



Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



CSIR UDC NET



IBPS PO



UP POLICE



SSC MTS



SBI PO



BPSC



UP TET



IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

SSC CHSL 2017 (Tier-I) Previous Year Paper (28-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. 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)

I want you to (1)/ write an essay (2)/ which will be include in the journal. (3)/
No error (4)

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

2. 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)

For peace and happiness in the world, (1)/ we need to remind ourselves
(2)/ of our philosophy and cultural. (3)/ No error (4)

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

3. In the following question, the sentence given with a blank is 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)

Anita _____ a collection of every nation's currency.

- a. Has
- b. Possess
- c. Is
- d. Have

-
4. In the following question, a sentence is given with a 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)

The bus from Haridwar to Delhi _____ at 11:15 a.m. daily.

- a. Come
- b. Arrived
- c. Arrive
- d. Arrives

-
5. 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)

Noxious

- a. Sterile
- b. Harmful
- c. Wholesome
- d. Curing

6. 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)

Herald

- a. Messenger
- b. Flock
- c. Newcomer
- d. Old

7. 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)

Preclude

- a. Include
- b. Prevent
- c. Impede
- d. Stop

8. 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)

Deserter

- a. Criminal
- b. Loyalist

- c. Refugee
- d. Runaway

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

The Montreal Protocol

P : by more than 150 nations

Q : on substances that deplete the

R : Ozone layer, was signed in 1987

- a. QRP
- b. PRQ
- c. RPQ
- d. QPR

10. 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)

His daughter blamed him for partiality.

- a. He was blame for partiality by his daughter.
- b. He is being blamed for partiality by his daughter.
- c. He was being blamed for partiality by his daughter.
- d. He was blamed for partiality by his daughter.

11. 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)

Pooja said, "I write novels."

- a. Pooja says she wrote novels.
- b. Pooja said that she wrote novels.
- c. Pooja wrote a novel.
- d. Novels were written by Pooja.

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

- a. Fallacoius
- b. Falacious
- c. Fallacious
- d. Facllacous

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)

Now we do talk first about the disease in cases of bodily breakdown; and that for _____ excellent reason. Because, _____ there may be doubt about the way in which the body broke down, there is _____ doubt at all about the shape in which it should be built up again. No doctor _____ to produce a new kind of man, with a new arrangement of eyes or limbs. The hospital, by _____, may send a

man home with one leg less: but it will not (in a creative rapture) send him home with one leg extra. Medical science is content with the normal human body, and only seeks to restore it.

and that for _____ excellent reason.

- a. A
- b. An
- c. At
- d. To

14. 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)

Now we do talk first about the disease in cases of bodily breakdown; and that for _____ excellent reason. Because, _____ there may be doubt about the way in which the body broke down, there is _____ doubt at all about the shape in which it should be built up again. No doctor _____ to produce a new kind of man, with a new arrangement of eyes or limbs. The hospital, by _____, may send a man home with one leg less: but it will not (in a creative rapture) send him home with one leg extra. Medical science is content with the normal human body, and only seeks to restore it.

Because, _____ there may be doubt

- a. Though
- b. Through
- c. Thorough
- d. Thought

15. 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)

Now we do talk first about the disease in cases of bodily breakdown; and that for _____ excellent reason. Because, _____ there may be doubt about the way in which the body broke down, there is _____ doubt at all about the shape in which it should be built up again. No doctor _____ to produce a new kind of man, with a new arrangement of eyes or limbs. The hospital, by _____, may send a man home with one leg less: but it will not (in a creative rapture) send him home with one leg extra. Medical science is content with the normal human body, and only seeks to restore it.

there is _____ doubt at all about the shape

- a. None
- b. No
- c. Never
- d. Nothing

16. 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)

Now we do talk first about the disease in cases of bodily breakdown; and that for _____ excellent reason. Because, _____ there may be doubt about the way in which the body broke down, there is _____ doubt at all about the shape in which it should be built up again. No doctor _____ to produce a new kind of man, with a new arrangement of eyes or limbs. The hospital, by _____, may send a man home with one leg less: but it will not (in a creative rapture) send him

home with one leg extra. Medical science is content with the normal human body, and only seeks to restore it.

No doctor _____ to produce a new kind

- a. Proposes
- b. Propose
- c. Proposing
- d. Proposed

17. 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)

Now we do talk first about the disease in cases of bodily breakdown; and that for _____ excellent reason. Because, _____ there may be doubt about the way in which the body broke down, there is _____ doubt at all about the shape in which it should be built up again. No doctor _____ to produce a new kind of man, with a new arrangement of eyes or limbs. The hospital, by _____, may send a man home with one leg less: but it will not (in a creative rapture) send him home with one leg extra. Medical science is content with the normal human body, and only seeks to restore it.

The hospital, by _____, may send a man

- a. Necessary
- b. Necessarily
- c. Necessity
- d. Necessaries

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

Wine and dine

- a. Get drunk before dinner
- b. A place where both alcohol and food is served
- c. Live a hedonistic life
- d. When somebody is treated to an expensive meal

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

Cross your fingers

- a. Do nothing and hope that everything will fall in its place automatically.
- b. To express disapproval or dissatisfaction.
- c. Tell others that you will approve only on certain conditions.
- d. To hope that things will happen in the way that you want them to.

20. 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 payment given for professional services that are rendered nominally without charge.

- a. Honorarium

- b. Penalty
 - c. Forfeit
 - d. Retribution
-

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

Change in form, nature, or substance

- a. Resolute
 - b. Immutable
 - c. Intrepid
 - d. Transmute
-

22. 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)

The world we (is living) in is straight out of a dystopian novel.

- a. Was living
 - b. Are live
 - c. Are living
 - d. No improvement
-

23. 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)

He began to ask about his enemies who (had been hunting) him.

- a. Is been hunting
- b. Was been hunting
- c. Had been hunted
- d. No improvement

24. 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)

Even our own languages

A-it that the native speakers hardly

B-have contributed words to

C-consider foreign anymore

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

25. 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. Perennially
- b. Perennially
- c. Perennially
- d. Perennially

prepp

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General Intelligence

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

Tennis : Court :: ? : ?

- a. Sky : Yoga
- b. Race : Room
- c. Wrestling : Court
- d. Skating : Rink

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

47 : 52 :: 73 : ?

- a. 81
- b. 80
- c. 75
- d. 78

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

KOS : CGK :: LPT : ?

- a. GIM

b. DHK

c. DHL

d. GIL

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

a. Horse – Stable

b. Pig – Sty

c. Nest – Bird

d. Lion – Den

30. In the following question, four number pairs are given. The number on left side of (–) is related to the number on 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. 12 – 144

b. 8 – 64

c. 18 – 324

d. 2 – 12

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

a. QKE

- b.** SLF
 - c.** WQK
 - d.** OIC
-

32. Arrange the given words in the sequence in which they occur in the dictionary **(+2, -0.5)**

- 1. Terrible
- 2. Thaw
- 3. Thank less
- 4. Testify
- 5. Terrain

- a.** 3, 4, 5, 1, 2
 - b.** 2, 1, 5, 4, 3
 - c.** 5, 1, 4, 3, 2
 - d.** 2, 1, 3, 4, 5
-

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

29, 32, 38, 41, 47, ?

- a.** 52
- b.** 53
- c.** 50

d. 49

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)

LOQ, OQR, RSS, ?, XWU

a. PUX

b. UXT

c. UUT

d. UXX

35. Shivani started running from her office, she first ran for 16 km towards north, then she turned towards east and ran $\sqrt{68}$ km in that direction. How far (in km) and which direction is Shivani from her office? (+2, -0.5)

a. 18, North-East

b. 13, North-East

c. 18, South-East

d. 11, North-West

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

Telephone

a. Note

b. Phone

c. Let

d. Else

37. In a certain code language, "BLINK" is written as "96543" and "URGE" is written as "8217". How is "BURN" written in that code language? (+2, -0.5)

a. 9824

b. 8953

c. 9642

d. 5432

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

APG, CRI, ETK, ?, IXO

a. GUN

b. GVM

c. HUM

d. HVN

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

66, 65, 63, 62, 60, ?

- a. 58
- b. 59
- c. 57
- d. 56

40. 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. (16, 8, 4)
- b. (44, 22, 11)
- c. (46, 23, 11)
- d. (52, 26, 13)

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

$$16 \times 20 \div 15 - 4 + 2 = ?$$

- a. 15
- b. 38
- c. 47
- d. 26

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

$$16 \div 2 + 35 - 6 \times 10 = 33$$

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

43. If $20\Delta 30 = 5$, $90\Delta 40 = 13$ and $20\Delta 20 = 4$, then find the value of $90\Delta 80 = ?$ (+2, -0.5)

- a. 14
- b. 20
- c. 16
- d. 17

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

ABABABAB, CDABABAB, ADCBABAB, ABCDABAB, ABADCBAB, _____.

- a. ABABADCB
- b. ABABCDAB
- c. ABABABAB
- d. CDABABAB

45. Two siblings start from home to go to schools. The brother goes 2 km North, then turns right and goes 1 km and reaches his school. The sister goes 3 km West, then 5 km South, then turns left and goes 4 km and reaches her school. Where is the sister's school with respect to the brother's school? (+2, -0.5)

- a. 3 km South
- b. 7 km South
- c. 7 km North
- d. 3 km North

46. In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems 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: All drinks are beverages.

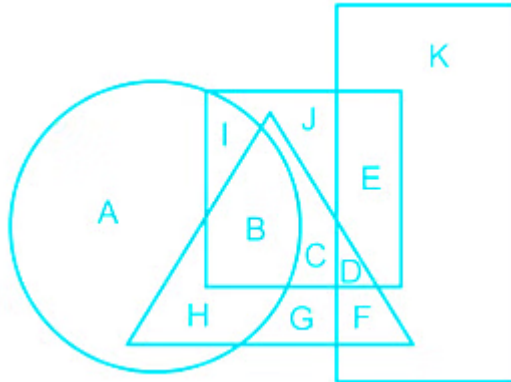
Statement II: No juices are beverages.

Conclusion I: Some beverages are juices.

Conclusion II: All juices are beverages.

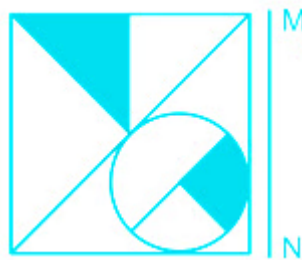
- a. Only conclusion I follows
- b. Only conclusion II follows
- c. Both conclusions I and II follow
- d. Neither conclusion I nor conclusion II follows

47. In the following figure, the rectangle represents Therapists, the circle represents Racers, the triangle represents Sculptors and square represents Boxers. Which set of letters represents Boxers who are Racers? (+2, -0.5)



- a. ED
- b. I
- c. BCD
- d. JI

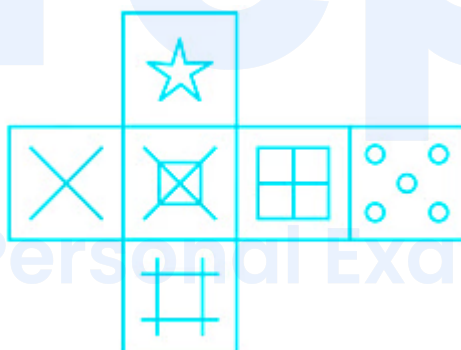
48. If a mirror is placed on the line MN, which of the following answer figures is the right mirror image of the given figure? (+2, -0.5)



a.



