



Your Personal Exams Guide



NDA



CDS



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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 2)

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. immpenetrable
- b. impenetrable
- c. impanetrable
- d. immpanetrable

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)

If a country wants to

A - to listen to the World Bank, the

B - custodian of big business

C - prove it is business-friendly, it has

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

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".

The course (has been) a success with more than a thousand students joining it.

- a. have been
- b. is been
- c. was been
- 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)

That game (were interrupted) by the rains; it resumed an hour after, when the rains stopped.

- a. are interrupted
- b. was interrupt
- c. was interrupted
- 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)

Characterized by bitterness or resentment

- a. Piety
- b. Amity

c. Rancorous

d. Fidelity

-
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)

Instruct or improve someone morally or intellectually.

a. Hoodwink

b. Allude

c. Beguile

d. Edify

-
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)

Children should be seen and not heard

a. The voice of children is often drowned in company of adults.

b. Some children will seek attention by crying.

c. Children should not speak in the presence of adults.

d. Those children are likable who dress neatly.

-
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)

Be in the air

- a. Harmful gaseous effluents from a factory.
- b. To fly like a bird or a plane.
- c. When an emotion or idea is on everyone's mind.
- d. To be likely to happen.

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)

The English language is ____1____ complex in character that it can scarcely be learned by rule, and can ____2____ be mastered by the study of such idioms and phrases as are provided in this book; but just as care must be taken to place every accent or stress ____3____ the proper syllable in the ____4____ of every word it contains, so must the stress or emphasis be placed on the proper word in ____5____ sentence spoken.

proper word in ____5____ sentence spoken.

- a. all
- b. while
- c. every
- d. as

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)

The English language is ____1____ complex in character that it can scarcely be learned by rule, and can ____2____ be mastered by the study of such idioms and phrases as are provided in this book; but just as care must be taken to place every accent or stress ____3____ the proper syllable in the ____4____ of every word it contains, so must the stress or emphasis be placed on the proper word in ____5____ sentence spoken.

syllable in the ____4____ of every word

- a. pronounce
- b. pronounces
- c. pronounced
- d. pronunciation

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)

The English language is ____1____ complex in character that it can scarcely be learned by rule, and can ____2____ be mastered by the study of such idioms and phrases as are provided in this book; but just as care must be taken to place every accent or stress ____3____ the proper syllable in the ____4____ of every word it contains, so must the stress or emphasis be placed on the proper word in ____5____ sentence spoken.

accent or stress ____3____ the proper

- a. on
- b. in

c. into

d. to

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)

The English language is ____1____ complex in character that it can scarcely be learned by rule, and can ____2____ be mastered by the study of such idioms and phrases as are provided in this book; but just as care must be taken to place every accent or stress ____3____ the proper syllable in the ____4____ of every word it contains, so must the stress or emphasis be placed on the proper word in ____5____ sentence spoken.

and can ____2____ be mastered by the study

a. good

b. best

c. nice

d. fine

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)

The English language is ____1____ complex in character that it can scarcely be learned by rule, and can ____2____ be mastered by the study of such idioms and phrases as are provided in this book; but just as care must be taken to place every accent or stress ____3____ the proper syllable in the ____4____ of every word it contains, so must

the stress or emphasis be placed on the proper word in ____5____ sentence spoken.

The English language is ____1____ complex in character

- a. as
- b. to
- c. at
- d. so

14. Directions: 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. Ocurrance
- b. Occurrence
- c. Occurrence
- d. Occurence

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)

The teacher said, "Wow! You have done well."

- a. The teacher applauded him saying that he had done well.
- b. The teacher appreciated me.
- c. The teacher said wow, he had done well.

d. The teacher applauded him by saying wow.

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)

I will conquer it.

- a. It would conquer me.
 - b. It will be conquered by me.
 - c. Conquered it will be by me.
 - d. It will be conquer by me.
-

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

The first and decisive step

P: in the expansion of

Q: conquest of the Atlantic ocean

R: Europe overseas was the

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

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)

Antithesis

- a. Opposite
 - b. Reverse
 - c. Harmony
 - d. Conflict
-

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)

Unprecedented

- a. Exceptional
 - b. Bizarre
 - c. Fantastic
 - d. Known
-

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)

Amorous

- a. Detest
- b. Correct

- c. Erotic
 - d. Appreciate
-

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)

Winsome

- a. Repulsive
 - b. Charming
 - c. Ugly
 - d. Repellent
-

22. In the following question, the sentence provided 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)

----- citizen of India must know about our country's history, struggle, culture and other important things.

- a. Each
 - b. Any
 - c. Every
 - d. No
-

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.

What is it? _____ it wait?

- a. May
- b. Can't
- c. Would
- d. Is

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)

Along with Plato, Aristotle is considered the father of Western (1)/Philosophy, which from his teachings inherited almost its entire (2)/lexicon, including problems and methods of inquiry. (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)

She chose (1)/ to stayed (2)/ there for a while. (3)/ No error (4)

- a. 1

b. 2

c. 3

d. 4

Prepp

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General Intelligence

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

Elephant : Mammal :: ? : ?

- a. Crocodile : Mammal
- b. Snake : Rodents
- c. Rabbit : Mammal
- d. Whale : Reptile

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

56 : 30 :: 34 : ?

- a. 24
- b. 12
- c. 7
- d. 9

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

TOK : UQN :: ROL : ?

- a. SQO

- b. SLP
 - c. PQM
 - d. RHO
-

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

- a. Cone
 - b. Cylinder
 - c. Rectangle
 - d. Prism
-

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. 15 - 19
 - b. 17 - 21
 - c. 19 - 23
 - d. 11 - 13
-

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

- a. HFDB

- b. KIGD
 - c. VTRP
 - d. NLJH
-

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

- 1. Serious
- 2. Single
- 3. Salted
- 4. Sand
- 5. Sickle

- a. Single
 - b. Sand
 - c. Sickle
 - d. Serious
-

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

23, 29, 24, 30, 25, ?

- a. 30
- b. 31
- c. 26

d. 28

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)

EF, GI, IL, KO, ?

- a. MR
 - b. NP
 - c. MS
 - d. NQ
-

35. Raja, Komal, Rupal, Sneha and Tarun are sitting in a line facing south. Raja and Komal are sitting together. Rupal is sitting at west end and Sneha is sitting at east end. Tarun is neighbor of Komal and Rupal. Who is sitting in the middle? (+2, -0.5)

- a. Raja
 - b. Tarun
 - c. Komal
 - d. Rupal
-

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

VISITORS

- a. VISS

- b. VISIT
- c. SITOR
- d. SITE

37. In a certain code language, "POWER" is written as "RMYCT". How is "TABLE" written in that code language? (+2, -0.5)

- a. VYXED
- b. VYDJG
- c. VWEGT
- d. TGJVV

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

$$17 \times 18 \div 30 - 20 + 14 = ?$$

- a. 30
- b. 9
- c. 37
- d. 13

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

$$14 + 16 \div 40 \times 8 - 48 = 46$$

a. $\div$ and $\times$

b. $\times$ and $-$

c. $\div$ and $-$

d. and $+$

40. If $40 @ 8 = 50$, $30 @ 3 = 100$ and $10 @ 2 = 50$, then find the value of $20 @ 5$ (+2, -0.5)
= ?

a. 70

b. 50

c. 40

d. 90

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

PRQPQPQPQ, PQRQPQPQPQ, PQPRQPQPQ, PQPQRQPQPQ, PQPQPRQPQ,
-----.

a. PQPQPQRPQ

b. RPQPQPQPQ

c. PRQPQPQPQ

d. PQRQPQPQPQ

42. An eagle starts from its nest and flies 1 km East, then turns North and flies 2 km, then turns West and flies 7 km and finally turns to its left and flies 2 km. (+2, -0.5)

Where is it now with respect to its nest?

- a. 8 km West
- b. 6 km West
- c. 6 km East
- d. 8 km East

-
43. 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 : No umbrellas are raincoats

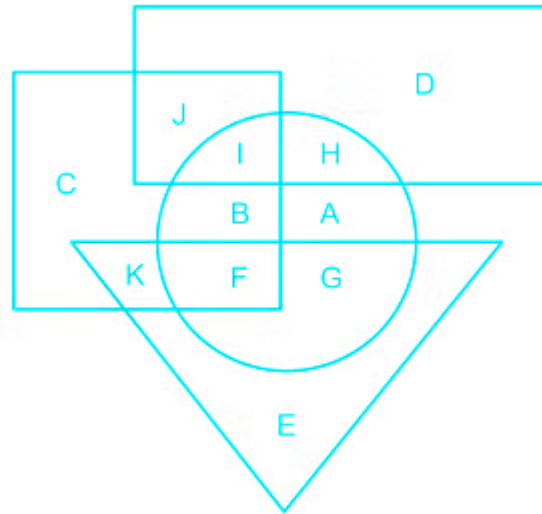
Statement II : Some jackets are umbrellas

Conclusion I : All raincoats are jackets

Conclusion II : All jackets are raincoats

- 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, rectangle represents lawyers, circle represents Bakers, triangle represents Singers and square represents Golfers. Which set of letters represents Golfer who is not Bakers? (+2, -0.5)



- a. IBF
- b. HAG
- c. CJK
- d. KFG

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)

ZCS, XAQ, VYO, TWM, ?

