Prepp

Your Personal Exams Guide

NDA	CDS	SSC CGL	CBSE UGC NET
IAS	SSC CHSL	CTET	MPSC
AFCAT	CSIR UDC NET	IBPS PO	UP POLICE
SSC MTS	SBI PO	BPSC	UPTET
IBPS RRB	IBPS CLERK	IES	UPSC CAPF
SSC Stenogr..	RRB NTPC	SSC GD	RBI GRADE B
RBI Assistant	DSSSB		

SSC MTS Previous Year Paper (Held on: 18 July 2022 Shift 3)

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

Instructions

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

1.) A total of 90 minutes is allotted for the examination.

2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.

3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

General Intelligence & Reasoning

1. In a certain code language, 'STOPER' is written as 'XNTJJL' and 'GANOPY' is written as 'LUSIUS'. How will 'FITAND' be written in that language?

   (+1, -0.25)

   a. KDYUSX

   b. KCYUXS

   c. KCYUSX

   d. KCYVSX

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

   (+1, -0.25)

   410, 210, 110, 60, 35, ?

   a. 23

   b. 25

   c. 20

   d. 22.5

3. Select the option that is related to the fifth term in the same way as the second term is related to the first term and the fourth term is related to the third term.

   (+1, -0.25)

   H64 : J100 :: L144 : N196 :: U441 : ?

   a. W582

   b. W529

c. V484

d. V221

---

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

(+1, –0.25)

Statements:

I. No R is a G.

II. All G's are H.

Conclusions:

I. No H is a R.

II. No G is a R.

a. Only conclusion II follows.

b. Neither conclusion I nor II follows.

c. Both conclusions I and II follow.

d. Only conclusion I follows.

---

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

(+1, –0.25)

803, 844, 885, 926, ?

a. 967

b. 977

c. 969

d. 957

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

RS : QT :: AK : ?

a. IC

b. HD

c. HC

d. ID

7. In a certain code language, 'PINT' is coded as '60', and 'HOME' is coded as '42'.   (+1, −0.25)
How will 'TONE' be coded in that language?
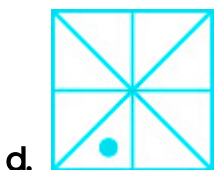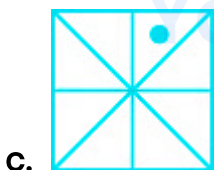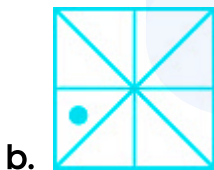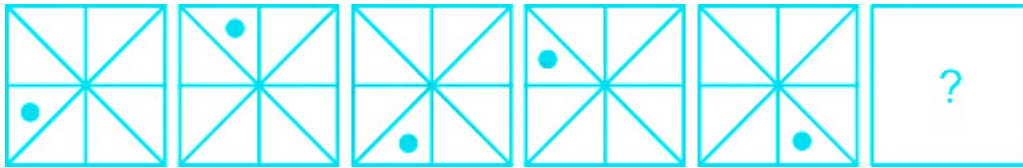
a. 54

b. 55

c. 56

d. 53

8. By interchanging which two signs will the given equation be correct?   (+1, −0.25)

11 ÷ 77 + 253 × 23 − 800 = 58

a. and +

b. × and ÷

c. + and -

d. and ×

---

9. Select the figure from among the given options that can replace the question mark (?) in the following series.   (+1, −0.25)

a.

b.

c.

d.

---

10. Select the option in which the numbers shares the same relationship as that shared by the numbers in the given set.   (+1, −0.25)
    that shared by the numbers in the given set.

(32, 70, 108)

a. (44, 82, 124)

b. (34, 62, 112)

c. (42, 80, 118)

d. (38, 76, 116)

---

11. Which two signs need to be interchanged to make the following equation correct?

$(+1, -0.25)$

96 – 12 ÷ 6 + 3 × 5 = 17

a. ÷ and -

b. ÷ and ×

c. + and -

d. + and ×

---

12. In a certain code language, 'GERMAN' is written as 'HFSLZM', and 'RUSTIC' is written as 'SVTSHB'. How will 'DIVIDE' be written in that language?
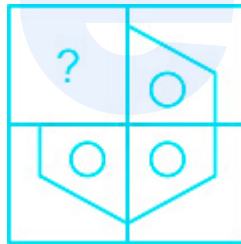
$(+1, -0.25)$

a. CHUJEF

b. CHUHCD

c. EJWJEF

d. EJWHCD

---

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

CWIS : VBPF :: AOLD : ?

a. CQUG

b. CXJU

c. XJMU

d. EXUW

---

14. Select the figure from the options that can replace the question mark (?) and complete the pattern. (rotation is not allowed) (+1, −0.25)

a.

b.

c.

d.

15. Amit, Bablu, Ramesh, Deepak, Imran, Sunil, and Sanju are sitting around a   (+1, -0.25)
circular table facing opposite to the centre. Amit does not sit adjacent to
Imran and Sanju. Bablu does not sit adjacent to Amit. Sanju sits second to
the left of Imran. Ramesh sits fourth to the left of Amit. Deepak and Bablu
sit adjacent to each other. Who sits immediate right of Amit?

a. Sanju

b. Sunil

c. Ramesh

d. Bablu

---

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

a.

b.
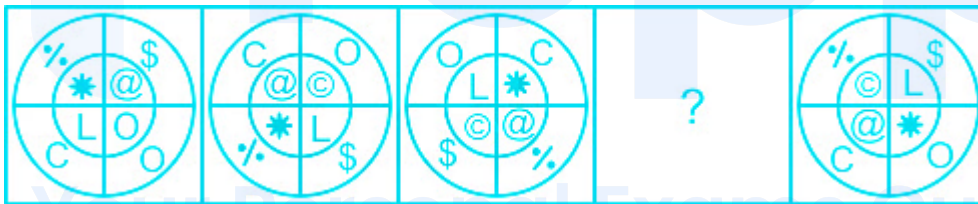
c.

d.

---

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

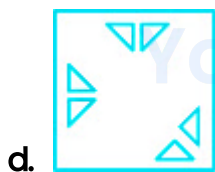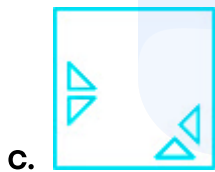(7, 9, 130), (11, 9, ?), (16, 8, 320)

a. 188

b. 220

c. 202

d. 160

---

18. In a certain code language, 'POM' is coded as '43', and 'HAN' is coded as '22'. How will 'BRO' be coded in that language?   (+1, -0.25)

a. 36

b. 33

c. 35

d. 34

---

19. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded? (+1, −0.25)

a.

b.

c.

d.
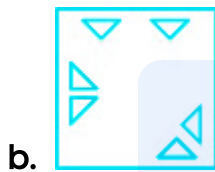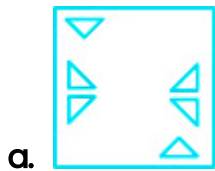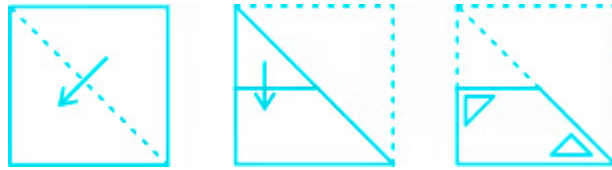
20. Five friends P, Q, R, S and T are sitting around a circular table facing towards the centre (not necessarily in the same order). Q is second to the left of T. S is the immediate neighbour of Q and T. R is not the immediate neighbour of Q. While counting from the left of Q, how many friends are sitting between Q and S? (+1, −0.25)

a. One

b. Two

c. Three

d. Four

---

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

Statements:

Some holders are parameters.