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 represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, for example 'A' can be represented by 40, 42 etc and 'N' can be represented by 87, 98 etc. Similarly, you have to identify the set for the word 'CURE'.

(+2, -0.5)

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Matrix- I					
	0	1	2	3	4
0	A	E	I	A	H
1	C	D	D	F	F
2	D	F	I	H	C
3	D	C	E	E	C
4	A	E	A	I	J

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Matrix- II					
	5	6	7	8	9
5	V	W	Q	U	Q
6	O	T	Q	U	R
7	W	S	K	V	W
8	W	V	N	S	X
9	R	O	X	N	Y

- a. 21, 55, 14, 98
- b. 43, 96, 20, 88
- c. 24, 68, 69, 33
- d. 43, 87, 44, 89

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Quantitative Aptitude

51. 1800 chocolates were distributed among the students of a class. Each student got twice as many chocolates as the number of students in the class. Calculate the number of students in the class. (+2, -0.5)
- a. 30
 - b. 40
 - c. 60
 - d. 90
-
52. Sum of four consecutive odd numbers is 328. Find the largest number. (+2, -0.5)
- a. 85
 - b. 98
 - c. 79
 - d. 97
-
53. Find the area (in sq units) of the triangle formed by lines $x - 3y = 0$, $x - y = 4$ and $x + y = 4$. (+2, -0.5)
- a. 1
 - b. 2
 - c. 3
 - d. 4

54. Find the number of solutions a pair of linear equation ($4x - 9y + 13 = 0$ and $(+2, -0.5)$ $2x + 3y - 13 = 0$) have.

- a. 1
- b. 2
- c. 10
- d. Infinite

55. An arc length of 16π units subtends an angle of 240 degrees. Find the radius (in units) of the circle. (+2, -0.5)

- a. 6
- b. 12
- c. 24
- d. 36

56. The area of an equilateral triangle is $18\sqrt{3}$ sq. units. Find the value of the side (in units) of the triangle. (+2, -0.5)

- a. $\sqrt{2}$
 - b. $2\sqrt{2}$
 - c. $3\sqrt{2}$
 - d. $6\sqrt{2}$
-

57. Rahul's salary is 50% more than Rohit's salary. If Rahul saves Rs 2250 which is 8% of his salary, then what is Rohit's salary (in Rs)? (+2, -0.5)

- a. 22250
- b. 24450
- c. 26350
- d. 18750

58. The ratio of the cost of the table and the chair is 9 : 4. The cost of the table is Rs. 1250 more than the cost of the chair. What is the cost (in Rs) of the chair? (+2, -0.5)

- a. 1000
- b. 1200
- c. 800
- d. 1500

59. In a mixture of 165 litres, the ratio of liquids X and Y is 6 : 5. If 5 litres of liquid Y is added in the mixture, then what is the ratio of X and Y in the new mixture? (+2, -0.5)

- a. 10 : 9
- b. 8 : 7
- c. 9 : 8
- d. 5 : 4

-
60. Average of 8 numbers is 40. The average of first three numbers is 46 and the average of next two numbers is 50. If the sixth number is 6 and 10 less than seventh and eighth number respectively, then what is the value of the eighth number? (+2, -0.5)
- a. 28
 - b. 22
 - c. 30
 - d. 32
-
61. A sum of Rs. 15000 is lent at compound interest (compounded annually) at an interest rate of 20% per annum. If the interest is compounded half-yearly, then how much more interest (in Rs) will be obtained in one year? (+2, -0.5)
- a. 225
 - b. 150
 - c. 75
 - d. 300
-
62. X sells shoes to Y at a profit of 20% and Y sells the same shoes to Z at a profit of 23%. If Z pays Rs. 3321 for the shoes, what was the cost price (in Rs) of shoes for X? (+2, -0.5)
- a. 1950
 - b. 2450
 - c. 2250

d. 2045

63. Amir gave two successive discounts of 10% and 20% on a pencil. If the marked price of the pencil is Rs 3200, then what is the total value (in Rs) of the two discounts together? (+2, -0.5)

a. 940

b. 1086

c. 896

d. 1120

64. If $\sqrt[3]{a} = \sqrt[3]{9} + \sqrt[3]{126} + \sqrt[3]{217}$, then which of the following is CORRECT? (+2, -0.5)

a. $a = 2197$

b. $a > 2197$

c. $a < 2197$

d. $a < 1728$

65. X can complete a work in 27 days and Y can do the same work in half of the time taken by X. Working together what part of the same work can they complete in a day? (+2, -0.5)

a. $1/9$

b. $1/6$

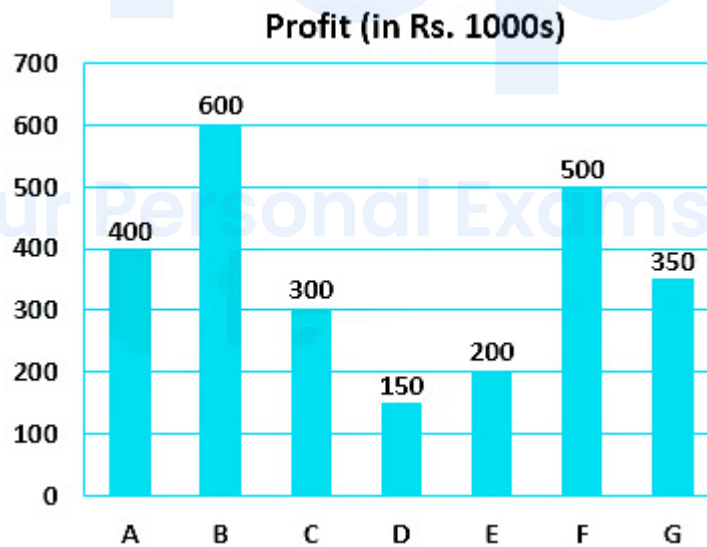
c. $1/12$

d. 2/27

66. The speed of a train is 72 km/hr and its length is 200 meters. What will be the time (in minutes) taken by the train to cross a pole? (+2, -0.5)

- a. $\frac{1}{6}$ min
- b. $\frac{3}{5}$ min
- c. 5 min
- d. 10 min

67. **Direction:** The bar graph shows the monthly profits of the different departments of a company. Study the diagram and answer the following questions. (+2, -0.5)



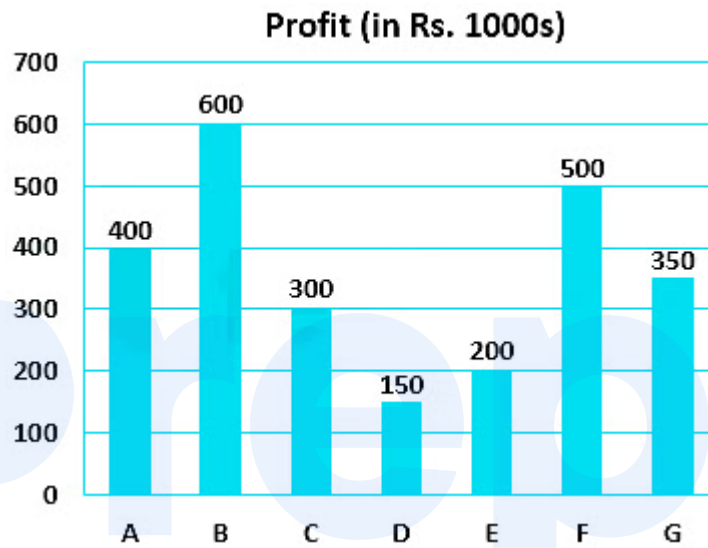
Which department has the second lowest monthly profits?

- a. C
- b. D

c. E

d. G

68. **Direction:** The bar graph shows the monthly profits of the different departments of a company. Study and diagram and answer the following questions. (+2, -0.5)



What is the ratio of the monthly profits of department G to that of department B?

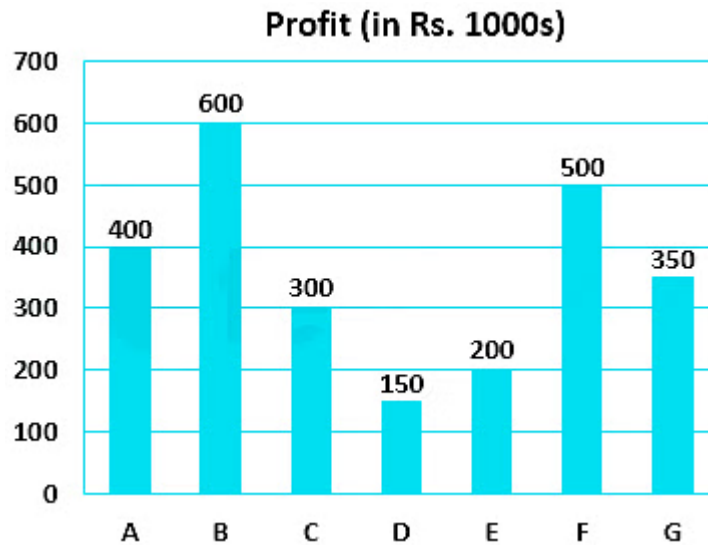
a. 12 : 7

b. 7 : 12

c. 5 : 12

d. 12 : 5

69. **Direction:** The bar graph shows the monthly profits of the different departments of a company. Study and diagram and answer the following questions. (+2, -0.5)



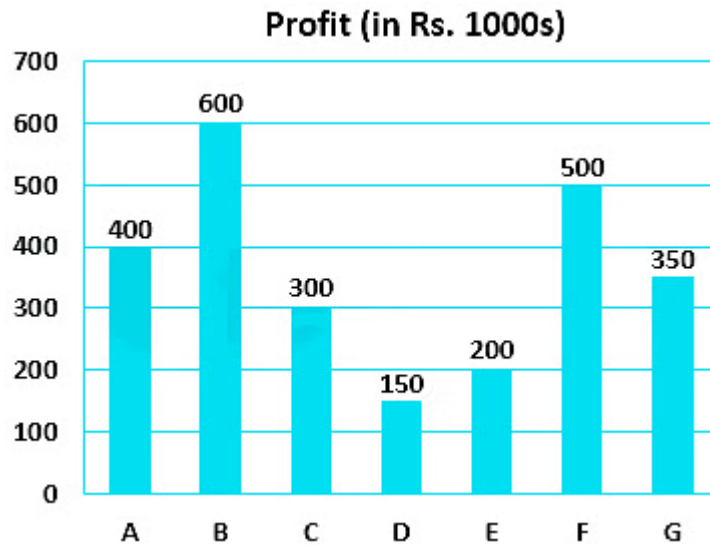
The monthly profit of department B is greater than that of department F by _____.