- a. SUJ
- b. RUK
- c. SVK
- d. RVJ

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

147, 149, 152, 156, 161, ?

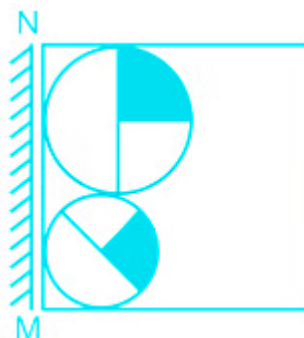
- a. 168
- b. 167
- c. 166
- d. 165

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. (2, 4, 8)
- b. (3, 9, 27)
- c. (4, 16, 32)
- d. (5, 25, 125)

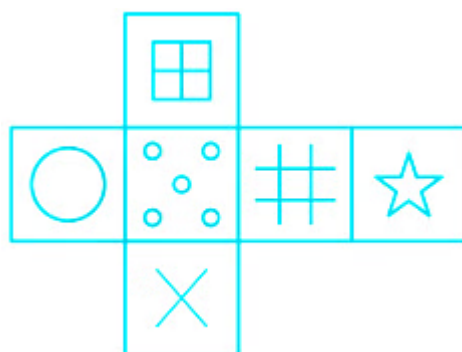
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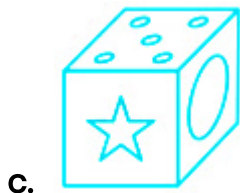
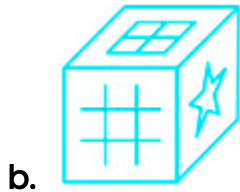
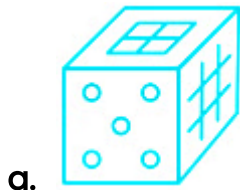
48. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure? (+2, -0.5)





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 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 'H' can be represented by 12, 34 etc and 'Z' can be represented by 85, 96 etc Similarly, you have to identify the set for the word 'KNIT'. (+2, -0.5)

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

a. 32, 76, 40, 87

b. 34, 67, 21, 85

c. 21, 69, 40, 68

d. 22, 59, 14, 68

Quantitative Aptitude

51. Ankit runs 324 metres every day for his fitness. According to his daily routine in how many days he covers 8.1 km. (+2, -0.5)

- a. 21
- b. 23
- c. 25
- d. 27

52. Simplify: $(13)^2 - (14)^2 + (17)^2 - 250 = \sqrt{?}$ (+2, -0.5)

- a. 196
- b. 169
- c. 121
- d. 144

53. Determine the value of $\frac{a^2 + b^2}{a^3 + b^3}$ when $a = 2 + \sqrt{3}$ and $b = 2 - \sqrt{3}$ (+2, -0.5)

- a. 0.27
- b. 0.42
- c. 0.58
- d. 0.93

54. What is the x-intercept of line joining (4, 2) and (6, 3)? (+2, -0.5)

- a. 0
- b. 1
- c. 2
- d. 3

55. Which of the following triangle is formed when the triangle has all the three medians of equal length? (+2, -0.5)

- a. Scalene
- b. Isosceles
- c. Equilateral
- d. Right angled

56. If the ratio of the angle bisector segments of the two equiangular triangles are in the ratio of 3 : 2 then what is the ratio of the corresponding sides of the two triangles? (+2, -0.5)

- a. 2 : 3
- b. 3 : 2
- c. 6 : 4
- d. 4 : 6

57. Which number is 30% less than 80% of 800? (+2, -0.5)

- a. 524

- b. 192
 - c. 448
 - d. 368
-

58. A box contain equal number of 1 rupee, 2 rupee and 5 rupee coins. If the total amount is Rs. 184, then how many coins of each type are there? (+2, -0.5)

- a. 18
 - b. 26
 - c. 25
 - d. 23
-

59. A 50 litre mixture of water and alcohol contains 10% alcohol. How much more alcohol must be added to make the strength of alcohol 40% in the new mixture? (+2, -0.5)

- a. 25
 - b. 30
 - c. 20
 - d. 23
-

60. In a committee there are 25 members. If two members whose ages are 64 years and 40 years are replaced by the two new members, then average age of 25 members is decreased by 2 years. What is the average age (in years) of the new members? (+2, -0.5)

- a. 27
 - b. 32
 - c. 38
 - d. 44
-

61. The simple interest on a sum of Rs. 3300 for 5 years is Rs. 1980. What is the annual rate (in percentage) of interest? (+2, -0.5)

- a. 10
 - b. 15
 - c. 12
 - d. 9
-

62. On selling 30 caps, a shopkeeper earns profit equal to the selling price of 3 caps. What is the profit percentage? (+2, -0.5)

- a. 12.5
 - b. 11.11
 - c. 10
 - d. 14.28
-

63. Selling price of an article is Rs. 2397 and discount offered is 15%. What is the marked price (in Rs.)? (+2, -0.5)

- a. 2756.5

b. 2856.6

c. 2740

d. 2820

64. If $3\sqrt{2} + \sqrt{18} + \sqrt{50} = 15.55$, then what is the value of $\sqrt{32} + \sqrt{72}$? (+2, -0.5)

a. 13.22

b. 10.83

c. 14.13

d. 16.54

65. Both X and Y together can complete a work in 12 days and Y alone can complete the same work in 30 days. In how many days will X alone complete the work? (+2, -0.5)

a. 15

b. 20

c. 18

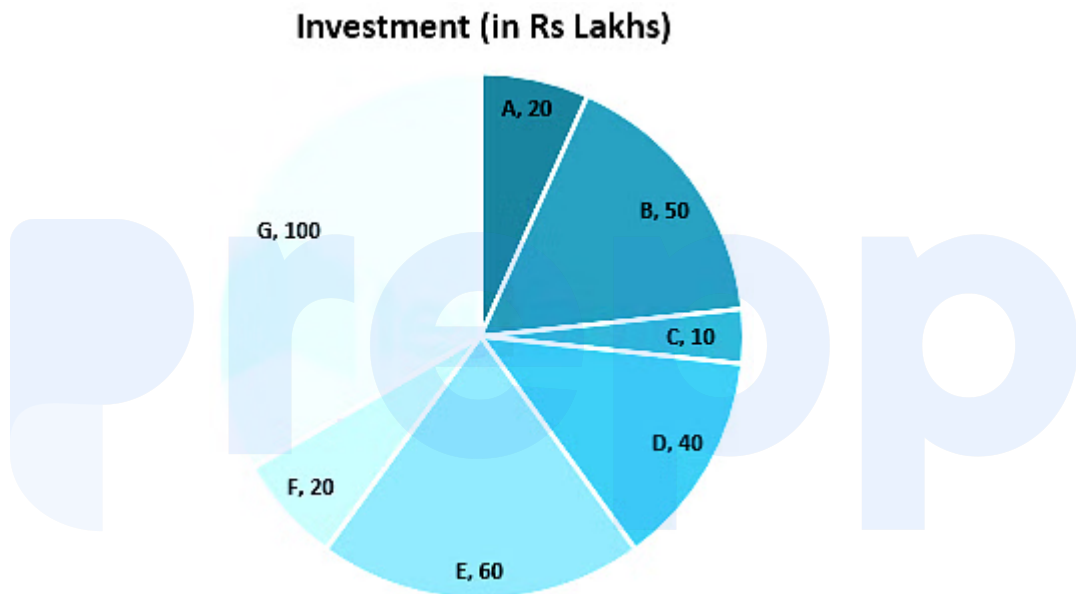
d. 16

66. A 600 metres long train is running at the speed of 81 km/hr. If it crosses a platform in 40 seconds, then what is the length of the platform (in metres)? (+2, -0.5)

a. 220

- b. 300
- c. 360
- d. 410

67. **Direction:** The pie chart shows the investments made by 7 partners in a business. Study the diagram and answer the following questions. (+2, -0.5)

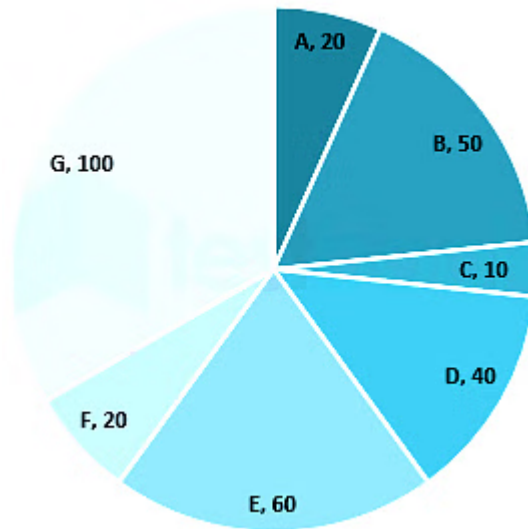


Which partner has made the second highest investment?