Some chambers are parameters.

Some parameters are not measures.

Conclusions:

I. Some measures are chambers.

II. Some holders are chambers.

a. Only conclusion I follows

b. Both conclusions I and II follow

c. Only conclusion II follows

d. Neither conclusion I nor II follows

---

22. Select the option that can replace the question mark (?) in the given figure and complete the pattern.   (+1, −0.25)

a.

b.

c.

d.

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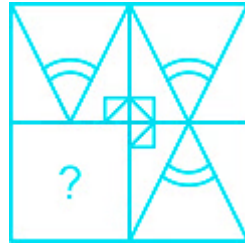
23. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.   (+1, −0.25)

BJT, DHV, FFX, ?, JBB

a. HDY

b. HCZ

c. HDZ

d. HCY

---

24. Select the option in which the given figure is embedded. (Rotation is not allowed) (+1, −0.25)

a.

b.

c.

d.
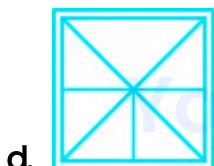
25. Among five persons A, B, C, D and E, who are of different ages, A is younger than only D and E. E is younger than D and older than B. C is the youngest. Who is the fourth oldest? (+1, −0.25)

a. C

b. D

c. E

d. B

Numerical Aptitude

26. The following pie chart gives the percentages of the number of students studying in different streams in an engineering college. There are 5000 students in the college in all.

(+1, −0.25)
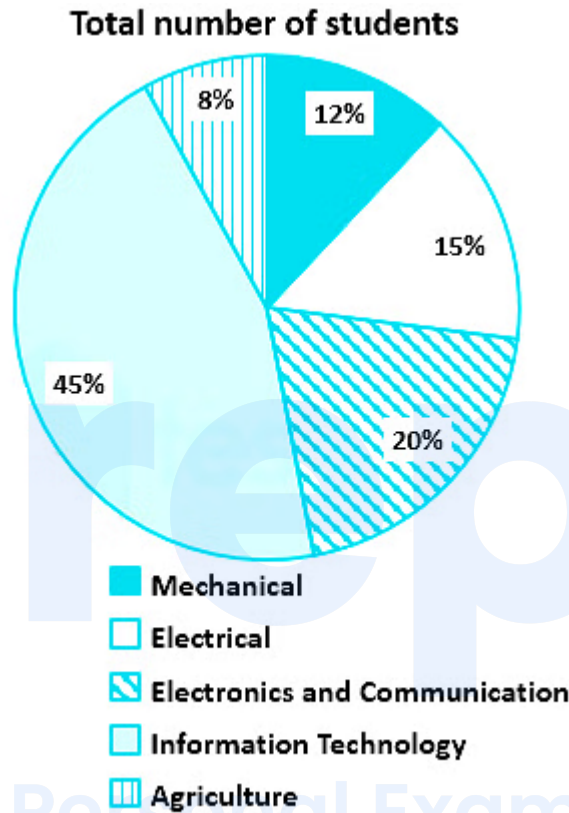
Total number of students

The college decided to give ₹300 per student to each stream for the purchase of teaching materials. How much will the Electronics and Communication stream get?

a. Rs. 2,25,000

b. Rs. 1,80,000

c. Rs. 3,00,000

d. Rs. 1,20,000

27. The marked price of an item is 25% more than its selling price. The selling price of the same item is 20% more than its cost price. The marked price of that item is what percentage more than its cost price?

   (+1, −0.25)

   a. 45%

   b. 35%

   c. 50%

   d. 40%

28. Find the total surface area of a closed hemisphere whose diameter is 7 cm. [Use $\pi = \frac{22}{7}$]

   (+1, −0.25)

   a. 77 cm^2

   b. 154 cm^2

   c. 110 cm^2

   d. 115.5 cm^2

29. The average of 12 numbers is 15, and the average of the first four numbers is 13. What is the average of the remaining numbers?

   (+1, −0.25)

   a. 16

   b. 14

   c. 12

   d. 18

30. A retailer buys a used laptop for Rs. 22,500. His overhead expenses are Rs. **(+1, -0.25)** 1,500. He sells the laptop for Rs. 30,000. The profit percentage of the retailer is :

   a. 50%

   b. 25%

   c. 10%

   d. 52%

31. The following table shows the marks secured (out of 50) in two subjects by **(+1, -0.25)** a number of students of a school.

Subject	Marks out of 50				
	40 and above	30 and above	20 and above	10 and above	0 and above
Hindi	80	120	150	540	1200
English	40	140	180	960	1200

What is the ratio of the number of students who scored 40 and above in Hindi to the number of students who scored 20 and above in English?

   a. 3 : 4

   b. 4 : 9

c. 9 : 4

d. 4 : 3

---

32. Kavita can complete a piece of work alone in 12 hours, while Komal can complete the same work alone in 18 hours. Kavita works alone for the first 4 hours and leaves. After that, Komal comes and completes the remaining work by herself. How much time did Komal take to finish the remaining work? **(+1, −0.25)**

a. 15 hours

b. 10 hours

c. 16 hours

d. 12 hours

---

33. Two wires of lengths 10 m 54 cm and 11 m 56 cm are both cut into pieces of length x cm each, where x is an integer. Find the maximum value of x. **(+1, −0.25)**

a. 42

b. 56

c. 34

d. 28

---

34. Rahul's monthly income is Rs. 1,50,000. Of this, he saves Rs. 1,500. Find the percentage of his savings. **(+1, −0.25)**

a. 4%

b. 2%

c. 3%

d. 1%

---

35. For a candidate to pass an examination, he must score 60% marks. If he scored 345 and failed by 15 marks, then what are the total marks for the examination?

(+1, −0.25)

a. 400

b. 480

c. 600

d. 540

---

36. What is the length of the longest pole that can fit itself in a hall 60 feet long, 30 feet broad and 20 feet high?

(+1, −0.25)

a. 70 feet

b. 20 feet

c. 50 feet

d. 30 feet

---

37. What will be average of all the odd numbers between 8 and 32?

(+1, −0.25)

a. 21

b. 18

c. 20

d. 19

---

38. If $P = \frac{5}{6}Q$ and $Q = \frac{4}{5}R$, what is $2P : 3Q : 4R$? **(+1, −0.25)**

a. $5 : 9 : 15$

b. $9 : 5 : 6$

c. $8 : 9 : 16$

d. $6 : 8 : 15$

---

39. A boat can travel 21 km in 3 hours going upstream. It can travel 55 km in 5 hours going downstream. What is the speed of the stream? **(+1, −0.25)**

a. 2.5 km/h

b. 3.5 km/h

c. 3 km/h

d. 2 km/h

---

40. Two numbers are in the ratio $3 : 5$. If 4 is subtracted from each of these two numbers, the new numbers then are in the ratio $4 : 7$. Find the smaller of the two original numbers. **(+1, −0.25)**

a. 2

b. 18

c. 4

d. 36

---

41. A, B and C together can complete a work in 10 days. A and B together can do the same work in 12 days. If A, B and C received Rs. 9,000 for doing the work together, then what was the share of C from the above amount? (+1, -0.25)

a. Rs. 3,750

b. Rs. 1,500

c. Rs. 3,000

d. Rs. 2,250

---

42. What is the value of $\frac{75}{28} \times \frac{7}{12} + \left[\frac{5}{12} + \left\{ \frac{5}{7} + \left(\frac{8}{12} \text{ of } \frac{36}{24} - \frac{1}{2} \right) \right\} \right]$? (+1, -0.25)