- a. 25%
- b. 30%
- c. 33.3%
- d. 20%

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70. **Direction:** The bar graph shows the monthly profits of the different departments of a company. Study and diagram and answer the following questions.

(+2, -0.5)



If the company has only 7 departments then what is the monthly revenue (in Rs lakhs) of the company if the monthly profit was 20% of the total monthly revenue of the company?

- a. 1250
- b. 500
- c. 50
- d. 125

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71. The length of the diagonal and the breadth of a rectangle is 25 cm and 7 cm respectively. Calculate its area (in cm^2). (+2, -0.5)

- a. 336
- b. 168
- c. 240
- d. 480

72. The area of a semicircle is 77 cm^2 . Calculate its perimeter (in cm). (+2, -0.5)

- a. 72
- b. 49
- c. 98
- d. 36

73. Find the total surface area (in cm^2) of a right circular cylinder of diameter 21 cm and height 10 cm. (+2, -0.5)

- a. 1353
- b. 1287
- c. 1678
- d. 1728

74. $\triangle XYZ$ is right angled at Y. If $\angle X = 60^\circ$, then find the value of $(\cot Z + 2)$. (+2, -0.5)

- a. $(2\sqrt{2} + 1)/2$
- b. $\sqrt{3} + 2$
- c. $(\sqrt{6} + 1)/\sqrt{3}$
- d. $(2\sqrt{2} + \sqrt{3})/2$

75. In $\triangle ABC$ measure of angle B is 90° . If $\tan A = 12/5$, and $AB = 1 \text{ cm}$, then what is the length (in cm) of side BC? (+2, -0.5)

- a. 2.6
- b. 2.4
- c. 1.5
- d. 2

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General Awareness

76. Special Drawing Rights (SDRs) is related to _____. (+2, -0.5)

- a. World Bank
- b. Reserve Bank of India
- c. World Trade Organization
- d. International Monetary Fund

77. The Khadi and Village Industries Commission were established during which Five Year Plan? (+2, -0.5)

- a. Second
- b. Third
- c. First
- d. Fifth

78. From whom did the French East India Company acquire Pondicherry? (+2, -0.5)

- a. From the Portuguese
- b. The ruler of Golconda
- c. Sultan of Bijapur
- d. Snatching

79. For the first time, postage stamps were released in which of the following reign? **(+2, -0.5)**

- a.** Lord Ripon
 - b.** Lord Lytton
 - c.** Lord Dalhousie
 - d.** Lord Canning
-

80. When does Pele's Tear occur? **(+2, -0.5)**

- a.** at the time of earthquake
 - b.** at the time of plate tectonics
 - c.** at the time of volcanic eruption
 - d.** at the time of mountain formation
-

81. First time in which year did Edmund Hillary and Tenzing Norgay conquer the world's highest mountain peak Mount Everest? **(+2, -0.5)**

- a.** 1898 AD
 - b.** 1953 AD
 - c.** 1957 AD
 - d.** 1969 AD
-

82. Which of the following is a major folk dance of Rajasthan? **(+2, -0.5)**

- a. Chhau
 - b. Giddha
 - c. Ghumar
 - d. Bihu
-

83. With which country India has been undertaken Kaladan multi-modal transport project? **(+2, -0.5)**

- a. Sri Lanka
 - b. Myanmar
 - c. Bangladesh
 - d. Bhutan
-

84. Who among the following has been awarded the Indira Gandhi Prize 2017 for peace, disarmament and development? **(+2, -0.5)**

- a. Pranab Mukherjee
 - b. Manmohan Singh
 - c. Charles Manson
 - d. Emmers on Mnangagwa
-

85. Which of following is NOT a major languages in Bangladesh? **(+2, -0.5)**

- a. Garo

- b. Khashia
 - c. Magh
 - d. Maithili
-

86. What is the maximum number of electrons that the outermost shell can have? (+2, -0.5)

- a. 2
 - b. 6
 - c. 8
 - d. None of these
-

87. Which of the following statement(s) is/are CORRECT? (+2, -0.5)

I. Carbon compounds linked by only single bond are called saturated compounds.

II. Carbon compounds having double or triple bonds are called unsaturated compounds.

III. Saturated carbon compounds are more reactive than unsaturated carbon compounds.

- a. Only I and II
 - b. Only I and III
 - c. Only II and III
 - d. All I, II and III
-

88. After the Presiding officer declares the house adjourned sine die President of India issues a notification for _____ of the session. (+2, -0.5)

- a. Adjournment
- b. Prorogation
- c. Dissolution
- d. Quorum

89. Which kind of emergency can be proclaimed on the grounds of failure of Constitutional machinery in States? (+2, -0.5)

- a. National Emergency
- b. State Emergency
- c. Financial Emergency
- d. State and Financial Emergency both

90. Rings of _____ are present in the throat to ensure that the air passage does NOT collapse. (+2, -0.5)

- a. Bone
- b. Tendon
- c. Ligament
- d. Cartilage

91. "All plants and animals are composed of cells and cell is the basic unit of life". The given statement is for which of the following theories? (+2, -0.5)

- a. Theory of evolution
- b. Theory of inheritance
- c. Cell theory
- d. Theory of natural selection

92. In November 2017, at first meeting of Prabhari Officers, a Major Policy initiative was launched for the transformation of _____ backward districts across the country. (+2, -0.5)

- a. 125
- b. 115
- c. 100
- d. 150

93. Researchers at the University of Illinois have announced discovery of new form of matter called _____. (+2, -0.5)

- a. Spectronium
- b. Unobtainium
- c. Excitonium
- d. Transionium

94. In September 2017, Investments in the Domestic Capital Market, through _____, slumped to a five year low. (+2, -0.5)

- a. S-notes
- b. P-notes
- c. L-notes
- d. N-notes

95. On 2 January 2018, Parliament passed NABARD (Amendment) Bill, 2017 which seeks to transfer share capital held by _____ to Union Government. (+2, -0.5)

- a. SEBI
- b. RBI
- c. IRDAI
- d. TRAI

96. A body of mass 8 kg is moving with a velocity of 4 m/s, find its momentum. (+2, -0.5)

- a. 2
- b. 64
- c. 32
- d. 4

97. If the velocity of a body is doubled, its momentum _____. (+2, -0.5)

- a. remains same
- b. doubles
- c. becomes half
- d. becomes 4 times

98. Each fragment of the Earth's crust is known as a _____. (+2, -0.5)

- a. Plane
- b. Plate
- c. Platter
- d. Slab

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

- A) Marc Marquez won the Motorcycle race 2017 Dutch TT MotoGP.
 - B) In 2018 IPL auctions, Royal Challengers Bangalore retained Rishabh Pant.
 - C) In 2017, Vincent Kompany captained the Premier League team Manchester City.
- a. Only B
 - b. Both A and C
 - c. Only C

d. None of these

100. Computers and communication technologies affect our lives in ways that include: _____, in terms of knowledge creation, publishing and distribution. (+2, -0.5)

a. Societal

b. Technological

c. Educational

d. Personal

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Answers

1. Answer: c

Explanation:

The correct answer is 3.

★ Key Points

- The error is in (3) ' *which will be include in the journal*'.
- It should be **which will be included** instead.
- The sentence indicates that the action *will* have been completed (finished or "perfected") at some point in the future.
- Thus, we use **future tense in passive voice** because the doer of the verb 'include' is somebody else hence, we need to use a passive voice.

Correct sentence: 'I want you to write an essay which **will be included** in the journal.'

2. Answer: c

Explanation:

The correct answer is 3.

★ Key Points

- The error is in (3) ' *of our philosophy and cultural*'
- Since *philosophy* is a noun and lists together two similar things, the word philosophy goes with another noun.
- Hence, **culture (noun)** should be used in place of cultural (adjective).

Correct sentence: 'For peace and happiness in the world, we need to remind ourselves of our philosophy and **culture**.'

3. Answer: a

Explanation:

The correct answer is **Has**

★ Key Points

- If we look at the sentence carefully, we can figure out that **every nation's currency is with Anita or is in Anita's possession in the form of a collection**
- Let's look at each option:
 - **Has**
 - **Has** is a **root verb** most commonly used alongside the pronouns **He/She/It** and **Who** and **Singular Nouns**
 - In general, **has** is a **Present Tense** word
 - It is generally used to denote **possession** or **consumption** or **action**
 - Thus this word correctly denotes the relationship between **Anita** and her **collection**
 - **Possess**
 - It is a **verb** meaning **Have as an ability, quality, characteristic or acquirement**
 - Noun: **Possession**; Adjective: **Possessive**
 - Since the subject **Anita** in the sentence is **singular**, the singular form of the verb, i.e., **possesses** should have been used for grammatical accuracy
 - Thus, if this word was used with the subject **Anita**, it would be **grammatically incorrect**
 - **Is**
 - **'Is'** is an **auxiliary singular present tense verb** used to denote the application of characteristic or quality to an entity or to help make a sentence construction grammatically correct, e.g., **He is a good boy**
 - Thus, if used in the blank above, it would imply **Anita is the collection** which is **absurd**
 - **Have**
 - It is the **plural form** of the root verb **'has'**

- Since the subject **Anita** is singular, using '**have**' here would violate **subject-verb agreement**

Thus the complete sentence is: *Anita has a collection of every nation's currency*

4. Answer: d

Explanation:

The correct answer is **Arrives**

★ Key Points

- Since the sentence is ending with the word '**daily**', it talks about a habitual/repetitive/regular action/phenomenon/happening
- This type of verb is always presented in the **Simple Present Tense**, e.g., *The Sun rises in the East*
- Let's look at the tense used in each of the given options:

Come	This is a root verb , i.e., it can take any tense depending on the sentence
Arrived	Past Tense
Arrive	This is a root verb , i.e., it can take any tense depending on the sentence
Arrives	Simple Present Tense

Thus the complete sentence is: *The bus from Haridwar to Delhi arrives at 11:15 a.m. daily.*



Confusion Points

- Even if one of the options would have been the word '**comes**', the **most suitable answer** would have remained unchanged.

- This is because in the context of bus timings, *arrives/departs* is a much more appropriate word than *comes/goes*.

5. Answer: b

Explanation:

The correct answer is **Harmful**.

★ Key Points

- Let us look at the meanings of the given word and the correct option.
 - **Noxious** – harmful, poisonous, or very unpleasant.
 - **Harmful** – causing or likely to cause harm.
- As you can see from the meanings of the two words, '**harmful**' best expresses the meaning of '**noxious**'.

★ Additional Information

- The meanings of the other words in the options are –
 - **Sterile** – not able to produce children or young; lacking in imagination, creativity, or excitement; uninspiring or unproductive.
 - **Wholesome** – conducive to or suggestive of good health and physical well-being.
 - **Curing** – relieve (a person or animal) of the symptoms of a disease or condition.