- a. B
- b. C
- c. D
- d. E

68. **Direction:** The pie chart shows the investments made by 7 partners in a business. Study the diagram and answer the following questions. (+2, -0.5)

Investment (in Rs Lakhs)



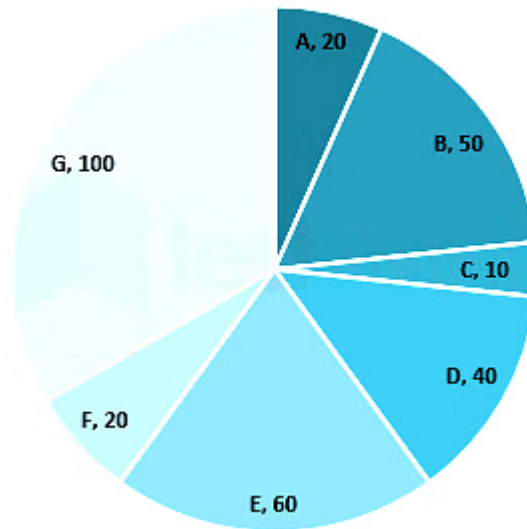
What is the total investment (in Rs. lakhs) in the business?

- a. 400
- b. 350
- c. 300
- d. 250

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69. **Direction:** The pie chart shows the investments made by 7 partners in a business. Study the diagram and answer the following questions. (+2, -0.5)

Investment (in Rs Lakhs)



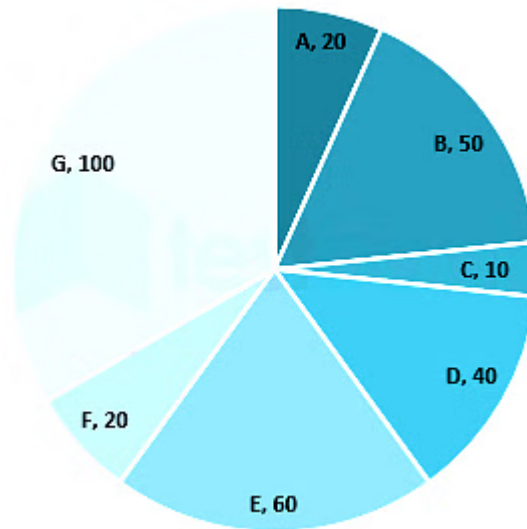
The measure of the central angle of the sector representing of partner E is _____ degrees.

- a. 60
- b. 36
- c. 50
- d. 72

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70. **Direction:** The pie chart shows the investments made by 7 partners in a business. Study the diagram and answer the following questions. (+2, -0.5)

Investment (in Rs Lakhs)



If the business makes Rs. 45 lakhs profit which is distributed between the partners how much does C get (in Rs. lakhs)?

- a. 3
- b. 2
- c. 1.5
- d. 2.5

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71. The lengths of the two diagonals of a rhombus are 7 cm and 24 cm. Find the length of its perimeter (in cm). (+2, -0.5)

- a. 25
- b. 100
- c. 75
- d. 50

72. If the perimeter of a semicircle is 36 cm, then find its area (in cm^2). (+2, -0.5)

- a. 154
- b. 35
- c. 77
- d. 70

73. The volume of a hemisphere is 19404 cm^3 . Find its diameter (in cm). (+2, -0.5)

- a. 42
- b. 21
- c. 84
- d. 63

74. What is the value of $(\tan 60^\circ - 1/3)$? (+2, -0.5)

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

75. In ΔUVW measure of angle V is 90° . If $\sin U = 24/25$, and $UV = 0.7 \text{ cm}$, then what is the length (in cm) of side VW? (+2, -0.5)

- a. 2.5
- b. 3
- c. 2.4
- d. 4

Prepp

Your Personal Exams Guide

General Awareness

76. The currency convertibility concept in its original form is originated in ----- (+2, -0.5)
- a. Taylor's agreement
 - b. Wells agreement
 - c. Bretton woods agreement
 - d. Symonds agreement
-
77. India has changed over to the decimal system of coinage in ----- (+2, -0.5)
- a. April, 1958
 - b. April, 1959
 - c. April, 1995
 - d. April, 1957
-
78. Which of the following Vedic texts mentioned the eastern and western seas for the first time? (+2, -0.5)
- a. Tandya Brahmana
 - b. Satpath Brahmana
 - c. Gopath Brahmana
 - d. Kaustiki Brahmana
-

79. Mir Hassan Dehlavi was in the court of which of the following? (+2, -0.5)

- a. Alauddin Khilji
 - b. Mubarak Khilji
 - c. Muhammad Bin Tughlaq
 - d. Firoj Tuglaq
-

80. Which of the following planets has the highest rotational motion? (+2, -0.5)

- a. Mercury
 - b. Venus
 - c. Mars
 - d. Jupiter
-

81. Which country forms the longest international border with India in the far east? (+2, -0.5)

- a. China
 - b. Bangladesh
 - c. Thailand
 - d. Vietnam
-

82. Saint Kabir was the disciple of whom? (+2, -0.5)

- a. Ramanujacharya
 - b. Chaitanya Mahaprabhu
 - c. Swami Haridas
 - d. Ramananda
-

83. What was the name of the operation launched by India to help Bangladesh in solving Rohingya crisis? (+2, -0.5)

- a. Operation Saksham
 - b. Operation Manavata
 - c. Operation Khushhali
 - d. Operation Insaniyat
-

84. Who among the following has been awarded the Dronacharya Award for the year 2017? (+2, -0.5)

- a. Bhupender Singh
 - b. Devender Nath
 - c. Syed Shahid Hakim
 - d. Roshan Lal
-

85. Which of the following country's national flag has a dragon on it? (+2, -0.5)

- a. Nepal

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

86. Which of the following is an example of thermoplastics? (+2, -0.5)

- a. Bakelite
 - b. Melamine
 - c. PVC
 - d. None of the above
-

87. Which among the following has highest electron affinity? (+2, -0.5)

- a. Chlorine
 - b. Fluorine
 - c. Helium
 - d. Xenon
-

88. If any Fundamental Right of a citizen is breached then under Article 226 of Indian Constitution he can move to _____. (+2, -0.5)

- a. Prime minister of India
- b. Chief justice of India
- c. President of India

d. High Court of State

89. What is the minimum age required to become a member of municipality? (+2, -0.5)

- a. 15 years
 - b. 20 years
 - c. 21 years
 - d. 25 years
-

90. In Paramecium, the food is moved to a specific spot by the movement of (+2, -0.5)
----- which cover the entire surface of the cell.

- a. Cilia
 - b. Villi
 - c. Pseudopodia
 - d. Vacuole
-

91. Which among the following is respiratory pigment in human beings? (+2, -0.5)

- a. Melanin
 - b. Haemoglobin
 - c. Rhodopsin
 - d. Bilirubin
-

92. In July 2017, the central government has set the investment limit per fiscal year for 'Hindu Undivided Family' to _____ kg under 'Sovereign Gold Bonds Scheme'. **(+2, -0.5)**

- a. 2
 - b. 10
 - c. 4
 - d. 15
-

93. China has successfully launched two Beidou-3 satellites on board of which carrier rocket? **(+2, -0.5)**

- a. Kuaizhou
 - b. Chang-4
 - c. Simorgh
 - d. Long march-3B
-

94. In May 2017, the base year of All-Indian WPI (Wholesale Price Index) has been revised from 2004-05 to _____. **(+2, -0.5)**

- a. 2010-11
 - b. 2015-16
 - c. 2011-12
 - d. 2016-17
-

95. From May 2017, the Real estate act has come into effect. It aims to protect the interests of _____. (+2, -0.5)

- a. Bureaucrats
- b. Home buyers
- c. Lenders
- d. None of the above

96. Calculate the frequency (in Hz) of a sound wave of wavelength 4m travelling with a speed of 200 m/s. (+2, -0.5)

- a. 50
- b. 800
- c. 100
- d. 400

97. The numerical value of a physical quantity is its _____. (+2, -0.5)

- a. Vector
- b. Magnitude
- c. Direction
- d. Property

98. Humidity is a measure of the _____. (+2, -0.5)

- a. Pressure in the air
 - b. Viscosity of the air
 - c. Air resistance
 - d. Moisture in air
-

99. Which of the following given below are correct?

(+2, -0.5)

- a. Aryan Tari won the 2017 world junior chess championship.
 - b. Dustin Johnson won the golf 2017 WGC-Dell technologies match play.
 - c. Rafael Nadal won the tennis 2017 Wimbledon championship men's singles.
- a. Only a
 - b. A and b
 - c. A, b and c
 - d. None of the above
-

100. Books in electronic formats are called _____.

(+2, -0.5)

- a. i-books
- b. e-books
- c. e-library
- d. e-learning

Answers

1. Answer: b

Explanation:

The correct answer is 'Impenetrable'

★ Key Points

- The correct spelling is 'Impenetrable' and the meaning of this word is- 'Impossible to pass through or enter.'
- Let's see an example-
 - His books are notoriously impenetrable.

