true for cold air. It is more dense because the molecules are closer together and they are closer together because the bonds are absorbing less energy and therefore do not move as much.

99. Answer: d

Explanation:

Alexander Noren	Alexander Norén is a Swedish professional golfer who currently plays on the PGA Tour and the European Tour.
Table Tennis 2017 ITTF Women's world cup	The 2017 ITTF Women's World Cup was a table tennis competition held in Markham, Ontario, in 2017. The first time that it had been staged in Canada. In the final, China's Zhu Yuling defeated fellow Chinese player Liu Shiwen, 4–3, to win her first World Cup title.
Steve Smith	Steven Peter Devereux Smith is an Australian international cricketer and former captain of the Australian national team. As of June 2018, Smith is the top-ranked Test batsman in the world, according to the ICC Player Rankings.

100. Answer: d

Explanation:

The amount of vertical space between successive lines of text is called the spacing between two lines. It is most prominently used in particular forms of citations and

research papers.

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