6. Answer: a

Explanation:

The correct answer is **Messenger**.

★ Key Points

- Let us see the meanings of the given word and the correct option –
 - **Herald** – an official messenger bringing news.
 - **Messenger** – a person who carries a message or is employed to carry messages.
- As you can see from the meanings of the two words, 'messenger' best expresses the meaning of 'herald'.

★ Additional Information

- Let us see the meanings of the other words in the given options –
 - **Flock** – a number of birds of one kind feeding, resting, or travelling together.
 - **Newcomer** – a person or thing that has recently arrived in a place or joined a group.
 - **Old** – having lived for a long time; no longer young.

7. Answer: a

Explanation:

The correct answer is Include .

★ Key Points

Let's look at the meaning of the given word and the correct option.

- Preclude : Prevent someone from happening/ doing something.
- Include : To make someone a part of something.

Thus from the above points, we find that both the words have the opposite meaning.

★ Additional Information

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

- Prevent : To keep something from happening.
- Impede : Delay or prevent by obstructing something.
- Stop : Come to an end; cease to happen.

8. Answer: b

Explanation:

The correct answer is **Loyalist**.

★ Key Points

Let's look at the meaning of the given word and the correct option.

- **Deserter** : A member of the armed forces who deserts.
- **Loyalist** : A person who remains loyal to the established ruler or government.

Thus from the given points, it is clear that both the words express the opposite meanings.

★ Additional Information

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

- **Criminal** : A person who has committed a crime.
- **Refugee** : A person who has been forced to leave his or her country.
- **Runaway** : A person who has run away, especially from a family or institution.

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9. Answer: a

Explanation:

The correct answer is QRP

★ Key Points

Let's look at the following points-

- Since the opening sentence has been given it denotes the subject of the context i.e. The Montreal Protocol; therefore we will find the part that continues the

subject matter or connect it to the verb

- Q will be the 2nd part of the sentence as it continues the subject matter with action word i.e. **that deplete the**
- Option R will be the 3rd part of the sentence as 'the' is part Q has been used for the "ozone layer"
- Thus, as per the above-mentioned points, it is clear that part P will be the last part of the context

The final arrangement–The Montreal Protocol on substances that deplete the Ozone layer, was signed in 1987 by more than 150 nations.

10. Answer: d

Explanation:

The correct answer is option 4

★ Key Points

Let's look at the following points–

- The sentence is in Active voice (in simple past tense)
- The passive voice of the given context will be– **Subject + Helping Verb (was/were) + Third form of verb + Object Of the sentence**
- Out of all 4 given options, 4th shows the correct structure of the Passive voice for the given context – Sub (He) + Helping Verb (was) + Third form of the verb (Blamed) + Object of the sentence (By his daughter)

Thus, the correct sentence–He was blamed for partiality by his daughter.

11. Answer: b

Explanation:

The correct answer is Pooja said that she wrote novels.

★ Key Points

- We make changes in tenses of reported speech only when the reporting verb is in the past tense .
- When the reported speech is an assertive sentence, we follow these steps-
 - Reporting verb 'said to' is changed into told .
 - connector 'that' is used in place of commas .
 - Tense of reported speech is changed accordingly. (in above sentence- 'write' changes into 'wrote')
 - personal Pronouns of reported speech are changed as per subject and object of reporting verb. Here, the first person- 'I' will change into 'she ' as per **subject** - 'Pooja'.

By following these steps we get the final sentence - "Pooja said that she wrote novels."

12. Answer: c

Explanation:

The correct spelling is Fallacious

★ Key Points

- **Fallacious:** If an idea, argument, or reason is **fallacious**, it is wrong because it is based on a fallacy.
- **Example:** *Their main argument is fallacious.*
- **Fallacious** is an adjective.

13. Answer: b

Explanation:

The correct answer is **An**.

★ Key Points

The word excellent starts with the vowel 'e'. The pronunciation starts with a vowel sound.

★ Important Points

Also, we use a/an when we talk about a singular person or thing. Hence, an is the correct answer here.

14. Answer: a

Explanation:

The correct answer is **Though**.

★ Key Points

Though(conjunction) : despite the fact that; although

None of the other three options fit in the context:

★ Additional Information

- **Through(preposition)** = via ; by
- **Thorough(adjective)** = careful
- **Thought(noun)** = idea; imagination

15. Answer: b

Explanation:

The correct answer is **No**.

★ Key Points

No: not any

★ Important Points

No is a determiner.

★ Additional Information

- **None:** not any
 - Although it means the same as 'no', none is a pronoun and we cannot use a pronoun in the given blank
- **Never:** at no time in the past or future; not ever
 - It is an adverb
- **Nothing:** not anything; no single thing
 - It is a pronoun.

16. Answer: a

Explanation:

The correct answer is **Proposes**.

★ Key Points

The entire paragraph is in the present tense. Since the subject of the sentence is the phrase 'No doctor', the correct tense will be third-person singular 'proposes'.

We always use the singular verb with the determiners- no, all, none, every etc.

17. Answer: c

Explanation:

The correct answer is **Necessity**.

★ Key Points

We can easily determine from the context of the line that the blank needs a noun.

Among the options, only '**necessity**' is a noun.

Necessity : the state or fact of being required.

★ Additional Information

The meaning of the other words:

- **Necessary** : needed to be done, achieved, or present; essential.
- **Necessarily** : it is the adverb form of 'necessary'
- **Necessaries** is not a valid word in English.

18. Answer: d

Explanation:

The correct answer is **Wine and dine**.

★ Key Points

Wine and dine: to entertain someone with food and drink, esp. expensive food and drink

★ Additional Information

Hedonistic : engaged in the pursuit of pleasure; sensually self-indulgent

19. Answer: d

Explanation:

The correct meaning of the given idiom is '**To hope that things will happen in the way that you want them to**'.

★ Key Points

- **To cross one's fingers** is a hand gesture commonly used to wish for luck. Occasionally it is interpreted as an attempt to implore God for protection. The gesture is referred to by the common expressions "**cross your fingers**", "**keep your fingers crossed**", or just "**fingers crossed**".
 - **Example:** *We will be keeping our fingers crossed that a quick thaw is on its way.*
- **Illustration by image:**

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20. Answer: a

Explanation:

The correct one word for the word group given in the question is ' **Honorarium**'.

★ Key Points

- Let's understand the meaning of all the words given in options:
 - **Honorarium**: a payment given for professional services that are rendered nominally without charge.
 - **Forfeit**: a fine or penalty for wrongdoing.
 - **Retribution**: punishment inflicted on someone as vengeance for a wrong or criminal act; revenge.
 - **Penalty**: a punishment imposed for breaking a law, rule, or contract.
- By the above explanations, we can say that **option 1 i.e. Honorarium** is the right substitute for the given word group.

★ Additional Information

- a payment made for somebody's professional services when no particular amount is charged for those services.
- **Example Sentence:** *We pay an honorarium of Rs 5000 to all our guest lecturers.*

21. Answer: d

Explanation:

The correct answer is Option 4.

★ Explanation

Let's take a look at the table below:

Word	Meaning
Resolute	determined; decided.
Intrepid	fearless; not afraid.
Immutable	unchanging over time or unable to be changed.
Transmute	change shape, form, or appearance to a more improved version.

Clearly, **Transmute** best expresses the above-mentioned phrase.

★ Hint

Mnemonic trick

WORDS	RHYMING WORD	TRICK
Immutable	immune	An immune person's health doesn't change with weather conditions.
Transmute	transition	it indicates change .

22. Answer: c

Explanation:

The correct answer is '**are living**'.

★ Key Points

- In a sentence, the verb must agree with the subject. The verb used is according to person and number.
- For example:
 - He comes . (singular subject, singular verb)
 - They come . (plural subject, plural verb)
- The subject 'we' is plural so it will take a plural verb i.e. 'are'.

- The sentence is in the **present continuous tense** so living will come along with 'are'.

The correct sentence: *The word we **are living** in is straight out of a dystopian novel.*

23. Answer: d

Explanation:

The correct answer is **No improvement**

★ Key Points

- **Began** is past tense.
- Since he is asking something that happened **before** the action of asking, so use **had** with **hunting**. Hence ruling out options 1) and 2).
- Since he is alive, he isn't dead, so he hasn't been **hunted down** yet, therefore ruling out option 3).

Option 4) is the correct answer.

24. Answer: d

Explanation:

- A can't be first since **our own languages it** doesn't make any sense, hence ruling out options 1) and 2).
- Languages consider foreign anymore = wrong. Languages aren't something that can consider or think, so **option C can't be first**.

Even our own languages have contributed words to it that the native speakers hardly consider foreign anymore.

Option 4) BAC is the correct answer.

25. Answer: c

Explanation:

The correct answer is Option 3) *Perennially*

- The **correct spelling** is **Perennially**
- **Parts of speech** - an adverb
- **Meaning** :- in a way that continues for a long or apparently infinite time; permanently.
- **Synonyms** - constantly, continually, continuously, incessantly, and perpetually.
- **Antonyms** - periodically, occasionally, intermittently,
- **Usage in a sentence**- "It is perennially tempting to suppose that there is something red and circular that the perceiver is aware of."

Perennially sounds "permanently" and is one of the **synonyms** for it.

Perennially = permanently

26. Answer: d

Explanation:

Here, Pattern is such that second word is a place or space where the sport given in first word is played or performed i.e.

Tennis : Court → Tennis is played in Court or tennis court.

Let's check all the options.

Sky : Yoga → Here sky is not a sport and yoga is not a place it's a sport.

Race : Room → Here Race is not done in the room but on the ground.

Wrestling : Court → Here Wrestling is not played in Court but inside the Ring.

Skating : Rink → Here Skating is played in Rink or Skating rink.

Hence, Skating : Rink is the correct alternative.

27. Answer: d

Explanation:

The logic followed here →

Second Number = (First Number + 5)

47: 52 → $47 + 5 = 52$.

Similarly,

73: ? → $73 + 5 = 78$.

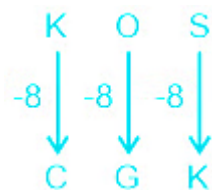
Hence, the correct answer is "**78**".

28. Answer: c

Explanation:

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

The pattern followed here is as follows,



Similarly,



Hence, the correct answer is " DHL ".

29. Answer: c

Explanation:

In all the pairs, the 2nd word is the place/home where the animal or bird of 1st word lives or are kept i.e.

Horse – Stable → Stable is the place where horses live.

Pig – Sty → Sty or pigsty is the place where pigs live.

Lion – Den → Den is the place where Lions live.

But in, Nest – Bird → Here 2nd word i.e. Bird is not a place where 1st word i.e. Nest live.

Thus, Nest – Bird is the odd pair.