2. Answer: b

Explanation:

The correct answer is 'CAB'

★ Key Points

- **In the fixed sentence**, the last word is 'to' which is a preposition and we know that it is going to make an infinitive phrase so we need a verb after this. The verb is written in part C.
- **At the last of sentence C**, the word given is 'has' that makes the perfect tense or a modal verb 'has to' as it cannot make a perfect tense because there no third form of the verb given. **Hence, the second part is 'A'**

So the correct sentence is-*If a country wants to prove it is business-friendly, it has to listen to the World Bank, the custodian of big business.*

3. Answer: d

Explanation:

The correct answer is '**No improvement**'

★ Key Points

- In the given sentence, 'has' is used for the subject 'course' which is a singular noun. 'been' is the third form of the verb 'be'.
- 'With more than a thousand students joining it' is a phrase that tells that the action is still continuing and in-process. This action was started in the past hence, we need to use the perfect tense which is correctly used in the sentence.

So the correct sentence is- *The course has been a success with more than a thousand students joining it.*

4. Answer: c

Explanation:

The correct answer is '**was interrupted**'

★ Key Points

- The given bracketed part is to be replaced with 'was interrupted' because the subject of the sentence is 'game' which is a singular noun hence use the singular verb with it.
- We cannot use the present tense here, because the subordinate clause 'when the rains stopped' is in the past tense. Hence use the past tense in the main clause too.

So the correct sentence is- *That game was interrupted by the rains; it resumed an hour after, when the rains stopped .*

5. Answer: c

Explanation:

The correct answer is '**Rancorous**'

★ Key Points

- Let's see the meaning of the given words-
 - **Piety** → means 'the quality of being pious or reverent'
 - **Amity** → means 'friendly relations'
 - **Rancorous** → means 'bitterness and resentment'
 - **Fidelity** → means 'continuing loyalty to a person'
- Hence, according to the meaning of the given words, the correct answer is '**Rancorous**'

6. Answer: d

Explanation:

The correct answer is '**Edify**'

★ Key Points

- Let's see the meaning of the given words-
 - **Hoodwink** → means 'deceive or trick'
 - **Allude** → means 'hint at'
 - **Beguile** → means 'trick into doing something'
 - **Edify** → means 'instruct or improve morally; intellectually'
- So according to the meaning of the given words, the correct answer is '**Edify**'

7. Answer: c

Explanation:

The correct answer is ' **Children should not speak in the presence of adults**'

★ Key Points

- The meaning of the given idiom '**children should be seen and not heard**' means '**you think children should behave well and be quiet**'
- So according to the meaning the nearest meaning is '**Option 3**'

8. Answer: c

Explanation:

The correct answer is '**Be in the air**'

★ Key Points

- The meaning of the given idiom '**Be in the air**' is '**to be going to happen very soon**'
Or '**if a feeling is in the air, a lot of people feel it at the same time**'
- Let's see an example–
 - Here was a sense of excitement in the air.

9. Answer: c

Explanation:

The correct answer is '**every**'

★ Key Points

- In the given blank, we need a determiner because before the blank the preposition 'in' is given and we know that with the preposition we usually use the

prepositional object which can be a noun/pronoun/gerund here the prepositional object is 'sentence' for this noun we need a determiner

- In the given options-
 - **All-** is a pronoun
 - **While-** is conjunction.
 - **Every-** is a determiner.
 - **As-** is an adverb.
- hence, the correct answer is '**every**'

10. Answer: d

Explanation:

The correct answer is '**Pronunciation**'

★ Key Points

- **In the given blank**, we need a noun because before the blank there is a definite article. Hence, in the option, there is only one singular noun which is 'pronunciation.'
- *The meaning of this word is- the way in which the word is pronounced.*
- 'Pronounced' is a past participle and 'pronounce' is a verb also, 'pronounces' is a plural noun.

So the correct answer is '**Option 4**'

11. Answer: a

Explanation:

The correct answer is '**on**'

★ Key Points

- *The meaning of the word 'Stress' → pressure; gives particular emphasis or importance.*
- With this word, we usually use the preposition 'on' that means 'about or concerning something.'

So the correct answer is 'on'

12. Answer: b

Explanation:

The correct answer is '**best**'

★ Key Points

Reading the above sentence we find that:

- The sentence is talking about English and how to master it.
- In the given blank we find that the verb '**be mastered**' is written.
- But this verb in itself has little meaning and it should be accompanied by an **adverb**.
- And the adverb should convey the degree to which the action of mastering can be done.

★ Important Points

Looking at the options we find that:

- The word **best** also acts as an adverb which means to the **highest degree**.
- This gives complete meaning to the sentence i.e to master English to the **highest degree**.

Thus the sentence will be: 'and can **best** be mastered by...'

Therefore we can conclude that the correct answer is **best**.

13. Answer: d

Explanation:

The correct answer is 'So'

★ Key Points

- 'So' is an adverb that is used to show the meaning 'to such a great extent.'
- 'So that' in this phrase 'that' is used to give the result.
- **In the given sentence**, The English Language is So complex in character that it can scarcely be learned by rule. (Scarcely be learned by rule is the result of the statement given before it.)

So the correct answer is 'Option 4'

14. Answer: c

Explanation:

The correct answer is 'Occurrence'

★ Key Points

- The correct spelling is 'Occurrence'
- **The meaning of the given word is-** An occurrence is something that happens.
- Let's see an example-
 - 'The food queues have become a daily occurrence across the country.'

15. Answer: a

Explanation:

The correct answer is **'The teacher applauded him saying that he had done well.'**

★ 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.)
- The given sentence is an exclamatory sentence follow the table for exclamatory sentences-

Wow!	State of wonder.
Alas!	Sate of sorrow.
Hurrah!	State of joy.

- The given sentence speech can be changed in two ways- the first one is 'applauded' and the second one 'exclaimed with wonder' as the second one is not given in the options then choose the first one as your answer.

16. Answer: b

Explanation:

The correct answer is 'It will be conquered by me.'

★ Key Points

- The following things to be remembered while changing the active voice into the passive voice-
 - **Firstly**, check the tense of the sentence because it is not going to be changed in the passive voice.
 - **Secondly**, check whether the sentence has an object in it. If it doesn't then go for the infinitive phrase.
 - The structure of the passive voice is- Subject + Verb (be) + V₃ (past participle) + by + Object.
- So according to the steps, the correct passive voice of the given sentence is- *it will be conquered by me.*

17. Answer: c

Explanation:

The correct answer is 'PRQ'

★ Key Points

- In the fixed sentence, the last word is 'step' is the subject of the sentence and we need the verb for this singular subject which is written in sentence 'R' but it is not

going to be the first part because it makes the whole sentence contextually incorrect.

- So, the first sentence will be 'P' i.e. 'in the expansion of'
- **'of' is a preposition and after the preposition,** we need a prepositional object which is going to be a noun/pronoun/gerund/, and the noun is written in 'R' i.e. Europe overseas.

So the correct sentence is—The first and decisive step in the expansion of Europe overseas was the conquest of the Atlantic Ocean.

18. Answer: c

Explanation:

The correct answer is **'Harmony'**

★ Key Points

- Let's see the meaning of the given words—
 - **Antithesis** → means 'a person or thing that is the direct opposite of another'
 - **Opposite** → means 'situated on the other or further side; facing'
 - **Reverse** → means 'move backward'
 - **Harmony** → means 'agreement or concord'
 - **Conflict** → means 'a serious disagreement or argument'
- So according to the meaning of the given words, the correct answer is **'harmony'**

19. Answer: d

Explanation:

The correct answer is **'known'**

★ Key Points

- Let's see the meaning of the given words-
 - **Unprecedented** → means 'never done or known before'
 - **Exceptional** → means 'unusual; not typical or unusually good.'
 - **Bizarre** → means 'very strange or unusual'
 - **Fantastic** → means 'imaginative or fanciful; remote from reality.'
 - **Known** → means 'recognized, familiar, or within the scope of knowledge.'
 - So according to the meaning of the given words, the correct answer is '**Known**'
-

20. Answer: c

Explanation:

The correct answer is '**Erotic**'

★ Key Points

- Let's see the meaning of the given words-
 - **Amorous** → showing or feeling lustful desire.
 - **Detest** → means 'dislike'
 - **Correct** → means 'free from error; true or right'
 - **Erotic** → means 'relating to or tending to arouse excitement'
 - **Appreciate** → means 'recognize the value or significance of.'
 - So according to the meaning of the given words, the correct answer is '**Erotic**'
-

21. Answer: b

Explanation:

The correct answer is '**charming**'

★ Key Points

- Let's see the meaning of the given words-
 - **Winsome** → means 'attractive or appealing'

- **Repulsive** → means 'intense distaste or disgust'
- **Charming** → means 'delightful and attractive or very polite.'
- **Ugly** → means 'unpleasant or repulsive'
- **Repellent** → means 'able to repel a particular thing; impervious to'
- So according to the meaning of the given words the correct answer is 'charmng'

22. Answer: c

Explanation:

The correct answer is '**Every**'

★ Key Points

In the given blank, we need to use '**every**' in the blank

- **According to grammar**, '**every**' is a determiner that is used to show 'for more than two people or group' and 'each' is a determiner or a distributive pronoun that is used for 'for two or more than two'
- **In the given sentence**, the subject is 'citizen' hence for this we need a determiner we cannot use 'each' as it is a determiner but contextually it would be incorrect. hence, use '**every**' to convey the meaning of '*nearly, almost, approximately, roughly*'
- Let's see an example-
 - They have revised every concept.
 - They would go to that temple every Sunday.