a. $\frac{1811}{335}$

b. $\frac{1085}{339}$

c. $\frac{1073}{336}$

d. $\frac{1561}{337}$

---

43. What is the value of a in the following equation? (+1, -0.25)

$34 + 16 - a \times [40 \div 5 - 3] = 15$

a. 5

b. 7

c. 9

d. 6

---

44. A man completes his journey in 6 hours. He covers half the distance at 10 km/h and the rest at 20 km/h. The length of the journey is :   **(+1, -0.25)**

    a. 30 km

    b. 10 km

    c. 80 km

    d. 20 km

---

45. The radius of the base and the height of a closed cylinder are 14 cm and 14 cm, respectively. The total surface area of the cylinder is equal to the area of a circle. What will be the diameter of the circle? [Use $\pi = \frac{22}{7}$]   **(+1, -0.25)**

    a. 56 cm

    b. 28 cm

    c. 14 cm

    d. 35 cm

---

46. A sum of Rs. 7,000 deposited at compound interest becomes triple of itself after 4 years. How much will the amount be after 12 years?   **(+1, -0.25)**

    a. Rs. 49,000

    b. Rs. 63,000

    c. Rs. 1,89,000

d. Rs. 84,000

---

47. A shopkeeper marks up his price by 12% and then allows a 12% discount. What is his profit or loss percentage?

    (+1, -0.25)

    a. 1.44% loss

    b. 1.2% profit

    c. 6% profit

    d. 4% loss

---

48. the average of nine consecutive even numbers is 24. What is the average of the smallest three of these 9 given numbers?

    (+1, -0.25)

    a. 21

    b. 20

    c. 18

    d. 19

---

49. The following bar graph shows the number of pages read by five friends when they went to a library.

    (+1, -0.25)
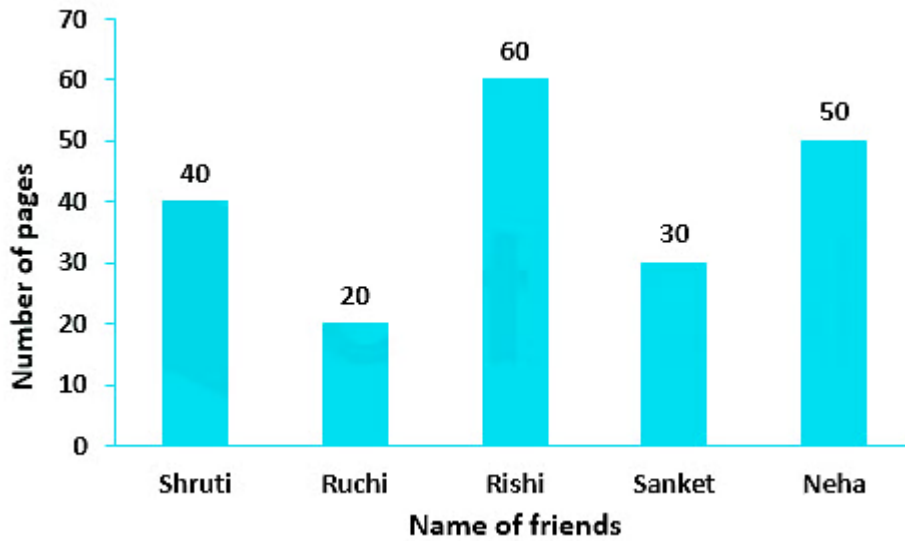
In percentage terms, how many more pages did Rishi read than Neha?

a. 10%

b. 15%

c. 5%

d. 20%

50. A sum of money amounts to 5 times of itself in 20 years, when invested at a certain rate of simple interest per annum. What is the rate of simple interest per annum that is on offer?   (+1, −0.25)

a. 25%

b. 12.5%

c. 20%

d. 15%

General English

51. The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

(+1, −0.25)

The young boy tried to jerk out of the way, / but she grabbed him and began / rubbing the tip of his nose to get the stain off.

   a. No error

   b. The young boy tried to jerk out of the way

   c. rubbing the tip of his nose to get the stain off

   d. but she grabbed him and began

---

52. Select the most appropriate synonym of the given word.

(+1, −0.25)

Revile

   a. Silence

   b. Incite

   c. Discourage

   d. Abuse

---

53. Select the most appropriate meaning of the underlined idiom in the given sentence.

(+1, −0.25)

Stop flogging a dead horse and concentrate on your career.

   a. To waste time on useless things

b. To go on trips repeatedly

c. To fall in love quickly

d. To make no progress

---

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

a. Autocrecy

b. Bureaucracy

c. Autonomy

d. Anarchy

---

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

We need to _ _ _ _ _ _ for next week, so are you in or out?

a. make noise

b. make a mess

c. make plans

d. make a mistake

---

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

The plants underline readily respond to these stimulus.

a. readily respond to these stimuli

b. ready respond to these stimuli

c. readily responds to this stimulus

d. No improvement required

---

57. Select the most appropriate synonym of the given word.   **(+1, −0.25)**

Fright

a. Dread

b. Mockery

c. Composure

d. Bravery

---

58. Parts of the following sentence have been given as options. One of them   **(+1, −0.25)**
contains an error. Select the part that contains the error from the given
options.

We are all aware that our environment are not what it used to be.

a. What it used to be

b. We are all

c. environment are not

d. aware that our

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

    a. Escapeade

    b. Resonate

    c. Progresion

    d. Disccovery

---

60. The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer. (+1, −0.25)

Most of the carbon-trapping mechanisms / that we have identified are / based at limit studies.

    a. No error

    b. that we have identified are

    c. based at limit studies

    d. Most of the carbon-trapping mechanisms

---

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

Incapable of making mistakes or being wrong

    a. Fatalist

    b. Fanatic

    c. Infallible

d. Cynic

---

62. Select the most appropriate meaning of the underlined idiom.   (+1, –0.25)

Half a million dollars is only a <u>drop in the bucket</u> to what is required for this industry.

a. An unreliable person

b. unity and functioning together to achieve a goal

c. A very small part of something big or whole

d. a person or situation having no hope of positive change

---

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

This small hut is going to be my _ _ _ _ _ _ for the next three days.

a. legacy

b. scout

c. loaf

d. abode

---

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

He believed that he had struck terror in his children's hearts because of his _ _ _ _ _ _ _ _.

a. love

b. rage

c. calmness

d. fortune

---

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

Miss Samantha is at the _ _ _ _ _ _ of her popularity.

a. pick

b. peek

c. peck

d. peak

---

66. Select the most appropriate ANTONYM of the given word.   (+1, −0.25)

Flexible

a. Compliant

b. Defiant

c. Peculiar

d. Reckless

---

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

As the tree came crashing down, the monkeys <u>woke up from its sleep</u> and
ran from branch to branch.

a. woke up from their sleep

b. No improvement required

c. waken up in their sleep

d. wakes up from its sleep

---

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

The age of the participants _ _ _ _ _ _ an important factor in this competition.

a. is

b. do

c. has

d. are

---

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

<u>No other informations</u> was conveyed to him.

a. No other's information

b. No improvement required

c. No other information

d. None another information

---

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

Someone working or acting merely for money or other rewards

a. Debtor

b. Mercenary

c. Contractor

d. Player

---

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

Mahalia Jackson was (1) _ _ _ _ _ _ into a preacher's family in 1911, and she grew up in a riverfront shanty in New Orleans. She was motherless at five, working as a maid and laundress in her mid-teens. As a little girl, she would (2) _ _ _ _ _ _ to herself before she went to sleep, "Someday the sun is going to shine down on me in some faraway place." In pursuit of that dream, Mahalia migrated to Chicago when she was still a teenager. She never expected to support herself by singing, and by the time I joined her, the hands she used so expressively in her performances had (3) _ _ _ _ _ _ floors, (4) _ _ _ _ _ _ and helped her earn a living as a hotel maid, factory worker, beautician and florist. But her remarkable (5) _ _ _ _ _ _ brought her more and more invitations to sing at funerals, in churches, at concerts. And, through her warm friendly personality and a life based on sound spiritual values and hard work, she eventually found her place in the sun.