30. Answer: d

Explanation:

The logic used here,

$$\text{Second Number} = (\text{First Number})^2$$

Let's check each option,

$$1) 12 - 144 \rightarrow 144 = (12 \times 12)$$

2) $8 - 64 \rightarrow 64 = (8 \times 8)$

3) $18 - 324 \rightarrow 324 = (18 \times 18)$

4) $2 - 12 \rightarrow 12 \neq (2 \times 2) \rightarrow$ **Doesn't satisfies the logic.**

Here, we can see that only Option 4 doesn't satisfy the logic.

Hence, the correct answer is "**2 - 12**".

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 $\rightarrow (-6)$ is done to each letter's positional value to get the next letter of the cluster.

Let's check each option as per the logic,

1) QKE:



2) SLF:



3) WQK:



4) OIC:



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

Hence, the correct answer is "SLF".

32. Answer: c

Explanation:

The correct order of the given words as they would appear in an English dictionary sequence is:-

5. Terrain

1. Terrible

4. Testify

3. Thank less

2. Thaw

Thus, 5, 1, 4, 3, 2 will be the correct sequence.

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

33. Answer: c

Explanation:

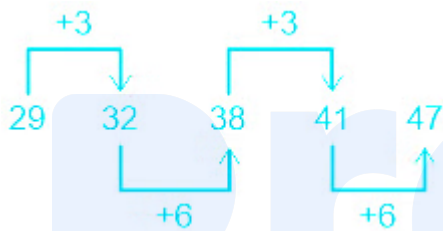
The logic followed here is:-



Hence, the correct answer is "50".

★ Alternate Method

The Logic followed here is:-



Hence, the correct answer is "50".

34. Answer: c

Explanation:

The pattern followed here is:-

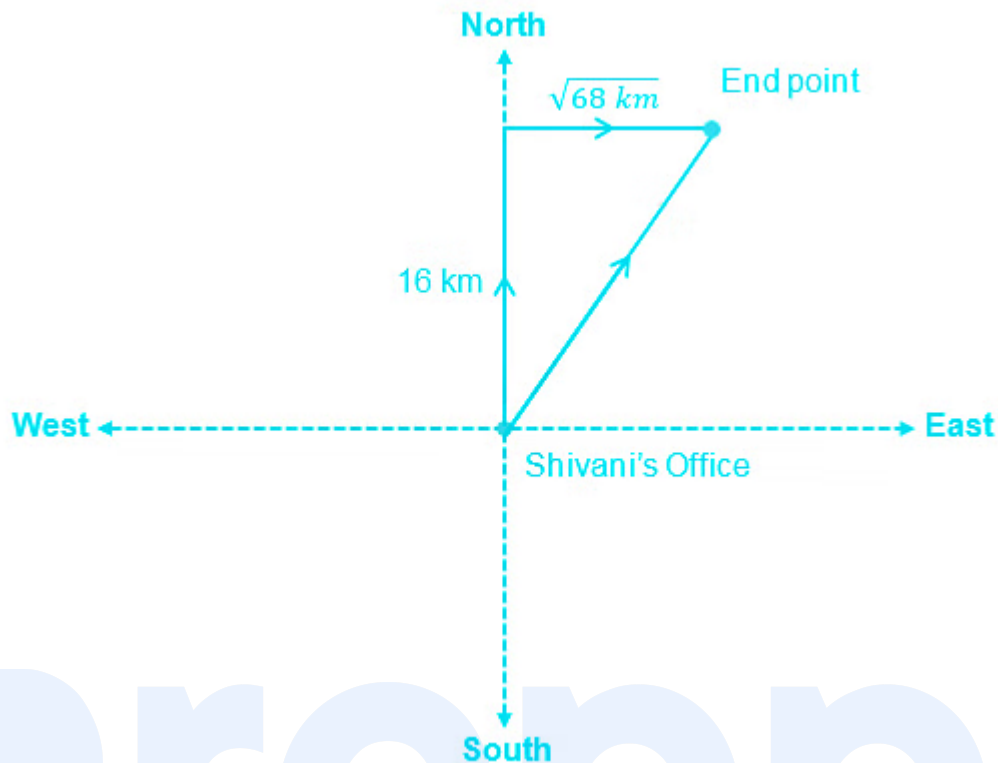


Hence, the correct answer is "UUT".

35. Answer: a

Explanation:

The diagram below shows the route taken by Shivani from her office,



Clearly, we can see that Shivani is in $\sqrt{16^2 + 68} = \sqrt{256 + 68} = \sqrt{324} = 18 \text{ km}$ North-East direction from her office.

36. Answer: d

Explanation:

Let's check each option,

- 1) NOTE → can be formed from **TE** LEPH **ON** E.
- 2) PHONE → can be formed from TELE **PHONE** .
- 3) LET → can be formed from **TEL** EPHONE.
- 4) ELSE → cannot be formed because there is no 'S' in TELEPHONE.

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

37. Answer: a

Explanation:

The pattern here is each letter of the given two words is coded as a particular number as shown below :

B	L	I	N	K	U	R	G	E
9	6	5	4	3	8	2	1	7

Hence the required conversion is,

B	U	R	N
9	8	2	4

Hence, 9824 is the correct alternative.

38. Answer: b

Explanation:

The pattern is as follows,



Hence, the missing term is GVM.

39. Answer: b

Explanation:

The logic followed here,

→ 1 and 2 is subtracted alternatively in the numbers to get the next number.

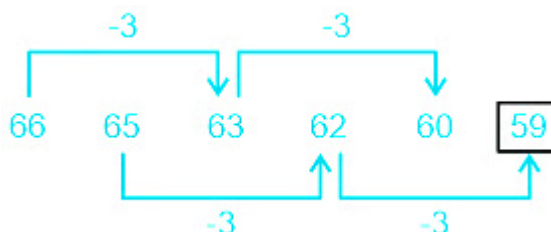


Hence, the correct answer is " 59 ".

★ Alternate Method

The logic followed here,

→ 3 has been subtracted from the terms to get the next alternate term of the series.



Hence, the correct answer is " 59 ".

40. Answer: c

Explanation:

Out of the given options, (46, 23, 11) is odd one because in all other options 2nd number is half of the 1st number and 3rd number is half of the 2nd number i.e.

(16, 8, 4) → $16 \div 2 = 8$ and $8 \div 2 = 4$.

(44, 22, 11) → $44 \div 2 = 22$ and $22 \div 2 = 11$.

(52, 26, 13) → $52 \div 2 = 26$ and $26 \div 2 = 13$.

But in (46, 23, 11) → $46 \div 2 = 23$ and $23 \div 2 = 11.5$ which is not equal to 11.

Thus, (46, 23, 11) is odd one.

41. Answer: d

Explanation:

The given equation is: $16 \times 20 \div 15 - 4 + 2 = ?$

Operator	-	÷	×	+
Meaning	×	÷	-	+

Given equation: $16 \times 20 \div 15 - 4 + 2$

After changing: $16 - 20 + 15 \times 4 \div 2$

According to the BODMAS rule,

$$= 16 - 20 + 15 \times \underline{4 \div 2}$$

$$= 16 - 20 + \underline{15 \times 2}$$

$$= \underline{16} - 20 + \underline{30}$$

$$= \underline{46} - 20$$

$$= 26$$

Hence, 26 is the correct alternative.

42. Answer: c

Explanation:

The given equation is: $16 \div 2 + 35 - 6 \times 10 = 33$

Let's check each option,

1) $\div$ and $\times \rightarrow 16 \times 2 + 35 - 6 \div 10 = 66.4 \neq 33$

2) $\times$ and $- \rightarrow 16 \div 2 + 35 \times 6 - 10 = 208 \neq 33$

3) $-$ and $+$ $\rightarrow 16 \div 2 - 35 + 6 \times 10 = 33 = 33$

4) $\div$ and $- \rightarrow 16 - 2 + 35 \div 6 \times 10 = 72.33 \neq 33$

Hence, by interchanging $-$ and $+$ the equation will be correct.

43. Answer: d

Explanation:

The pattern here is as follows, two numbers are given separated by 'Δ'. We get the answer by adding the two numbers and dividing it by 10 to get the answer.

Let A and B are two numbers such that AΔB then

$$A\Delta B = (A + B) \div 10 \text{ i.e.}$$

$$20\Delta 30 = (20 + 30) \div 10 = 50 \div 10 = 5.$$

$$90\Delta 40 = (90 + 40) \div 10 = 130 \div 10 = 13.$$

$$20\Delta 20 = (20 + 20) \div 10 = 40 \div 10 = 4.$$

$$\text{Similarly, } 90\Delta 80 = (90 + 80) \div 10 = 170 \div 10 = 17.$$

Hence, 17 is the correct alternative.

44. Answer: b

Explanation:

The pattern here is the letter 'C' and 'D' are two letters that appear on the left corner of second step of continuous series of 'AB'. After the second step 'CD' is in the left most corner. Now C will replace its place with the letter which is to the immediate right of D. In the next step D will replace its place with the letter which is to the immediate right of C and this process continues as shown below :

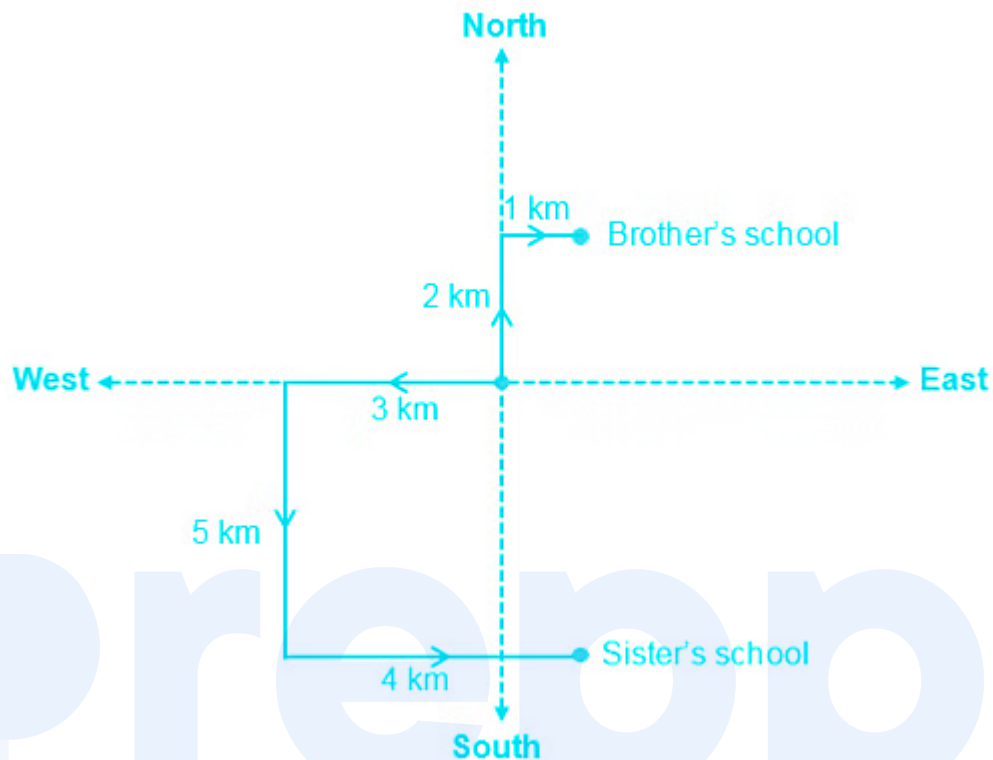
ABABABAB, **CD** ABABAB, A **DC** BABAB, AB **CD** ABAB, ABA **DC** BAB, ABAB **CD** AB.