So the correct sentence is- *Every citizen of India must know about our country's history, struggle, culture, and other important things.*

23. Answer: b

Explanation:

The correct answer is '**Can't**'

★ Key Points

- In the given blank, we need to use '**can't**'
- **According to grammar**, '**can**' is a modal verb and it is used to express ability or to say that something is possible.
- Let's see an example-
 - Can you speak Japanese?
- Hence, in the given sentence, '**Can**' is used to show the possibility.

So the correct sentence is- *What is it? **Can't** it wait?*

24. Answer: d

Explanation:

The correct answer is 4 i.e **No error**.

★ Key Points

- Reading the above sentence we find that it is devoid of any error.
 - Therefore the correct answer is **No error**.

★ Mistake Points

- One might think that the error lies in **part 2** of the sentence in the word "**which**" that comes after **Philosophy**.
 - However here the word which is referring to the subject **Western Philosophy** and **not** Aristotle or Plato.
-

25. Answer: b

Explanation:

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

★ Key Points

In the **second part of the sentence**, the usage of '**stayed**' is incorrect. Instead, use '**stay**'

- **According to grammar** , whenever an infinitive phrase is used we have to use the base form of the verb with the preposition 'to'.
- Let's see an example-
 - He asked me not to be late.

So the correct sentence is- *She chose **to stay** there for a while.*

26. Answer: c

Explanation:

Elephant is a Mammal.

Similarly, Rabbit is also a Mammal.

Hence, Rabbit : Mammal is the correct answer.

27. Answer: b

Explanation:

The pattern followed here is:

$$5 \times 6 = 30$$

Similarly,

$$3 \times 4 = 12$$

Hence, 12 is the correct answer.

28. Answer: a

Explanation:

$$\rightarrow T - 5 = O, O - 4 = K$$

$$\rightarrow U - 4 = Q, Q - 3 = N$$

$$\rightarrow R - 3 = O, O - 3 = L$$

By following the same pattern,

$$\rightarrow S - 2 = Q, Q - 2 = O$$

Hence, SQO is the correct answer.

29. Answer: c

Explanation:

Cone, Cylinder and Prism are 3 dimensional figures, but Rectangle is 2 dimensional figure.

Hence, Rectangle is the correct answer.

30. Answer: d

Explanation:

$$1) 15 + 4 = 19$$

$$2) 17 + 4 = 21$$

3) $19 + 4 = 23$

4) $11 + 4 = 15$

Clearly, 11 - 13 does not follow the same pattern.

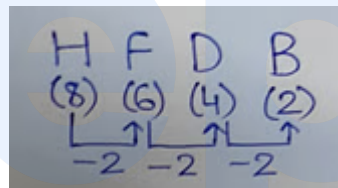
Hence, 11 - 13 is the correct answer.

31. Answer: b

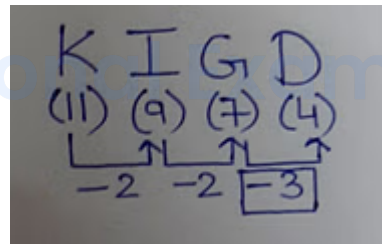
Explanation:

The pattern followed here is:-

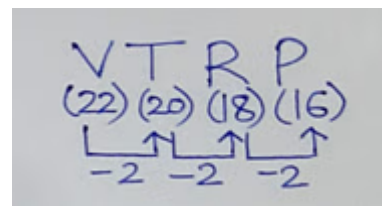
1) HFDB



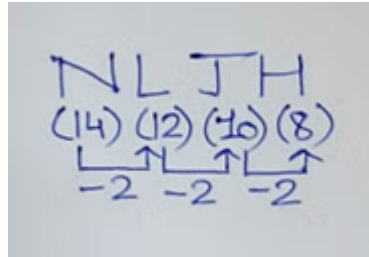
2) KIGD



3) VTRP



4) NLJH



As can be seen clearly from the above that KIGD does not follow the same pattern and thus, is the odd one out.

Hence, the correct answer is "KIGD".

32. Answer: d

Explanation:

The dictionary arrangement order would be:

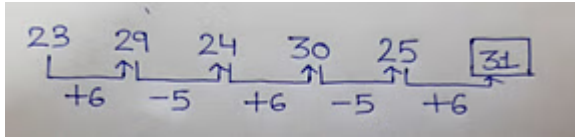
1. Sal ted
2. San d
3. Se rious
4. Sic kle
5. Sin gle

Hence, SERIOUS is the correct answer.

33. Answer: b

Explanation:

The pattern followed here is:-

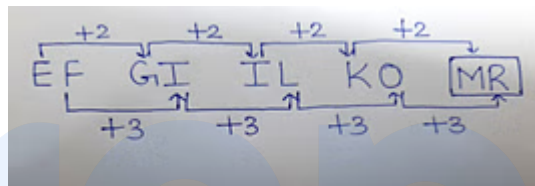


Hence, the correct answer is "31".

34. Answer: a

Explanation:

The pattern followed here is:-



As can be seen clearly from the above that the next term in the given series is 'MR'

Hence, the correct answer is "MR".

35. Answer: c

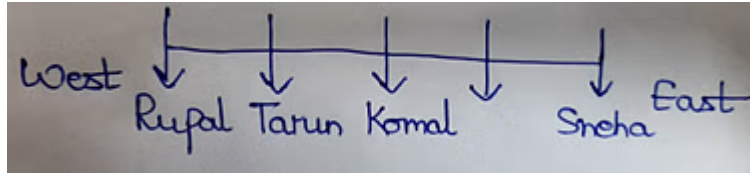
Explanation:

Given → Raja, Komal, Rupal, Sneha and Tarun are sitting in a line facing south.

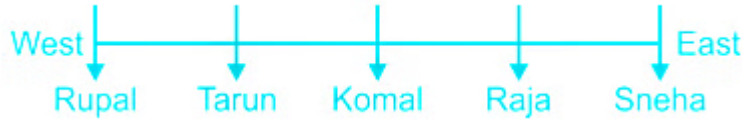
1) Rupal is sitting at west end and Sneha is sitting at east end.



2) Tarun is neighbor of Komal and Rupal.



3) Raja and komal are sitting together.



As can be seen clearly from the above that Komal is sitting in the middle.

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

36. Answer: d

Explanation:

- 1) VISS → VIS ITOR S (Can be formed)
- 2) VISIT → VISIT ORS (Can be formed)
- 3) SITOR → VI SITOR S (Can be formed)
- 4) SITE → VI SIT ORS (Cannot be formed because E is missing)

Clearly, the word 'VISITORS' does not contain the letter E. Hence, site cannot be formed using the letter of the given word.

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 is:-

POWER is written as RMYCT

P	O	W	E	R
(16)	(15)	(23)	(5)	(18)
↓+2	↓-2	↓+2	↓-2	↓+2
R	M	Y	C	T
(18)	(13)	(25)	(3)	(20)

Similarly,

TABLE is written as VYDJG

T	A	B	L	E
(20)	(1)	(2)	(12)	(5)
↓+2	↓-2	↓+2	↓-2	↓+2
V	Y	D	J	G
(22)	(25)	(4)	(10)	(7)

Hence, the correct answer is "VYDJG".

38. Answer: a

Explanation:

Solution :

Symbols	-	+	÷	×
Codes	÷	-	×	+

Using the code language symbols the equation will be :

$$17 + 18 \times 30 \div 20 - 14$$

$$17 + 18 \times 1.5 - 14$$

$$17 + 27 - 14$$

$$44 - 14 = 30$$

Hence 30 is the correct answer.

39. Answer: a

Explanation:

$$14 + 16 \div 40 \times 8 - 48 = - 30.8$$

However, after interchanging the equation $\div$ and $\times$

$$14 + 16 \times 40 \div 8 - 48$$

$$14 + 16 \times 5 - 48$$

$$14 + 80 - 48$$

$$94 - 48 = 46$$

Hence $\div$ and $\times$ is the correct answer.

40. Answer: c

Explanation:

$$40 @ 8 \rightarrow (40 \div 8) \times 10 = 50$$

$$30 @ 3 \rightarrow (30 \div 3) \times 10 = 100$$

$$10 @ 2 \rightarrow (10 \div 2) \times 10 = 50$$

Similarly,

$$20 @ 5 \rightarrow (20 \div 5) \times 10 = 40$$

Hence, 40 is the correct answer.

41. Answer: a

Explanation:

The pattern followed here is:-



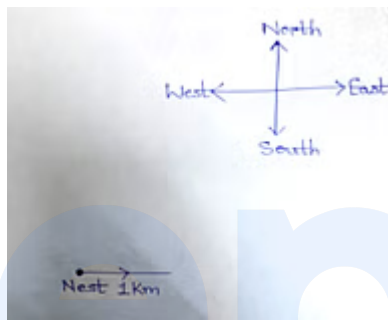
Hence, the correct answer is "PQPQPQR PQ".