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

a. Adorn

b. Worn

c. Born

d. Scorn

---

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

    (+1, -0.25)

    Mahalia Jackson was (1) _ _ _ _ _ _ into a preacher's family in 1911, and she grew up in a riverfront shanty in New Orleans. She was motherless at five, working as a maid and laundress in her mid-teens. As a little girl, she would (2) _ _ _ _ _ _ to herself before she went to sleep, "Someday the sun is going to shine down on me in some faraway place." In pursuit of that dream, Mahalia migrated to Chicago when she was still a teenager. She never expected to support herself by singing, and by the time I joined her, the hands she used so expressively in her performances had (3) _ _ _ _ _ _ floors, (4) _ _ _ _ _ _ and helped her earn a living as a hotel maid, factory worker, beautician and florist. But her remarkable (5) _ _ _ _ _ _ brought her more and more invitations to sing at funerals, in churches, at concerts. And, through her warm friendly personality and a life based on sound spiritual values and hard work, she eventually found her place in the sun.

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

    a. Whisper

    b. Glimmer

    c. Crisper

    d. Prosper

---

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

(+1, −0.25)

Mahalia Jackson was (1) _ _ _ _ _ _ into a preacher's family in 1911, and she grew up in a riverfront shanty in New Orleans. She was motherless at five, working as a maid and laundress in her mid-teens. As a little girl, she would (2) _ _ _ _ _ _ to herself before she went to sleep, "Someday the sun is going to shine down on me in some faraway place." In pursuit of that dream, Mahalia migrated to Chicago when she was still a teenager. She never expected to support herself by singing, and by the time I joined her, the hands she used so expressively in her performances had (3) _ _ _ _ _ _ floors, (4) _ _ _ _ _ _ and helped her earn a living as a hotel maid, factory worker, beautician and florist. But her remarkable (5) _ _ _ _ _ _ brought her more and more invitations to sing at funerals, in churches, at concerts. And, through her warm friendly personality and a life based on sound spiritual values and hard work, she eventually found her place in the sun.

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

a. Stubbed

b. Clubbed

c. Scrubbed

d. Grubbed

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

(+1, −0.25)

Mahalia Jackson was (1) _ _ _ _ _ _ into a preacher's family in 1911, and she grew up in a riverfront shanty in New Orleans. She was motherless at five, working as a maid and laundress in her mid-teens. As a little girl, she would

(2) _ _ _ _ _ _ to herself before she went to sleep, "Someday the sun is going to shine down on me in some faraway place." In pursuit of that dream, Mahalia migrated to Chicago when she was still a teenager. She never expected to support herself by singing, and by the time I joined her, the hands she used so expressively in her performances had (3) _ _ _ _ _ _ floors, (4) _ _ _ _ _ _ and helped her earn a living as a hotel maid, factory worker, beautician and florist. But her remarkable (5) _ _ _ _ _ _ brought her more and more invitations to sing at funerals, in churches, at concerts. And, through her warm friendly personality and a life based on sound spiritual values and hard work, she eventually found her place in the sun.

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

a. Pondered

b. Laundered

c. Unsoldered

d. Considered

---

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

(+1, -0.25)

Mahalia Jackson was (1) _ _ _ _ _ _ into a preacher's family in 1911, and she grew up in a riverfront shanty in New Orleans. She was motherless at five, working as a maid and laundress in her mid-teens. As a little girl, she would (2) _ _ _ _ _ _ to herself before she went to sleep, "Someday the sun is going to shine down on me in some faraway place." In pursuit of that dream, Mahalia migrated to Chicago when she was still a teenager. She never expected to support herself by singing, and by the time I joined her, the hands she used so expressively in her performances had (3) _ _ _ _ _ _ floors, (4) _ _ _ _ _ _ and helped her earn a living as a hotel maid, factory worker, beautician and florist. But her remarkable (5) _ _ _ _ _ _ brought

her more and more invitations to sing at funerals, in churches, at concerts. And, through her warm friendly personality and a life based on sound spiritual values and hard work, she eventually found her place in the sun.

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

a. keeping-skills

b. Voice

c. Beauty

d. Cleaning

General Awareness

76. Which of the following is an example of autotrophs?   (+1, −0.25)

    a. Protozoa

    b. Animals

    c. Viruses

    d. Green plants

77. Which of the following terms is NOT associated with cricket?   (+1, −0.25)

    a. Maiden

    b. LBW

    c. Slam dunk

    d. Yorker

78. Which of the following festivals marks the start of the Telugu New year?   (+1, −0.25)

    a. Onam

    b. Gudi Padwa

    c. Pongal

    d. Ugadi

79. In which year did the Bhopal Gas Tragedy take place?   (+1, −0.25)

a. 1986

b. 1982

c. 1984

d. 1980

---

80. Most Harappan seals made of _ _ _ _ _.   (+1, −0.25)

a. Bricks

b. Granite

c. Steatite

d. Brass

---

81. Who was the first Indian composer to win the Grammy Award?   (+1, −0.25)

a. Zubin Mehta

b. Zakir Hussain

c. AR Rahman

d. Pandit Ravi Shankar

---

82. If a fundamental right of a citizen of India is violated, _ _ _ _ _.   (+1, −0.25)

a. he has to appeal in the Supreme court only

b. he has to appeal in the district court first

---

c. he has the choice of either approaching the Supreme court directly or the High court

d. he has to appeal in the High court first

---

83. For which of the following albums did Sonu Nigam win a Grammy Award?　　(+1, -0.25)

a. Mubarakan

b. Mehmaan

c. Mahsoos

d. Muskurahat

---

84. Which of the following countries belong to the polar regions?　　(+1, -0.25)

a. Canada

b. Colombia

c. Chile

d. China

---

85. Kathak is a classical dance form of which Indian state?　　(+1, -0.25)

a. Tamil Nadu

b. Uttar Pradesh

c. Manipur

d. Assam

86. Mirabai Chanu won the first silver medal for India in weightlifting at the _ _ _ _ _ _ _ _ _ _ _ Olympics 2020. (+1, -0.25)