Hence, ABABCDAB is the correct alternative.

45. Answer: b

Explanation:

The diagram below shows the route taken by two siblings from their home to their school,



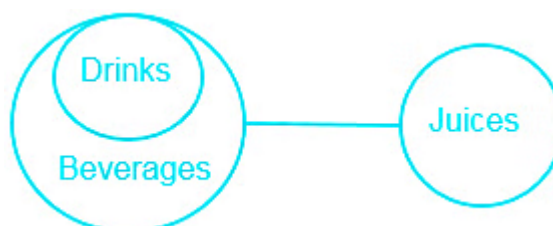
Clearly, we can see that the sister's school is 7 km in South direction with respect to the brother's school.

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46. Answer: d

Explanation:

Consider the following least possible Venn diagram,



Conclusions:

I. Some beverages are juices → False (It is not possible as no juices are beverages).

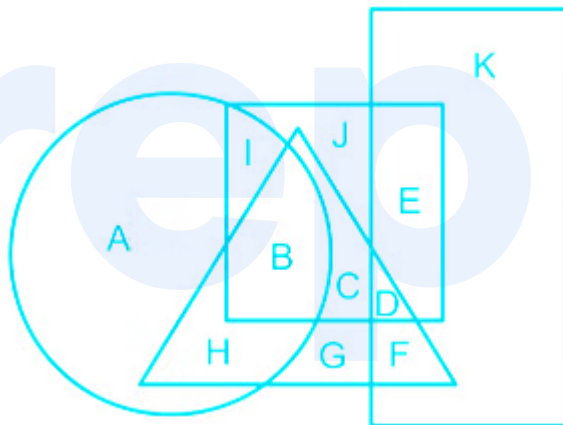
II. All juices are beverages → False (It is not possible as no juices are beverages).

Hence, neither conclusion I nor conclusion II follows.

47. Answer: b

Explanation:

Here, rectangle represents Therapists, circle represents Racers, triangle represents Sculptors and square represents Boxers.



Clearly, Boxers who are Racers are represented by the intersection of square and circle i.e. I.

Hence, I is the correct alternative.

48. Answer: c

Explanation:

The mirror image of the question will be :

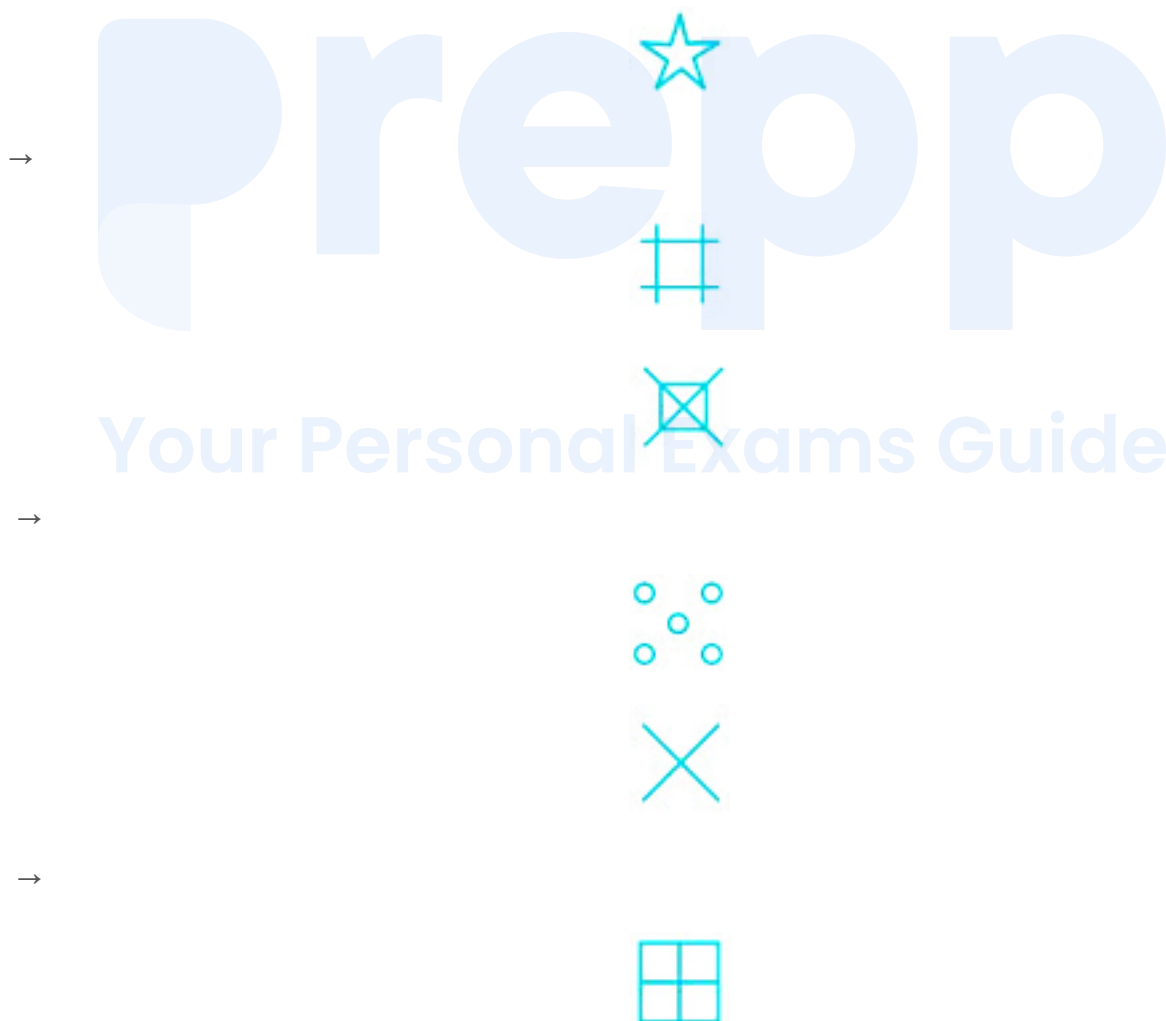


Hence, we can say that option 3 is the correct mirror image of the given question.

49. Answer: a

Explanation:

When the unfolded cube is folded, the following pairs of faces will be opposite to each other,



Now, let's check each option,

1)



→



and



are adjacent pairs in this cube which **contradicts the pattern of opposite pairs**. Thus, this cube can't be formed.

2)



→ Follows the pattern of opposite pairs.

3)



→ Follows the pattern of opposite pairs.

4)



→ Follows the pattern of opposite pairs.

Here, we can see that only cube in Option 1 cannot be formed.

Hence, the correct answer is " Option 1 ".

50. Answer: c

Explanation:

Let's check all the options,

1) 21, 55, 14, 98 → FVFN

2) 43, 96, 20, 88 → IODS

3) 24, 68, 69, 33 → CURE

4) 43, 87, 44, 89 → INJX

Thus, the correct option is 24, 68, 69, 33.

51. Answer: a

Explanation:

Let the number of students in the class be 'x'

No. of chocolates received by each student = $2x$

Total number of chocolates = $2x \times x$

$$\Rightarrow 2x^2 = 1800$$

$$\Rightarrow x^2 = 900$$

$$\Rightarrow x = \sqrt{900} = 30$$

$\therefore$ There are 30 students in the class

52. Answer: a

Explanation:

GIVEN:

Sum of four consecutive odd numbers is 328

CALCULATION:

Let the numbers be x , $(x + 2)$, $(x + 4)$ and $(x + 6)$

Sum of the numbers = $x + x + 2 + x + 4 + x + 6 = 4x + 12$

$$\Rightarrow 4x + 12 = 328$$

$$\Rightarrow 4x = 328 - 12 = 316$$

$$\Rightarrow x = 316/4 = 79$$

$$\therefore \text{The largest number} = x + 6 = 79 + 6 = 85$$

53. Answer: b

Explanation:

The intersection points of the lines are the vertices of the triangle

The given equations are:

$$x = 3y \text{ ----(1)}$$

$$x - y = 4 \text{ ----(2)}$$

$$x + y = 4 \text{ ----(3)}$$

Substituting eq. (1) in eq. (2), we get,

$$\Rightarrow 3y - y = 4$$

$$\Rightarrow y = 4/2 = 2$$

$$\Rightarrow x = 3(2) = 6$$

Substituting eq. (1) in eq. (3), we get,

$$\Rightarrow 3y + y = 4$$

$$\Rightarrow y = 4/4 = 1$$

$$\Rightarrow x = 3(1) = 3$$

Substituting eq. (2) in eq. (3), we get,

$$\Rightarrow y + 4 + y = 4$$

$$\Rightarrow y = 0$$

$$\Rightarrow x = 4$$

Hence, the three vertices of the triangle are A(6,2), B(3,1) and C(4, 0)

For the given coordinates of the vertices of a triangle ABC, the area is computed as,

$$\text{Area} = | [A_x(B_y - C_y) + B_x(C_y - A_y) + C_x(A_y - B_y)] / 2 |$$

$$\therefore \text{Area of the given triangle} = | [6(1 - 0) + 3(0 - 2) + 4(2 - 1)] / 2 | = | (6 - 6 + 4) / 2 | = 2 \text{ sq. units.}$$

54. Answer: a

Explanation:

Given equations,

$$4x - 9y + 13 = 0 \text{ ----(1)}$$

$$2x + 3y - 13 = 0 \text{ ----(2)}$$

Multiplying eq. (2) by 2 and subtracting from (1), we get,

$$\Rightarrow 4x - 9y + 13 - 4x - 6y + 26 = 0$$

$$\Rightarrow 15y = 39$$

$$\Rightarrow y = 39/15 = 2.6$$

Substituting in (2),

$$\Rightarrow x = [13 - 3(2.6)]/2 = 2.6$$

$\therefore$ There is only 1 solution that the given pair of linear equations have

55. Answer: b

Explanation:

For a given circle of radius R, and an arc with central angle C,

$$\text{Arc length} = 2\pi R \times (C/360^\circ)$$

Given, arc length = 16π and $C = 240^\circ$

$$\Rightarrow 16\pi = 2\pi R \times (240^\circ/360^\circ)$$

$$\Rightarrow R = 16 \times 3/4 = 12 \text{ units}$$

$\therefore$ The radius of the circle is 12 units

56. Answer: d

Explanation:

$$\text{Area of an equilateral triangle} = (\sqrt{3}/4) \times (\text{side})^2$$

Given, the area of triangle = $18\sqrt{3}$

$$\Rightarrow (\sqrt{3}/4) \times (\text{side})^2 = 18\sqrt{3}$$

$$\Rightarrow (\text{side})^2 = 18 \times 4 = 72$$

$$\therefore \text{Side of the triangle} = \sqrt{72} = 6\sqrt{2} \text{ units}$$

57. Answer: d

Explanation:

Given,

$$8\% \text{ of (Rahul's salary)} = 2250$$

$$\Rightarrow \text{Rahul's salary} = 2250/0.08 = \text{Rs. } 28125$$

Now,

$$\text{Rahul's salary} = (100 + 50)\% \text{ of (Rohit's salary)} = 1.5 \times (\text{Rohit's salary})$$

$$\therefore \text{Rohit's salary} = 28125/1.5 = \text{Rs. } 18750$$

58. Answer: a

Explanation:

Let the cost of the table and the chair be '9x' and '4x' respectively

$$\Rightarrow 9x - 4x = 1250$$

$$\Rightarrow 5x = 1250$$

$$\Rightarrow x = 1250/5 = 250$$

$$\therefore \text{Cost of the chair} = 4(250) = \text{Rs. } 1000$$

59. Answer: c

Explanation:**GIVEN:**

Ratio of X and Y in 165 litres of mixture = 6 : 5

FORMULA USED:

Ratio of X and Y in new mixture = Quantity of liquid X in new mixture : Quantity of liquid Y in new mixture

CALCULATION:

Quantity of liquid Y in 165 litres = $(5/11) \times 165 = 75$ litres

When 5 litres of liquid Y is added,

Quantity of new mixture = $165 + 5 = 170$ litres

Quantity of liquid Y in new mixture = $75 + 5 = 80$ litres

Quantity of liquid X in new mixture = $170 - 80 = 90$ litres

$\therefore$ Ratio of X and Y in new mixture = $90 : 80 = 9 : 8$

60. Answer: d

Explanation:

Sum of the 8 numbers = $8 \times 40 = 320$

Sum of first 3 numbers = $3 \times 46 = 138$

Sum of next two numbers = $2 \times 50 = 100$

Let the 6th number be 'x'

$\Rightarrow$ 7th number = $x + 6$

$$\Rightarrow 8^{\text{th}} \text{ number} = x + 10$$

Hence,

$$\Rightarrow 138 + 100 + x + x + 6 + x + 10 = 320$$

$$\Rightarrow 3x = 320 - 254$$

$$\Rightarrow x = 66/3 = 22$$

$$\therefore \text{The } 8^{\text{th}} \text{ number} = 22 + 10 = 32$$

61. Answer: b

Explanation:

The compound interest on a sum of Rs. P at R% per annum in one year,

When compounded annually, $CI = P[(1 + R/100) - 1] = PR/100$

When compounded half-yearly, $CI = P[(1 + R/200)^2 - 1]$

Given, P = Rs. 15000, R = 20%

When compounded annually, $CI = (15000 \times 20)/100 = \text{Rs. } 3000$

When compounded half-yearly, $CI = 15000 \times [(1 + 20/200)^2 - 1] = 15000 \times 0.21 = \text{Rs. } 3150$

$\therefore \text{Extra interest} = 3150 - 3000 = \text{Rs. } 150$

62. Answer: c

Explanation:

Given:

Profit of X = 20%

Profit of Y = 23%

Concept used:

C.P in case of profit = $(100 + P\%)$ of C.P

Calculation:

Let the cost price of shoes for X be Rs. A.

Profit of X = 20%

Cost price for Y = Selling price of X = $(100 + 20)\%$ of A = $1.2A$

Profit of Y = 23%

Price for Z = Selling price of Y = $(100 + 23)\%$ of $1.2A = 1.23 \times 1.2A = 1.476A$

$\Rightarrow 1.476A = 3321$

$\Rightarrow A = 3321/1.476 = 2250$

$\therefore$ Cost price of shoes for X is Rs. 2250

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63. Answer: c

Explanation:

Marked price = Rs. 3200

Selling price = Marked price – Discount = $(100 - 20)\%$ of $(100 - 10)\%$ of 3200

$= 0.8 \times 0.9 \times 3200 = \text{Rs. } 2304$

$\therefore$ Total discount = $3200 - 2304 = \text{Rs. } 896$

64. Answer: b

Explanation:

Since the options are based on inequality, we can initially assume the nearest perfect cubes and then proceed to solve the question.

As we know, $\sqrt[3]{8} = 2$

We can write,

$$\Rightarrow \sqrt[3]{9} > 2 \quad \text{-----(1)}$$

Similarly, $\sqrt[3]{125} = 5$

$$\Rightarrow \sqrt[3]{126} > 5 \quad \text{-----(2)}$$

Also, $\sqrt[3]{216} = 6$

$$\Rightarrow \sqrt[3]{217} > 6 \quad \text{-----(3)}$$

Adding the three equations, we get,

$$\Rightarrow \sqrt[3]{9} + \sqrt[3]{126} + \sqrt[3]{217} > 2 + 5 + 6$$

$$\Rightarrow \sqrt[3]{a} > 13$$

$$\Rightarrow a > (13)^3$$

$$\therefore a > 2197$$

65. Answer: a

Explanation:

If X can do a work in 27 days, Y will do the same work in 27/2 days

1 day work of X = $1/27$

1 day work of Y = $2/27$

$\therefore$ When they work together, part of work done in 1 day = $1/27 + 2/27 = 3/27 = 1/9$

66. Answer: a

Explanation:

The speed of train = $72 \text{ km/hr} = 72 \times \left(\frac{5}{18}\right) = 20 \text{ m/sec.}$

$\therefore$ Time taken by train to cross a pole = length of train/speed of train

$\therefore$ Time taken = $200/20 = 10 \text{ sec.} = 10/60 = 1/6 \text{ min.}$

67. Answer: c

Explanation:

From the given graph, it can be seen that:

Lowest monthly profit = Rs. 150 thousand

Second lowest monthly profit = Rs. 200 thousand

$\therefore$ Department E has the second lowest monthly profits

68. Answer: b

Explanation:

Monthly profit of department G = Rs. 350 thousand

Monthly profit of department B = Rs. 600 thousand

$\therefore$ Required ratio = $350 : 600 = 7 : 12$

69. Answer: d

Explanation:

Monthly profit of department F = Rs. 500 thousand

Monthly profit of department B = Rs. 600 thousand

$\therefore$ The monthly profit of department B is greater than that of department F by =
 $[(600 - 500)/500] \times 100 = 20\%$

70. Answer: d**Explanation:**

Total monthly profit of the seven departments = $400 + 600 + 300 + 150 + 200 + 500 + 350$

= Rs. 2500 thousand

$\therefore$ Total monthly profit = 20% of Total monthly revenue

$\therefore$ Total monthly revenue of company = $(2500 \times 10^3)/0.2 = \text{Rs. } 125 \times 10^5 = \text{Rs. } 125$ lakhs

71. Answer: b**Explanation:**

Let the length of the rectangle be 'l' cm

Breadth (b) = 7 cm

Diagonal (d) = 25 cm

Using Pythagoras theorem, we have,

$$\Rightarrow d^2 = l^2 + b^2$$

$$\Rightarrow l^2 = 25^2 - 7^2 = 625 - 49 = 576$$

$$\Rightarrow l = \sqrt{576} = 24 \text{ cm}$$

$$\therefore \text{Area of rectangle} = \text{length} \times \text{breadth} = 24 \times 7 = 168 \text{ cm}^2$$

72. Answer: d

Explanation:

Concept:

- Area of circle of radius $r = \pi r^2$
- Perimeter $= 2\pi r$
- Diameter $= 2 \times \text{radius} = 2r$
- Perimeter of semicircle $= \pi r + 2r$

Calculation:

Given that, area of a semi-circle with radius ' r ' $= \frac{\pi r^2}{2}$

$$\Rightarrow \frac{\pi r^2}{2} = 77$$

$$\Rightarrow r^2 = \frac{(77 \times 2)}{\pi} = 49$$

$$\Rightarrow r = \sqrt{49} = 7 \text{ cm}$$

Hence, by using the above concept,

$$\text{Perimeter of semi-circle} = \pi r + 2r$$

$$\Rightarrow \left(\frac{22}{7}\right) \times 7 + 2(7)$$

$$\Rightarrow 22 + 14 = 36 \text{ cm}$$

$\therefore$ Perimeter of semi-circle is 36 cm.

73. Answer: a

Explanation:

Radius of cylinder = $21/2 = 10.5$ cm

Height = 10 cm

$\therefore$ Total surface area of a cylinder with radius 'r' and height 'h' = $2\pi rh + 2\pi r^2$

$\therefore$ Total surface area of given cylinder = $2 \times (22/7) \times 10.5 \times 10 + 2 \times (22/7) \times 10.5 \times 10.5$
 $= 660 + 693 = 1353 \text{ cm}^2$

74. Answer: b

Explanation:

Given, in $\triangle XYZ$, $\angle Y = 90^\circ$ and $\angle X = 60^\circ$

Sum of angles of a triangle = 180°

$\Rightarrow \angle X + \angle Y + \angle Z = 180^\circ$

$\Rightarrow 60^\circ + 90^\circ + \angle Z = 180^\circ$

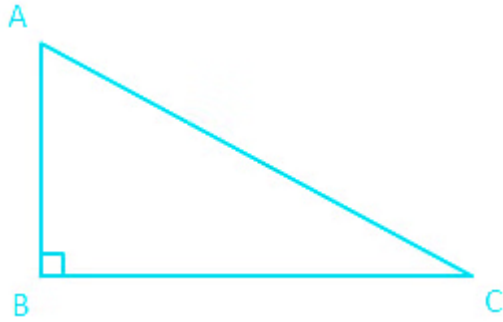
$\Rightarrow \angle Z = 180^\circ - 150^\circ = 30^\circ$

$\therefore (\cot Z + 2) = \cot 30^\circ + 2 = \sqrt{3} + 2$

75. Answer: b

Explanation:

In the given $\triangle ABC$,



$$\tan A = \text{opposite/adjacent} = BC/AB = 12/5$$

Given, $AB = 1 \text{ cm}$

$$\therefore BC = 12/5 = 2.4 \text{ cm}$$

76. Answer: d

Explanation:

The correct answer is International Monetary Fund.

★ **Key Points**

- **Special Drawing Rights (SDRs):-**
 - These are assets that are maintained by the IMF.
 - The unit of SDR is XDR.
 - These rights were created in 1969.
 - There are only five currencies in the world which are associated with SDR and those currencies are the Chinese Yuan, Japanese Yen, American dollar, Euro, and Pound Sterling.
- **International Monetary Fund:-**
 - The International Monetary Fund (IMF) is an organization of 189 member countries.
 - The IMF also known as the Fund, was conceived at a UN conference in Bretton Woods New Hampshire, United States, in July 1944.
 - The 44 countries at that conference sought to build a framework for economic cooperation to avoid a repetition of the competitive

devaluations that had contributed to the Great Depression of the 1930s.