42. Answer: b

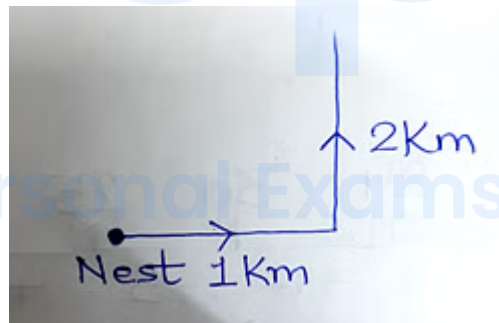
Explanation:

Given:-

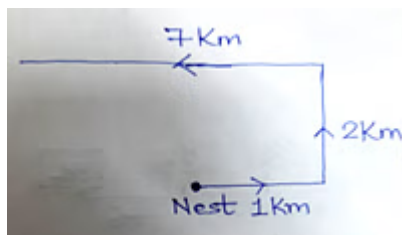
- 1) An eagle starts from its nest and flies 1 km East.



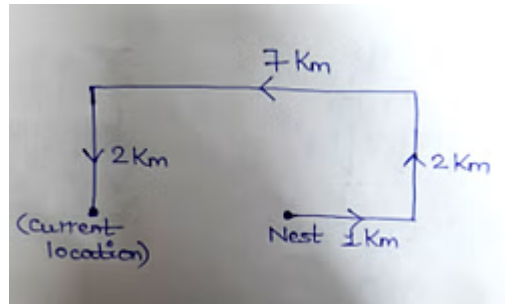
- 2) Then turns North and flies 2 km.



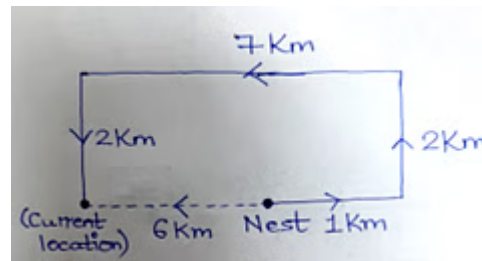
- 3) Then turns West and flies 7 km.



- 4) Finally turns to its left and flies 2 km.



5) Distance and direction of an eagle with respect to its nest.



As can be seen clearly from the above that the Eagle is 6 km to the west of its nest.

Hence, the correct answer is **"6 km West"**.

43. Answer: d

Explanation:

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



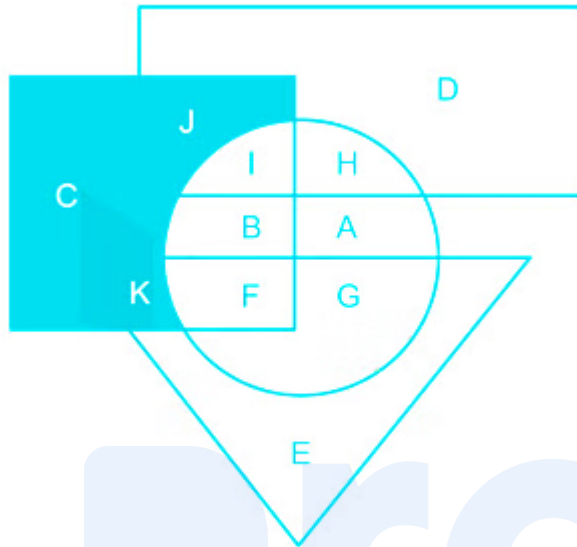
I. All raincoats are Jackets → False.(it is possible but not definite)

II. All jackets are raincoats → False (Some jackets are umbrellas and No umbrellas are raincoats)

Hence, neither conclusion I nor conclusion II follows.

44. Answer: c

Explanation:

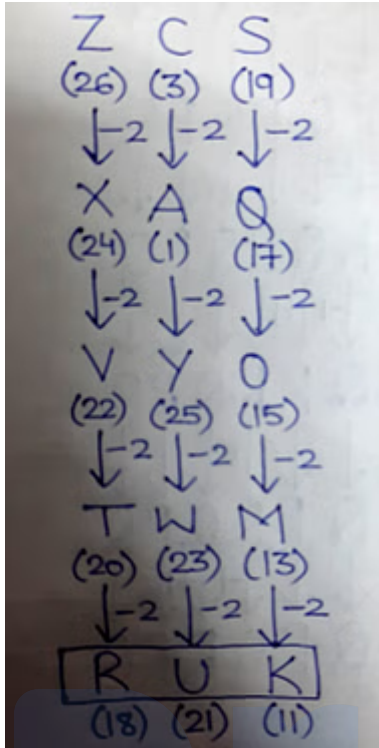


Hence, CJK is the correct answer.

45. Answer: b

Explanation:

The pattern followed here is:-

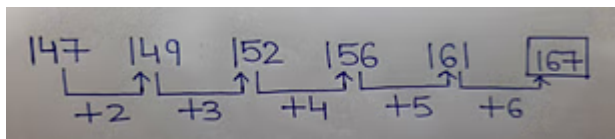


Hence the correct answer is "RUK".

46. Answer: b

Explanation:

The pattern followed here is:-



Hence the correct answer is "167".

47. Answer: c

Explanation:

$$\rightarrow 2 \times 2 = 4; 4 \times 2 = 8$$

$$\rightarrow 3 \times 3 = 9; 9 \times 3 = 27$$

$$\rightarrow 4 \times 4 = 16; 16 \times 2 = 32$$

$$\rightarrow 5 \times 5 = 25; 25 \times 5 = 125$$

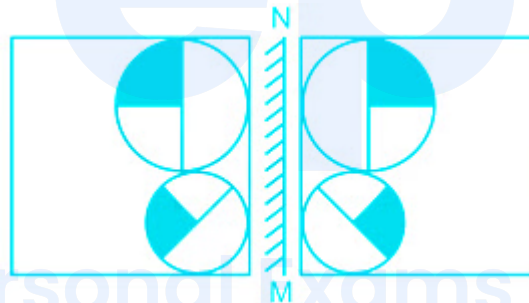
(4, 16, 32) do not follow the same pattern.

Hence, (4, 16, 32) is the correct answer.

48. Answer: a

Explanation:

The correct mirror image of the given figure when the mirror is placed at 'MN' is:



Clearly, 1 is the correct answer.

★ Additional Information

In a mirror image Left changes to right and the right changes to left vice-versa.

When placement of mirror not given, By default we will assume it in Vertical direction .

The Letter adjacent to the mirror after the mirror image will adjacent to it just with the left change to right and right change to left vice-versa.

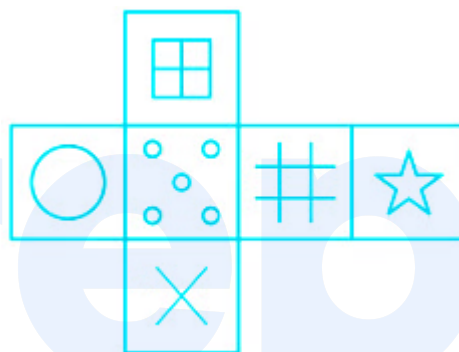
The starting letter of the word will be at last after the mirror image drawn with left changes to right and right changes to left.

49. Answer: c

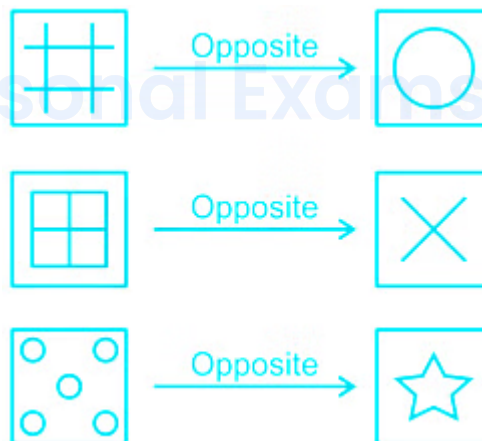
Explanation:

Given:-

An unfolded cube.



When the unfolded cube is folded then, the opposite faces of the cube will be:-

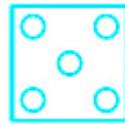


Checking options one by one to see the figure cube that cannot be formed:-

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

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

3) Cube in Option figure (3) CANNOT be formed as two opposite faces i.e.



and



of the cube are present adjacent to each other

4) Cube in the Option figure (4) can be formed as no two opposite faces of the cube are present adjacent to each other.

Hence, the correct answer is "Option 3".

50. Answer: a

Explanation:

1. 32, 76, 40, 87 → K, N, I, T

2. 34, 67, 21, 85 → H, Q, J, Z

3. 21, 69, 40, 68 → J, R, J, X

4. 22, 59, 14, 68 → J, X, F, X

Hence, '32, 76, 40, 87' is the right answer.