    a. Beijing

    b. Rio de Janeiro

    c. London

    d. Tokyo

87. Which of the following measures of money supply is least liquid of all? (+1, -0.25)

    a. M4

    b. M1

    c. M3

    d. M2

88. Damon Galgut was awarded the Booker Prize 2021 for Fiction for his book _ _ _ _ _. (+1, -0.25)

    a. The Promise

    b. Great Circle

    c. A Passage North

    d. The Fortune Men

89. The workforce population includes people between _ _ _ _ _ _ years. (+1, -0.25)

a. 20 to 54

b. 15 to 59

c. 18 to 45

d. 17 to 55

---

90. Which of the following is a noble chemical element of the modern periodic table?   (+1, –0.25)

   a. Fluorine

   b. Silicon

   c. Nitrogen

   d. Neon

---

91. Who among the following is popularly known as the 'Disco King' passed away in February 2022?   (+1, –0.25)

   a. Anupam Shyam

   b. Bappi Lahiri

   c. Vanraj Bhatia

   d. Chandrashekhar G

---

92. Who among the following published the book 'Stripurushtulna'?   (+1, –0.25)

   a. Anita Desai

---

b. Tarabai Shinde

c. Shashi Deshpande

d. Pandita Ramabai

---

93. Kanishka was a ruler of _ _ _ _ _ _ dynasty.   **(+1, -0.25)**

  a. Mughal

  b. Maurya

  c. Kushana

  d. Gupta

---

94. Who ruled over Delhi after Razia Sultan?   **(+1, -0.25)**

  a. Shamsuddin Iltutmish

  b. Ghiyasuddin Balban

  c. Prithviraj Chauhan

  d. Qutbuddin Aibak

---

95. Which of the following campaigns was launched for greywater management in March 2022?   **(+1, -0.25)**

  a. Sujlam

  b. Sujlam 2.0

  c. Jalrakshak

d. Jalrakshak 2.0

---

96. As of April 2022, what is the official language of India's neighboring country China?   (+1, -0.25)

   a. Bengali

   b. Burmese

   c. Sinhala

   d. Mandarin

---

97. In which year through the Indian Official Secrets Act was freedom of press curbed?   (+1, -0.25)

   a. 1919

   b. 1921

   c. 1904

   d. 1909

---

98. This layer of soil is dark in colour as it is rich in humus and minerals. It is generally soft, porous and can retain more water. It is called :   (+1, -0.25)

   a. B-horizon

   b. bedrock

   c. C-horizon

   d. topsoil

99. Which of the following is NOT a function of the State Public Service Commission?   (+1, −0.25)

   a. It conducts examinations for appointments to the services of the state.

   b. It is consulted in all disciplinary matters affecting a person serving under the government of the state in a civil capacity.

   c. It is consulted on any claim for the award of a pension in respect of injuries sustained by a person while serving under the government of the state.

   d. It is consulted while making reservations of appointments or posts in favour of any backward class of citizens.

100. Which of the following minerals are NOT found in Chota nagpur-belt?   (+1, −0.25)

   a. Gold

   b. Iron-ore

   c. Chromite

   d. Coal

Answers

1. **Answer: c**

Explanation:

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

The logic followed here is:

'STOPER' is written as 'XNTJJL'.

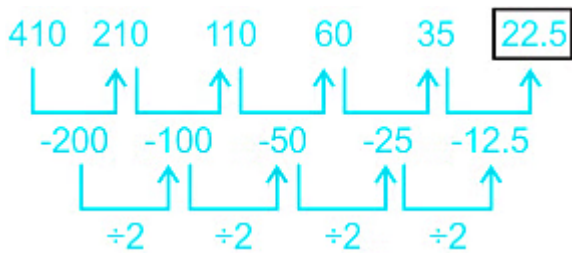'GANOPY' is written as 'LUSIUS'.

Similarly, for 'FITAND'

So, 'FITAND' will be written as 'KCYUSX'.

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

2. Answer: d

Explanation:

The logic followed here is:

410   210   110   60   35   **22.5**

-200 -100   -50   -25   -12.5

÷2   ÷2   ÷2   ÷2

So, '22.5' will complete the series.

Hence, the correct answer is "22.5".

---

3. 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 followed here is:

For, H64 : J100

$$H \quad 64(8^2)$$
$$\downarrow +2 \quad \downarrow +2$$
$$J \quad 100(10^2)$$
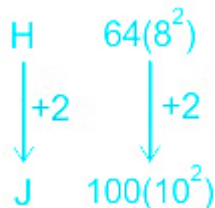
For, L144 : N196

$$L \quad 144(12^2)$$

$$\downarrow +2 \qquad \downarrow +2$$

$$N \quad 196(14^2)$$

Similarly, for U441 : ?

$$U \quad 441(12^2)$$

$$\downarrow +2 \qquad \downarrow +2$$

$$\boxed{W \quad 529(23^2)}$$

Hence, the correct answer is "**W529**".
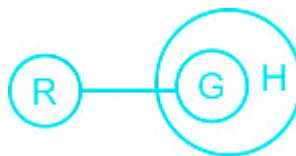
---

4. **Answer: a**

Explanation:

Statement:

I. No R is a G.

II. All G's are H.

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

Conclusions:

(i) No H is a R - False (Because No definite relation given between H and R, so it can be possible only).

(ii) No G is a R - True (No R is G, so No G is also R).

Here, Only conclusion II follows.

Hence, the correct answer is "Option 1".

---

5. Answer: a

Explanation:

The logic followed here is:

So, '967' will complete the series.

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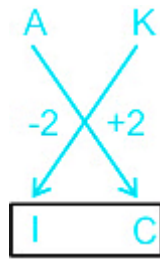
---

6. Answer: a

Explanation:

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

The logic followed here is:

For, RS : QT

Similarly, for AK : ?

Hence, the correct answer is "Option 1".

---

7. Answer: b

Explanation:

The logic followed here is:

Logic: Sum of the Place Value + 1.

Now,

'PINT' is coded as '60',

$\Rightarrow$ P(16) + I(9) + N(14) + T(20) + 1

$\Rightarrow$ 16 + 9 + 14 + 20 + 1 = 60.

'HOME' is coded as '42'

$\Rightarrow$ H(8) + O(15) + M(13) + E(5) + 1

$\Rightarrow$ 8 + 15 + 13 + 5 + 1 = 42.

Similarly, for 'TONE'

⇒ T (20) + O (15) + N (14) + E (5) + 1

⇒ 20 + 15 + 14 + 5 + 1 = 55.

So, 'TONE' will be coded as '55'.

Hence, the correct answer is "55".

---

8. **Answer: b**

Explanation:

Given equation: 11 ÷ 77 + 253 × 23 − 800 = 58.

BODMAS Table:

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

Let's check each option one by one.

Option 1) − and +

Given: 11 ÷ 77 + 253 × 23 − 800 = 58.

After interchanging the Symbols & Numbers we get;

⇒ __11 ÷ 77__ − 253 × 23 + 800 = 58

⇒ 0.14 − __253 × 23__ + 800 = 58

⇒ __0.14__ − 5819 __+ 800__ = 58

⇒ __800.14 − 5819__ = 58

⇒ – 5018.86 ≠ 58

⇒ LHS ≠ RHS

Option 2) × and ÷

Given: 11 ÷ 77 + 253 × 23 − 800 = 58

After interchanging the Symbols & Numbers we get;

⇒ 11 × 77 + <u>253 ÷ 23</u> − 800 = 58

⇒ <u>11 × 77</u> + 11 − 800 = 58

⇒ <u>847 + 11</u> − 800 = 58

⇒ <u>858 − 800</u> = 58

⇒ **58 = 58**

⇒ **LHS = RHS.**

Option 3) + and -

Given: 11 ÷ 77 + 253 × 23 − 800 = 58

After interchanging the Symbols & Numbers we get;

⇒ <u>11 ÷ 77</u> − 253 × 23 + 800 = 58

⇒ 0.14 − <u>253 × 23</u> + 800 = 58

⇒ <u>0.14</u> − 5819 <u>+ 800</u> = 58

⇒ <u>800.14 − 5819</u> = 500

⇒ − 5018.86 ≠ 58

⇒ LHS ≠ RHS

Option 4) - and ×

Given: 11 ÷ 77 + 253 × 23 − 800 = 58

After interchanging the Symbols & Numbers we get;

⇒ <u>11 ÷ 77</u> + 253 × 23 × 800 = 58

⇒ 0. 14 + <u>253 × 23 × 800</u> = 58

⇒ <u>0. 14 + 4655200</u> = 58

⇒ 4655200.14 ≠ 58

⇒ LHS ≠ RHS

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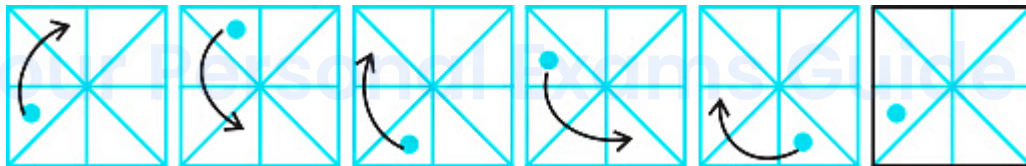
---

9. Answer: b

Explanation:

The logic followed here is:

The shaded circle rotates 2 place in clockwise direction, and in next box it rotated 3 place in anticlockwise direction, continued this pattern till last box.