- IMF funds come from two major sources – Quotas and Loans.
- Headquarters – Washington D.C., United States.
- President – Kristalina Georgieva.

★ Additional Information

• **World Bank:-**

- The World Bank is an international financial institution that provides loans and grants to the governments of low- and middle-income countries for the purpose of pursuing capital projects.
- It comprises two institutions : the International Bank for Reconstruction and Development (IBRD), and the International Development Association (IDA).
- The headquarters of the World Bank is in Washington D.C. of the United States of America (USA).
- It has a total membership of 189 countries .
- It was established in the year 1945.

• **Reserve Bank of India:-**

- RBI was established in India on 1st April, in Kolkata in 1935 under the Reserve Bank Of India Act, 1934.
- It was set up on the recommendation of the Hilton Young Commission.
- RBI is the central bank of India and is responsible for the issue and supply of Indian currency.
- RBI is the regulatory body of the Indian Banking system and it is also managing a country's Payment system.

• **World Trade Organization:-**

- WTO is headquartered in Geneva, Switzerland .
- The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations .
- The WTO facilitates trade in goods, services, and intellectual property among participating countries by providing a framework for negotiating trade agreements.
- It aims to reduce or eliminate tariffs, quotas, and other restrictions ; these agreements are signed by representatives of member governments

77. Answer: a

Explanation:

The correct answer is Second

- **Khadi and Village commission** was set up by the **Govt. of India** under the **Khadi and Village Industries Commission Act of 1956** . Its headquarters is in **Mumbai** . It is a statutory body. It comes under the **Ministry of Micro, Small and Medium enterprises** .
- The success of the First Five-year plan enhanced the **confidence of the leaders** . The **agriculture growth aim in the first plan was attained** , so the government quickly started looking beyond agriculture. **The second five-year plan targeted the industry, specifically heavy industry** . The target of **25% enhancement** in the **national income** was prescribed through instant industrialization.
- The **second five-year plan** was designed on the basis of the so-called **Mahalanobis model**. This was actually the **USSR model Indianized by PC Mahalanobis** , the father of the **Indian Statistical Institute**, and a close aide of Nehru.
- This model is considered to have set the **statistical base for state-directed investments and established the intellectual underpinnings of the license-raj** through a well explained **input-output model** . This Model recommended that there should be a focus on the **heavy industries** , which can take the Indian Economy to a long term greater growth path . *The* second five-year plan and **Industrial policy Resolution 1956** , which cleared the path for the improvement of the Public Sector and license raj; were based upon this model.

78. Answer: c

Explanation:

- The French East India Company acquire Pondicherry from the Sultan of Bijapur.

- French came in India in 1664 and started their trading activities. At same time, they were also finding new ways to expand in India.
 - Pondicherry made up of four regions like Yanam, Mahe, Karaikal and Pondicherry.
 - In 1962, the French gave Pondicherry to Indian Government by a treaty.
-

79. Answer: c

Explanation:

- Lord Dalhousie started the postage stamps in India in 1854 which gave Indians a new way to communicate through post cards in those years.
 - However, it was a step to make British Empire efficient in terms of fast communication during struggle of freedom.
-

80. Answer: c

Explanation:

Pele's Tear occur at the time of volcanic eruption. It is geological term for the small fragments of solidified lava drops and these are jet black in colour.

81. Answer: b

Explanation:

Edmund Hillary was from New Zealand and Tenzing Norgay was from Nepal. Mount Everest is the highest mountain peak in the world with the height of 8848 metres. Mount Everest lies in the Great Himalaya region of the Himalaya Mountain Range. It is located in Nepal.

82. Answer: c

Explanation:

Dance	State
Chhau	Jharkhand
Giddhaa	Punjab
<u>Ghumar</u>	Rajasthan
Bihu	Assam

83. Answer: b

Explanation:

Kaladan multi-modal transport project is the main project between India and Myanmar. It will connect the Eastern seaport of Kolkata with Rakhine state. It will reduce the distance between Kolkata and Sittwe by a great margin i.e. 1328 Km. Kaladan is a river in Myanmar on which this name has been taken.

84. Answer: b

Explanation:

Indira Gandhi Peace Prize was established in 1986. This price is given in the field of promoting international peace around the world. It is awarded by Gandhi Memorial trust in the memory of Indira Gandhi.

85. Answer: d

Explanation:

Maithili language is mainly spoken in Nepal region. An interested thing about this language is that it is prescribed in 22 scheduled languages in the constitution of India despite being the main language of Nepal. All other mentioned languages are spoken in Bangladesh except Maithili.

86. Answer: c

Explanation:

- That is the maximum number of electrons you can have in the valence, i.e. **outermost shell is 8.**
 - This is due to the filling of electrons under Aufbau principle or rule, also known as the diagonal rule.
-

87. Answer: a

Explanation:

In saturated carbon compounds, a compound which has a chain of atoms linked together by single bonds. In unsaturated compounds, atoms are linked together by double and triple bonds like alkenes and alkynes.

88. Answer: b

Explanation:

It is the process from one session to another session. Prorogation terminates a session.

Adjournment	Terminated a sitting for the particular working day, hours, weeks.
Dissolution	Terminated the term of Lok Sabha itself
Quorum	Minimum member in the house to continue the proceedings of the day; one tenth of total members

89. Answer: b

Explanation:

The correct answer is State Emergency.

★ Key Points

- State emergency is also known as the President's rule in laymen's language.
- A state emergency can be proclaimed on the order of the President with advice from the council of ministers.
- It is entertained under **article 356** of the Indian Constitution.

★ Additional Information

Financial emergency	Article 360
National emergency	Article 352
State Emergency	Article 356

90. Answer: d

Explanation:

- Rings of cartilage are present in the throat to ensure that the air passage does NOT collapse.
- Cartilage is a flexible tissue which is present in the windpipe or trachea. It helps the windpipe to move while breathing. It does not contain blood vessels or nerves.

Tendon	It connects muscles to the bone but it is inelastic in nature
Ligament	It is a connective tissue which joins bone to bone.
Bone	It is very hard whitish and makes up the skeleton.

91. Answer: c

Explanation:

Cell theory was a revolution in the evolution of animals on the Earth. It is a very basic theory on which the kingdom of organisms depends because each organism, unicellular or multicellular starts with a cell, the basic unit of life.

Theory of evolution	Change in the hereditary characteristics generation by generation; it was given by Charles Darwin
Theory of inheritance	Also known as the Sutton-Boveri theory; it identifies the importance of chromosomes in carrying genetic inheritance generation to generation
Theory of natural selection	It is the theory of survival as each organism depends upon some essential conditions to survive and it is the key mechanism of evolution through adaptation.

92. Answer: b

Explanation:

- In November 2017, at first meeting of Prabhari Officers, a Major Policy initiative was launched for the transformation of 115 backward districts across the country.
- This initiative was taken as a step towards making New India vision of Prime Minister Narendra Modi.
- In these 115 districts in which 35 are affected by left-wing extremism violence, 55 are LWE affected and another 15 are affected by the terrorism in Kashmir valley.

93. Answer: c

Explanation:

Excitonium is made up of a kind of boson. A boson can allow a matter to behave as a superconductor or superfluid or even an electronic crystal. It is a condensate form of excitons, according to researchers.

94. Answer: b**Explanation:**

P-notes are called participatory notes in business terms. P-notes are used by the foreign or overseas investor to invest in Indian stock market. Only those investors can invest who are registered with the SEBI.

95. Answer: b**Explanation:**

- NABARD Bill 2017 seeks to amend NABARD Act, 1981. In amended act, govt. is going to take 51% stakes in the NABARD. Govt. is going to share the capital which is held by the RBI.
- NABARD is responsible for the providing loans and credit facilities in rural and agricultural areas.

Authority	Function
SEBI- Securities and Exchange Board of India	To regulate stock market in India
TRAI-Telecom Regulatory Authority of India	To regulate Telecom operators in India
IRDAI-Insurance Regulatory and development Authority	To regulate insurance companies in India

96. Answer: c

Explanation:

CONCEPT:

- Momentum (p) : The product of mass and velocity is called momentum.

Momentum (p) = mass (m) × velocity (v)

CALCULATION:

Given that:

Here $v = 4 \text{ m/s}$ and $m = 8 \text{ kg}$

Momentum (p) = $8 \times 4 = 32 \text{ kg metre/second}$

97. Answer: b

Explanation:

CONCEPT:

- **Momentum (P)** : The product of mass and velocity is called momentum.
- The SI unit of momentum is kg m/s.
- Momentum (P) = Mass (m) × Velocity (v)

EXPLANATION:

Since, $P = m v$

Let the initial velocity of the body be v

Since the Mass of the body is constant

So, $P_1 = m v$ -----(i)

According to the question

The new velocity of the body = $2v$

New Momentum (P_2) = $m \times 2v$

$\Rightarrow P_2 = 2mv$ -----(ii)

On dividing (ii) by (i), we get

$$\frac{P_2}{P_1} = \frac{2mv}{mv}$$

$\Rightarrow P_2 = 2 P_1$

$\therefore$ The momentum will be doubled.

★ Key Points

- If the **velocity of a body is doubled then its momentum doubles** because velocity is directly proportional to momentum. So option 2 is correct.

98. Answer: b

Explanation:

The correct answer is Plate.

★ Key Points

- Each fragment of the Earth's crust is known as a Plate.
- Earth consists of **three parts** .
 1. The crust
 2. The mantle
 3. The core
- The Crust is **the outer layer** of the Earth and it is very thin compared to the core and mantle. It is made up of igneous, sedimentary, and metamorphic rocks.
- There are two types of crust viz **oceanic and continental**.
- The **mantle lies below the crust** and it is up to 2900 km thick.
- The core is **the centre of the earth**.

★ Additional Information

- Earth's crust consists of 15 to 20 moving plates known as **tectonic plates**.
- There are **seven major plates which form the continents**.
- There are **eight minor plates** in the earth's crust.

99. Answer: c

Explanation:

(a) Valentino Rossi won the Dutch TT MotoGP motor cycle race in 2017; statement A is wrong.

(b) Rishabh Pant was retained by the Delhi Daredevils in IPL 2018; so, statement is wrong.

(c) Statement C is completely correct.

100. Answer: b

Explanation:

The correct answer is Technological

★ Important Points

- Application software is a type of software or program that is designed to complete a specific task.
 - The first user deal with system software after that he/she deals with application software.
 - It is also known as an end-user program or a productivity program.
 - Examples of Application Software - Word processing software, Spreadsheets Software, Presentation, Graphics, CAD/CAM, Sending an email, etc.
- An Operating System (OS) is an interface between a computer user and computer hardware.
 - An operating system is software that performs all the basic tasks like file management, memory management, process management, handling input and output, and controlling peripheral devices such as disk drives and printers.