51. Answer: c

Explanation:

324 meter covered by Ankit = 1 day

1 meter covered by Ankit = $1/324$ day

1 km covered by Ankit = $1/324 \times 1000$

$\therefore$ 8.1 km covered by Ankit = $1/324 \times 8.1 \times 1000 = 25$ days

52. Answer: d

Explanation:

$$(13)^2 - (14)^2 + (17)^2 - 250 = \sqrt{?}$$

$$\Rightarrow 169 - 196 + 289 - 250 = \sqrt{?}$$

$$\Rightarrow -27 + 289 - 250 = \sqrt{?}$$

$$\Rightarrow -277 + 289 = \sqrt{?}$$

$$\Rightarrow \sqrt{?} = 12$$

$$\therefore ? = 144$$

53. Answer: a

Explanation:

$$\frac{a^2 + b^2}{a^3 + b^3}$$

When $a = 2 + \sqrt{3}$ and $b = 2 - \sqrt{3}$

Putting the value of a & b

$$\frac{(2 + \sqrt{3})^2 + (2 - \sqrt{3})^2}{(2 + \sqrt{3})^3 + (2 - \sqrt{3})^3}$$

$$\Rightarrow \frac{4+3+4\sqrt{3}+4+3-4\sqrt{3}}{8+3\sqrt{3}+6\sqrt{3}(2+\sqrt{3})+8-3\sqrt{3}-6\sqrt{3}(2-\sqrt{3})}$$

$$\Rightarrow \frac{14}{8+15\sqrt{3}+18+8-15\sqrt{3}+18}$$

$$\Rightarrow 14/52 = 0.27 \text{ (Approx.)}$$

54. Answer: a

Explanation:

Let $X_1 = 4$, $X_2 = 6$, $Y_1 = 2$ & $Y_2 = 3$

Equation of line

$$\Rightarrow (Y - Y_1) = (Y_2 - Y_1) / (X_2 - X_1) \times (X - X_1)$$

$$\Rightarrow (Y - 2) = (3 - 2) / (6 - 4) \times (X - 4)$$

$$\Rightarrow 2Y - 4 = X - 4$$

$$\Rightarrow X - 2Y = 0$$

$$\Rightarrow X = 2Y$$

At X intercept, $Y = 0$

$$\therefore X = 0$$

55. Answer: c

Explanation:

In equilateral triangle has all the three medians of equal length.

56. Answer: b

Explanation:

By Interior Angle Bisector Theorem

$$\Rightarrow \frac{AB}{AC} = \frac{BD}{DC} = \frac{3}{2}$$

57. Answer: c**Explanation:**

$$80\% \text{ of } 800 = 800 \times 80/100 = 640$$

$$\text{So, } 30\% \text{ less than of } 640 = 640 \times 70/100 = 448$$

58. Answer: d**Explanation:**

Let equal number of 1 rupee, 2 rupee and 5 rupee coins be x

$$\text{So, } (1 \times x + 2 \times x + 5 \times x) = 184$$

$$\Rightarrow 8x = 184$$

$$\Rightarrow x = 23$$

So, number of coins is 23

59. Answer: a**Explanation:**

$$\text{Alcohol quantity in 50 liter mixture} = 50 \times 10/100 = 5 \text{ Litre}$$

Let the quantity of alcohol which added = x liters

According to question

$$\Rightarrow (5 + x)/(50 + x) = 40\%$$

$$\Rightarrow (5 + x)/(50 + x) = 40/100$$

$$\Rightarrow x = 25 \text{ liter}$$

60. Answer: a

Explanation:

Let the average age of 25 members be = x

Sum of ages of new members = Y

Sum of 25 members Age = 25x

Age of replaced two member = 64 + 40 = 104

According to the question

$$\Rightarrow 25x - 104 + Y = (x - 2) 25$$

$$\Rightarrow 25x - 104 + Y + 25x - 50$$

$$\Rightarrow Y = 54$$

So, Average of new members = 54/2

$$= 27$$

61. Answer: c

Explanation:

Given, P = 3300, SI = 1980 and T = 5 years

$$\Rightarrow SI = (p \times r \times t)/100$$

$$\Rightarrow 1980 = (3300 \times 5 \times r)/100$$

$$\therefore r = 12\%$$

62. Answer: b

Explanation:

Let SP of 1 cap = 1

So, SP of 30 cap = 30

We know that,

SP - CP = Profit

$$\Rightarrow 30 - CP = 3$$

$$\Rightarrow CP = 27$$

$$\therefore \text{Profit \%} = (SP - CP)/CP \times 100 = (30 - 27)/27 \times 100 = 3/27 \times 100 = 11.11\%$$

63. Answer: d

Explanation:

SP of the article = 2397

Discount offered on the article = 15%

Marked price $\times$ (1 - Discount/100) = Selling Price

$$\therefore \text{Marked price} = 2397 \times 100/85 = 2820$$

64. Answer: c

Explanation:

Given:

$$3\sqrt{2} + \sqrt{18} + \sqrt{50} = 15.55$$

Calculation:

$$\Rightarrow 3\sqrt{2} + 3\sqrt{2} + 5\sqrt{2} = 15.55$$

$$\Rightarrow 11\sqrt{2} = 15.55$$

$$\Rightarrow \sqrt{2} = 15.55/11$$

Now, $\sqrt{32} + \sqrt{72}$

$$\Rightarrow 4\sqrt{2} + 6\sqrt{2}$$

$$\Rightarrow 10\sqrt{2}$$

Putting the value of $\sqrt{2}$

$$\text{So, } 10 \times 15.55/11 = 14.13$$

65. Answer: b

Explanation:

Calculation:

X and Y together can complete a work = 12 days

Y alone can complete the same work = 30

Let X alone can complete the same work = x days

$$\Rightarrow 1/x + 1/30 = 1/12$$

$$\Rightarrow 1/x = 1/12 - 1/30$$

$$\Rightarrow 1/x = (30 - 12)/(30 \times 12)$$

$$\therefore x = 20 \text{ days}$$

66. Answer: b

Explanation:

Speed of the train = 81 km/hr

Length of the train = 600 m

Let length of the platform = x m

Train crossed the platform = 40 sec

$$\Rightarrow \text{Speed} = (\text{Distance})/(\text{time})$$

$$\Rightarrow 81 \times 5/18 = (600 + x)/40$$

$$\Rightarrow x = 300 \text{ m}$$

$\therefore$ Length of the platform = 300 meters

67. Answer: d

Explanation:

Partner E has made the second highest investment = 60 Lakh

68. Answer: c

Explanation:

$$\therefore \text{total investment} = 20 + 50 + 10 + 40 + 60 + 20 + 100 = 300 \text{ lakhs}$$

69. Answer: d

Explanation:

$$\text{E invest in business} = 60$$

$$\therefore \text{measure of central angle of the sector representing of partner E} = 60/300 \times 360 = 72^\circ$$

70. Answer: c

Explanation:

$$\text{Total investment} = A + B + C + D + E + F + G = 20 + 50 + 10 + 40 + 60 + 20 + 100 = 300$$

$$\text{And, Investment of C} = 10 \text{ lacks}$$

$$\text{Total investment : investment of C} = 300 : 10 = 30 : 1$$

$$\therefore \text{C's share} = 1 \times 45/30 = 1.5 \text{ lakhs}$$

71. Answer: d

Explanation:

$$\text{The lengths of the first diagonal } (d_1) = 7$$

$$\text{The length of the second diagonal } (d_2) = 24 \text{ cm}$$

$$\Rightarrow a^2 = (d_1/2)^2 + (d_2/2)^2 \text{ (as diagonals of rhombus bisect at } 90^\circ)$$

$$\Rightarrow a^2 = (7/2)^2 + (24/2)^2$$

$$\Rightarrow a^2 = 49/4 + 144$$

$$\Rightarrow a^2 = \sqrt{(625/4)}$$

$$\Rightarrow a = 25/2$$

$$\therefore \text{Perimeter of rhombus} = 4 \times a = 4 \times 25/2 = 50 \text{ cm}$$

72. Answer: c

Explanation:

$$\text{Perimeter of semicircle} = \pi r + 2r$$

$$\Rightarrow 36 = \pi r + 2r$$

$$\Rightarrow 36 = (22/7 + 2) \times r$$

$$\Rightarrow 36 = 36/7 \times r$$

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

$$\therefore \text{Area of semicircle} = 1/2 \times \pi r^2 = 1/2 \times 22/7 \times 7 \times 7 = 77 \text{ cm}^2$$

73. Answer: a

Explanation:

$$\text{Volume of hemisphere} = 2/3 \times \pi r^3$$

$$\Rightarrow 19404 = 2/3 \times 22/7 \times r^3$$

$$\Rightarrow r^3 = 9261$$

$$\Rightarrow r^3 = 21 \times 21 \times 21$$

$$\Rightarrow r = 21$$

Radius of hemisphere (r) = 21 cm

$\therefore$ Diameter of hemisphere = $21 \times 2 = 42$ cm

74. Answer: d

Explanation:

$$\therefore (\tan 60^\circ - 1/3) = \sqrt{3} - 1/3 = (3\sqrt{3} - 1)/3$$

75. Answer: c

Explanation:

Given, $\sin U = 24/25$

$\sin U = (\text{Perpendicular})/\text{hypotenuse} = VW/UW = 24/25$

Let $VW = 24k$ and $UW = 25k$

By the Pythagoras theorem

$$UV^2 = UW^2 - VW^2$$

$$\Rightarrow 0.7^2 = (25k)^2 - (24)^2$$

$$\Rightarrow 0.7^2 = 625k - 576k$$

$$\Rightarrow 0.49 = 49k^2$$

$$\Rightarrow k^2 = 0.49/49 = 0.01$$

$$\Rightarrow k = 0.1$$

Thus, length of side $VW = 24k = 24 \times 0.1 = 2.4$ cm

76. Answer: c

Explanation:

The Bretton Woods Agreement is the landmark system for monetary and exchange rate management established in 1944. It was developed at the United Nations Monetary and Financial Conference held in Bretton Woods, New Hampshire, from July 1 to July 22, 1944. Under the agreement, currencies were pegged to the price of gold, and the U.S. dollar was seen as a reserve currency linked to the price of gold.