So, Option 2 will complete the series.

Hence, the correct answer is "Option 2".

---

10. Answer: c

Explanation:

The logic followed here is:

(1st number + 38) = 2nd number,

(2nd number + 38) = 3rd number .

Now,

(32, 70, 108)

⇒ (32 + 38) = 70,

⇒ (70 + 38) = 108.

Now, checking the options:

Option 1: (44, 82, 124)

⇒ (44 + 38) = 82,

⇒ (82 + 38) = 120 ≠ 124,

Option 2: (34, 62, 112)

⇒ (34 + 38) = 72 ≠ 62,

⇒ (62 + 38) = 100 ≠ 112.

Option 3: **(42, 80, 118)**

⇒ **(42 + 38) = 80,**

⇒ **(80 + 38) = 118 = 118.**

Option 4: (38, 76, 116)

⇒ (38 + 38) = 76,

⇒ (76 + 38) = 114 ≠ 116.

Hence, the correct answer is "Option 3".

11. **Answer: a**

Explanation:

Given equation: 96 − 12 ÷ 6 + 3 × 5 = 17.

BODMAS Table:

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

Let's check each option one by one.

Option 1) ÷ and −

Given: 96 − 12 ÷ 6 + 3 × 5 = 17.

After interchanging the Symbols & Numbers we get;

⇒ **96 ÷ 12** − 6 + 3 × 5 = 17

⇒ 8 − 6 + **3 × 5** = 17

⇒ **8** − 6 **+ 15** = 17

⇒ **23 − 6** = 17

⇒ 17 = 17

⇒ LHS = RHS

Option 2) ÷ and ×

Given: 96 − 12 ÷ 6 + 3 × 5 = 17

After interchanging the Symbols & Numbers we get;

⇒ 96 – 12 × 6 + <u>3 ÷ 5</u> = 17

⇒ 96 – <u>12 × 6</u> + 0.6 = 17

⇒ <u>96</u> – 72 <u> + 0.6</u> = 17

⇒ <u>96.06 – 72</u> = 17

⇒ 24.06 ≠ 17

⇒ LHS ≠ RHS

Option 3) + and -

Given: 96 – 12 ÷ 6 + 3 × 5 = 17

After interchanging the Symbols & Numbers we get;

⇒ 96 + <u>12 ÷ 6</u> – 3 × 5 = 17

⇒ 96 + 2 – <u>3 × 5</u> = 17

⇒ <u>96 + 2</u> – 15 = 17

⇒ <u>98 – 15</u> = 17

⇒ 83 ≠ 17

⇒ LHS ≠ RHS

Option 4) + and ×

Given: 96 – 12 ÷ 6 + 3 × 5 = 17

After interchanging the Symbols & Numbers we get;

⇒ 96 – <u>12 ÷ 6</u> × 3 + 5 = 17

⇒ 96 – <u>2 × 3</u> + 5 = 17

⇒ <u>96</u> – 6 <u>+ 5</u> = 17

⇒ <u>101 – 6</u> = 17

⇒ 95 ≠ 17

⇒ LHS ≠ RHS

Hence, the correct answer is "Option 1".

---

12. Answer: d

Explanation:

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

The logic followed here is:

'GERMAN' is written as 'HFSLZM'.

G   E   R   M   A   N
+1   +1   +1   -1   -1   -1
H   F   S   L   Z   M

'RUSTIC' is written as 'SVTSHB'.

R   U   S   T   I   C
+1   +1   +1   -1   -1   -1
S   V   T   S   H   B

Similarly, for 'DIVIDE'

D   I   V   I   D   E
+1   +1   +1   -1   -1   -1
E   J   W   H   C   D

So, 'DIVIDE' will be written as 'EJWHCD'.

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

---

13. **Answer: c**

Explanation:

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

The logic followed here is:

For, CWIS : VBPF

C W I S
↓ ↓ ↓ ↓ Opposite
X D R H
-2 -2 -2 -2
V B P F

Similarly, for AOLD : ?

A O L D
↓ ↓ ↓ ↓ Opposite
Z L O W
-2 -2 -2 -2
X J M U
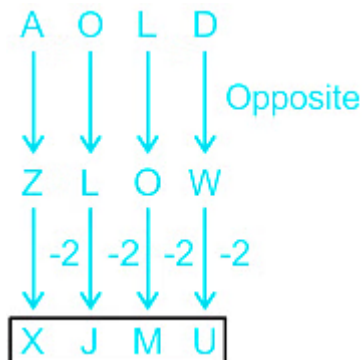
Hence, the correct answer is "Option 3".

14. **Answer: a**

Explanation:

The image that completes the pattern is:
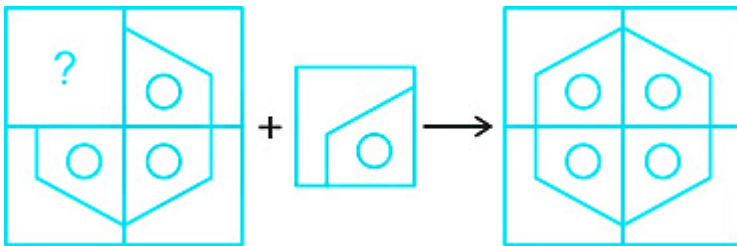
Hence, the correct answer is "Option 1".

---

15. **Answer: b**

Explanation:

Given: Amit, Bablu, Ramesh, Deepak, Imran, Sunil, and Sanju are sitting around a circular table facing opposite to the centre.

1) Sanju sits second to the left of Imran.

2) Ramesh sits fourth to the left of Amit.

3) Amit does not sit adjacent to Imran and Sanju.
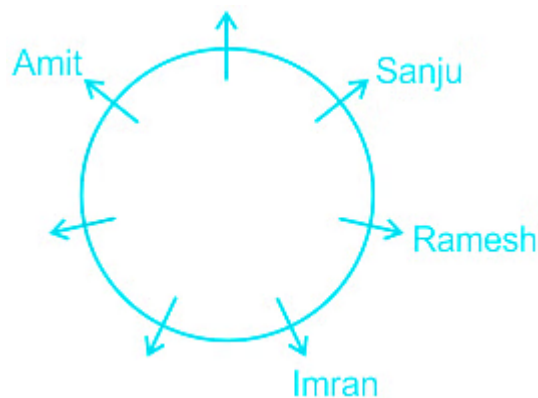
4) Deepak and Bablu sit adjacent to each other.

5) Bablu does not sit adjacent to Amit.