77. Answer: d

Explanation:

Decimal number system, used in mathematics for writing numbers and performing arithmetic. Dewey Decimal System, a subject classification system used in libraries.

Decimal currency system, where each unit of currency can be divided into 100 sub-units.

78. Answer: b

Explanation:

The Satpath Brahmana is a prose text describing Vedic rituals, history and mythology associated with the Shukla Yajurveda.

79. Answer: a

Explanation:

Syed Mir Hassan was a scholar of the Qur'an, Hadith, Sufism, and the Arabic language in the court of Alauddin Khilji.

Alauddin Khilji was one of the most powerful rulers of the Khalji dynasty that ruled the Delhi Sultanate in the Indian subcontinent.

80. Answer: d

Explanation:

- Jupiter is the fifth planet from the Sun and the largest in the Solar System.
- It is a giant planet with a mass one-thousandth that of the Sun, but two-and-a-half times that of all the other planets in the Solar System combined.
- Jupiter is the fastest spinning planet about its axis.
- It completes one rotation about its axis in about 10 hrs whereas Earth takes about 24 hours.

81. Answer: b

Explanation:

Bangladesh and India share a 4,156 km long international border. India shares its longest international border with Bangladesh. Indian State West Bengal with 2217 Km shares longest border with Bangladesh amongst all the states.

82. Answer: d

Explanation:

Ramananda was a 14th century Vaishnava devotional poet saint, in the Ganga river region of Northern India.

The Hindu tradition recognizes him as the founder of the Ramanandi Sampradaya, the largest monastic Hindu renunciant community in modern times.

83. Answer: d

Explanation:

In response to the humanitarian crisis being faced on account of the large influx of refugees into Bangladesh, Government of India has decided to extend assistance to Bangladesh.

The relief material consists of items required urgently by the affected people, namely rice, pulses, sugar, salt, cooking oil, tea, ready to eat noodles, biscuits, mosquito nets etc.

84. Answer: d

Explanation:

The Dronacharya Award, officially known as Dronacharya Award for Outstanding Coaches in Sports and Games, is sports coaching honour of the Republic of India. The award is named after Drona, often referred as "Dronacharya" a character from the Sanskrit epic Mahabharata of ancient India.

Roshan Lal is the latest recipient of Dronacharya award. He was awarded in 2017.

85. Answer: d

Explanation:

The correct answer is Bhutan.

★ Key Points

- The national flag of **Bhutan** has a dragon on it.
- The current flag is divided diagonally from the lower hoist-side corner, with the upper triangle yellow and the lower triangle orange.
- Centered along the dividing line is a large **black and white dragon facing away from the hoist side**.
- The flag features a dragon from Bhutanese mythology.
- It was adopted in **1969**.



★ Additional Information

- Prime Minister of Bhutan – **Lotay Tshering**
- The population of Bhutan – **7.63 lakhs**
- The religion of Bhutan – **Tibetan Buddhists**

86. **Answer: c**

Explanation:

A thermoplastic, or thermos softening plastic, is a plastic material, a polymer that becomes pliable or mouldable above a specific temperature and solidifies upon cooling.

Polyvinyl chloride (PVC) is a tough, lightweight material that is resistant to acids and bases. Much of it is used by the construction industry, such as for vinyl siding, drain pipes, gutters and roofing sheets.

87. Answer: a

Explanation:

- Although Fluorine has the highest electronegativity, Chlorine has the highest electron affinity and this is because of the considerable repulsion in the tightly packed 2p subshell of Fluorine.

88. Answer: d

Explanation:

Option 4 is correct, i.e. High Court of State.

- Under **Article 226**, a writ petition can be filed in a High court for issuing one of the five writs as per the case.
- The Supreme Court is considered as the protector and guarantor of the fundamental rights (Article 32).

Your Personal Exams Guide

<u>Article</u>	<u>Detail</u>
Article 226	States about the Power of high court to issue certain writs.
Article 227	States about the Power of superintendence over all courts by the high court.
Article 228	States about the Transfer of certain cases to the high court.
Article 230	States about the Extension of jurisdiction of the high court to union territories.
Article 231	States about the Establishment of a common high court for two or more states.
Article 233	States about the Appointment of the district judge.

89. Answer: c

Explanation:

Municipal Corporations are the governing bodies present in the cities with population more than a million.

The Mayor is the head of the municipal corporation, but the role is largely ceremonial as executive powers are vested in the City Corporations commissioner. The tenure of the Mayor is 5 years.

90. Answer: a

Explanation:

Paramecium is a genus of unicellular ciliates, commonly studied as a representative of the ciliate group.

A paramecium has thousands of cilia that rhythmically move, providing a way for the food to move around and to transfer the food in the oral cavity.

91. Answer: b

Explanation:

The correct answer is Haemoglobin.

★ Key Points

- The Hemoglobin molecules with the help of external chemical factors take up oxygen molecules in the lungs and then send them to the various tissues of our body.
- Iron is the **main constituent** of hemoglobin.
- The **normal level** of hemoglobin is 13 to 17 grams per deciliter in men and 12.0 to 15.5 grams per deciliter in women.

★ Important Points

- Melanin is a dark biological pigment found in skin, hair, feathers, scales, eyes, and some internal membranes.
- Rhodopsin is called visual purple, a pigment-containing sensory protein that converts light into an electrical signal.
- **Bilirubin** is a yellowish substance in your blood. It **forms after red blood cells break down**, and it travels through your liver, gallbladder, and digestive tract before being excreted.

★ Additional Information

- The biggest regulator of oxygen affinity in Hemoglobin is the oxygen itself.

- If in the lungs, the oxygen levels are high the Hemoglobin shows a greater affinity towards the oxygen molecules, and as it bounds to more oxygen, this property of affinity increases and vice versa.
- When the Oxyhemoglobin binds to the maximum capacity, it becomes saturated but its affinity towards oxygen increases whereas when this binding loose oxygen molecule the affinity decreases.
- This regulation activity is called Cooperativity and is an important function as it allows the maximum amount of Hemoglobin to be carried to the tissues and also allows deoxyhemoglobin which is releasing the oxygen tissue.

92. Answer: c

Explanation:

The Reserve Bank of India rolled out a Sovereign Golds Bonds Scheme on 9th October, 2017, under which it issues the bonds on behalf of the Government of India. The bonds are sold at post offices and banks and issued in denomination of gram.

93. Answer: d

Explanation:

The Beidou-3M/G/I satellites represent the orbital segment of the third phase of the Chinese Beidou navigation system which uses satellites in Medium Earth Orbit and Geosynchronous Orbit and is also known as the Compass Navigation Satellite System

The Long March 3B also known as the CZ-3B and LM-3B, is a Chinese orbital carrier rocket. Introduced in 1996, it is launched from Launch Area 2 and 3 at the Xichang Satellite Launch Centre in Sichuan.

94. Answer: c

Explanation:

The Wholesale Price Index (WPI) is the price of a representative basket of wholesale goods.

India has adopted new Consumer price Index to measure inflation since it considers the price at which the final consumer purchases essential consumer goods.

95. Answer: b

Explanation:

The Real Estate (Regulation and Development) Act, 2016 is an Act of the Parliament of India which seeks to protect home-buyers as well as help boost investments in the real estate industry.

The Act establishes Real Estate Regulatory Authority (RERA) in each state for regulation of the real estate sector and also acts as an adjudicating body for speedy dispute redressal.

96. Answer: a

Explanation:

The hertz (symbol: Hz) is the derived unit of frequency in the International System of Units (SI) and is defined as one cycle per second. The wavelength is the spatial period of a periodic wave which is basically the distance over which the wave's shape repeats. It is thus the inverse of the spatial frequency.

97. Answer: b

Explanation:

An order of magnitude is an approximate measure of the size of a number, equal to the logarithm rounded to a whole number.

For example, the order of magnitude of 1500 is 3, because $1500 = 1.5 \times 10^3$

98. Answer: d

Explanation:

- Humidity is the amount of water vapour present in the air. Water vapour is the gaseous state of water and is invisible to the human eye.
 - Humidity indicates the likelihood of precipitation, dew, or fog.
-

99. Answer: b

Explanation:

Aryan Tari	Aryan Tari is a Norwegian chess grandmaster. He was Norwegian Chess Champion in 2015 and won the World Junior Chess Championship in 2017.
Dustin Johnson	Dustin Hunter Johnson is an American professional golfer who currently plays on the PGA Tour. As of June 10, 2018, he is the World Number 1 in the Official World Golf Ranking.
Rafael Nadal	Rafael Nadal Parera is a Spanish professional tennis player, currently world No. 2 in men's singles tennis by the Association of Tennis Professionals (ATP). Known as "The King of Clay".

100. Answer: b

Explanation:

An electronic book (or e-book) is a book publication made available in digital form, consisting of text, images, or both, readable on the flat-panel display of computers or other electronic devices.