And, Sunil will sit on the remaining place.
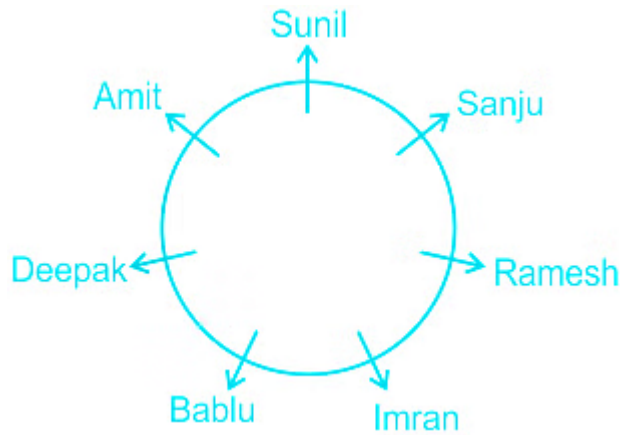
Here, 'Sunil' sits immediate right of Amit.

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

---

16. Answer: b

Explanation:

The logic followed here is:

Step I: The outer letters and symbols are getting exchanged in the next box.
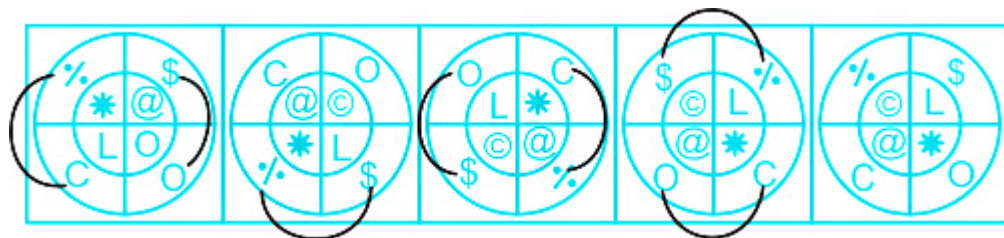
Step II: The inner letters and symbols are getting shifted to +1, +2, +3, +4 places in next boxes, and O has been interchanged with ©.
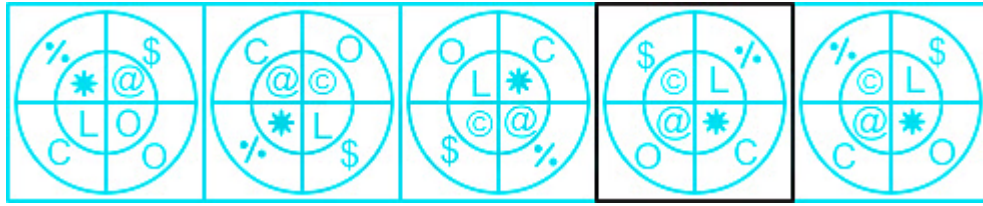
Hence, the correct answer is "Option 2".

---

17. **Answer: c**

Explanation:

The logic followed here is:

1st number^2 + 2nd number^2 = 3rd number.

Now,

(7, 9, 130)

$\Rightarrow 7^2 + 9^2$

$\rightarrow 49 + 81 = 130.$

For (16, 8, 320)

$\Rightarrow 16^2 + 8^2$

$\rightarrow 256 + 64 = 320.$

Similarly, for (11, 9, ?)

$\Rightarrow 11^2 + 9^2$

$\rightarrow 121 + 81 = 202.$

Hence, the correct answer is "Option 3".

---

18. **Answer: d**

Explanation:

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

The logic followed here is:

Logic: Sum of the Place Value - 1.

Now,

'POM' is coded as '43',

$\Rightarrow$ P(16) + O(15) + M(13) – 1

$\Rightarrow$ 16 + 15 + 13 – 1 = 43.

'HAN' is coded as '22',

$\Rightarrow$ H(8) + A(1) + N(14) – 1

$\Rightarrow$ 8 + 1 + 14 – 1 = 22.

Similarly, for ' **BRO** '

$\Rightarrow$ B(2) + R(18) + O(15) – 1

$\Rightarrow$ 2 + 18 + 15 – 1 = 34.

So, 'BRO' will be coded as '34'.

Hence, the correct answer is "34".

---

19. **Answer: d**

Explanation:

The paper when unfolded will appear as shown below:
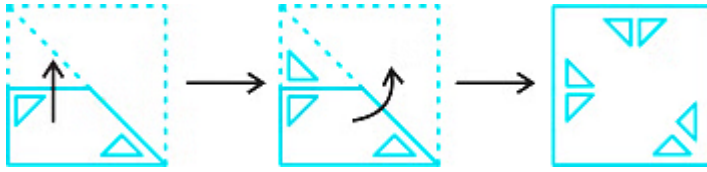
Hence, the correct answer is "Option 4".

---

20. **Answer: c**

Explanation:

Given: Five friends P, Q, R, S and T.

1) Q is second to the left of T.

2) S is the immediate neighbor of Q and T.

3) R is not the immediate neighbor of Q.
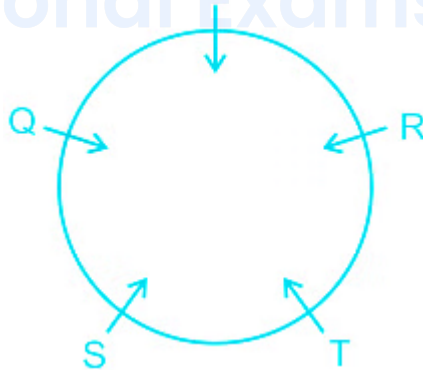
And, P will sit on the remaining place.
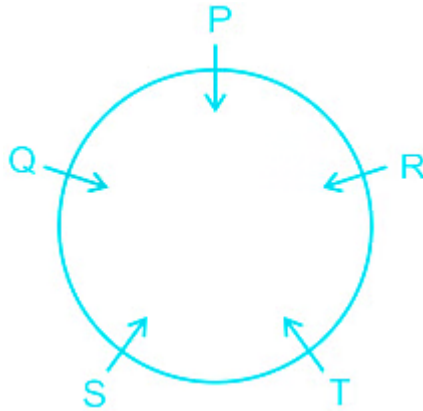
While counting from the left of Q, there are three friends are sitting between Q and S.

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

---

21. **Answer: d**

Explanation:

Statement:

Some holders are parameters.

Some chambers are parameters.

Some parameters are not measures.

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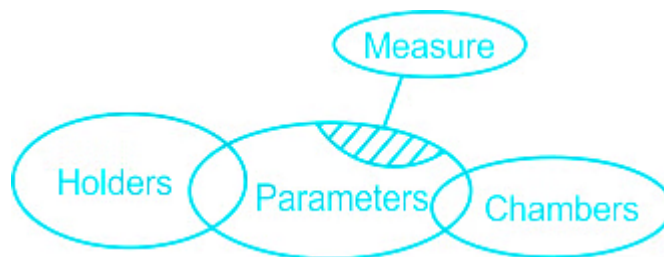
Conclusions:

(i) Some measures are chambers - False (Because No definite relation given between Measure and Chamber, so it can be possible only).

(ii) Some holders are chambers - False (Because No definite relation given between Holder and Chamber , so it can be possible only).

Here, Neither conclusion I nor II follows.

Hence, the correct answer is "Option 4".

---

22. **Answer: a**

Explanation:

The image that completes the pattern is:
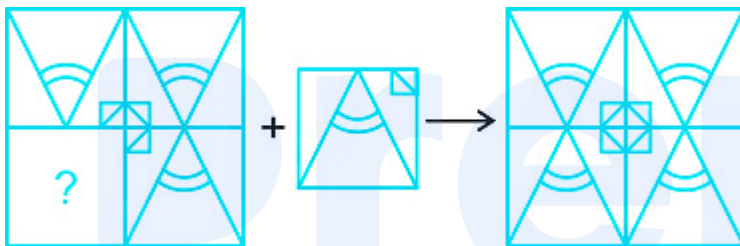
Hence, the correct answer is "Option 1".

---

23. **Answer: c**

Explanation:

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

The logic followed is:

```
B   J   T
|+2 |-2 |+2
↓   ↓   ↓
D   H   V
|+2 |-2 |+2
↓   ↓   ↓
F   F   X
|+2 |-2 |+2
↓   ↓   ↓
[H   D   Z]
|+2 |-2 |+2
↓   ↓   ↓
J   B   B
```
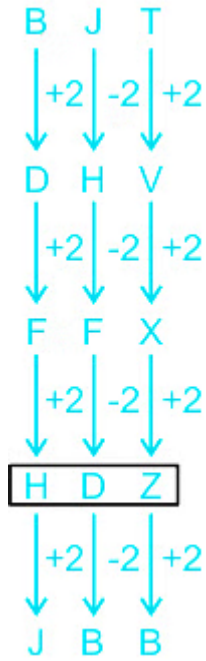
Hence the correct answer is **"HDZ"**.

24. **Answer: b**

Explanation:

The image embedded in given figure is as shown below:

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

Hence, "Option 2" is the correct answer.

25. Answer: d

Explanation:

Given: Among five persons A, B, C, D and E.

A is younger than only D and E.

D/E > E/D > A > _ _ > _ _

E is younger than D and older than B.

C is the youngest.

D > E > A > B > C

So, B is the fourth oldest.

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

---

26. **Answer: c**

Explanation:

Given:-
(1) Total number of students = 5000
(2) Number of students in the Electronics and Communication stream = 20%

(3) The college decided to give ₹300 per student
to each stream for the purchase of teaching materials
Calculation:-
Number of students in the Electronics and Communication stream = 20%
⇒(5000 × 20)/100 = 1000
 The college decided to give ₹300 per student to
each stream for the purchase of teaching materials.
Total money got by Electronics and Communication stream
⇒ 1000 × 300 = 300000
∴ The required answer is 300000.

---

27. **Answer: c**

Explanation:

Given:

The marked price of an item is 25% more than its selling price.

The selling price of the same item is 20% more than its cost price.

Calculation:

Let the cost price be Rs. 100.

The selling price of the same item is 20% more than its cost price.

Then, Selling Price = 1.2 × 100 = Rs. 120

The marked price of an item is 25% more than its selling price.

Marked Price = 1.25 × 120 = 150

Difference between marked price and cost price = 150 – 100 = 50

Percentage = 50/100 × 100 = 50%

∴ Option 3 is the correct answer.

---

28. Answer: d

Explanation:

Given:

Diameter of hemisphere = 7 cm.

Formula Used:

The total surface area of hemisphere = $3\pi r^2$

Calculation:

Diameter of hemisphere = 7 cm

Radius, r = 7/2 cm

The total surface area of hemisphere = 3π r2

⇒ 3 × 22/7 × 7/2 × 7/2

⇒ 33 × 7/2

⇒ 231/2

⇒ 115.5 cm^2

∴ Option 4 is the correct answer.

---

29. **Answer: a**

Explanation:

Given:

The average of 12 numbers is 15.

The average of the first four numbers is 13.

Concept Used:

Average = Sum of numbers/Total numbers

Calculation:

The average of 12 numbers is 15.

Total sum of 12 numbers = 15 × 12 = 180

The average of the first four numbers is 13

Sum of first four numbers = 13 × 4 = 52

Sum of remaining 8 numbers = 180 − 52 = 128

Average = 128/8 = 16

∴ Option 1 is the correct answer.

30. **Answer: b**

Explanation:

Given:

A retailer buys a used laptop for Rs. 22,500.

His overhead expenses are Rs. 1,500.

He sells the laptop for Rs. 30,000.

Concept Used:

Profit = Selling Price - Cost Price

Profit% = Profit/CP × 100

Calculation:

CP of Laptop = Rs. 22500

Overhead expense = Rs. 1500

Total CP = 22500 + 1500 = Rs. 24000

SP of Laptop = Rs. 30000

Profit = SP - CP

⇒ 30000 - 24000

⇒ 6000

Profit% = Profit/CP × 100

⇒ 6000/24000 × 100

⇒ 25%

∴ Option 2 is the correct answer.

---

31. **Answer: b**

Explanation:

Calculation:

The number of students who scored 40 and above in Hindi = 80

The number of students who scored 20 and above in English = 180

The ratio will be:

⇒ 80 : 180

⇒ 4 : 9

∴ Option 2 is the correct answer.

---

32. **Answer: d**

Explanation:

Given:-
(1) Kavita can complete a piece of work alone in 12 hours
(2) Komal can complete the same work alone in 18 hours
Formula used:-
Total work = time × efficency
Calculation:-

	Time	EFFICIENCY	Total work
kavita	12	3	36
komal	18	2	

⇒ Kavita works alone for the first 4 hours and leaves.

After that, Komal comes and completes the remaining work by herself.

Let's assume the time taken by Komal to complete

the remaining work by herself is 't' hours

Time of Kavita × Efficiency of Kavita

+ time of Komal × Efficiency of Komal = 36

⇒ 4 × 3 + t × 2 = 36

⇒ 2t +12 = 36

⇒ 2t = 24

⇒ t = 12

∴ The required answer is 12.

---

33. Answer: c

Explanation:

Detailed solution:-

Two wires of lengths 10 m 54 cm and 11 m 56 cm are

both cut into pieces of length x cm each,

where x is an integer.

Length of first wire = 10 m 54 cm = 1054 cm

Length of second wire = 11 m 56 cm = 1156 cm

⇒ 1054 cm factor = 2 × 17 × 31

⇒ 1156 cm factor = 2 × 2 ×17 ×17

The highest common factors(H.C.F) of 1054 and 1156 are 17 and 2.

The maximum length of each piece is 'x'.(Given)

So the maximum value of x = 2 × 17 =34

∴ The required answer is 34.

---

34. Answer: d

Explanation:

Given:-
(1) income = ₹1,50,000
(2) Savings = ₹ 1,500
Formula used:-
Percentage = (Savings /Total Monthly income) × 100
Calculation:-
⇒ Percentage of his savings =(1500/150000) × 100

⇒ Percentage of his savings = 1%
∴ The required answer is 1%.

---

35. Answer: c

Explanation:

Detailed solution:-
let's assume total marks = M
 If he scored 345 and failed by 15 marks.
Passing marks for him = 345+15 = 360
For a candidate to pass an examination,
he must score 60% marks
So,
⇒ (M × 60)/100 = 360
⇒ M = 36000/60 = 600
∴ The required answer is 600.

---

36. Answer: a

Explanation:

Given:-
(1) Long = 60 feet
(2) Broad = 30 feet

(3) High = 20 feet

The formula u sed:-

Length of the longest pole = $\sqrt{L^2 + W^2 + H^2}$

Where L = Length, W = Width ,H = Height

Calculation:-

Length of the longest pole = $\sqrt{L^2 + W^2 + H^2}$

$\Rightarrow \sqrt{60^2 + 30^2 + 20^2}$

$\Rightarrow \sqrt{3600 + 900 + 400}$

$\Rightarrow \sqrt{4900}$ = 70 feet

∴ The required answer is 70.

---

37. Answer: c

Explanation:

Given:-

All the odd numbers between 8 and 32

Formula used:-

Average = (Frist number + Last number)/2

Calculation:-

All the odd numbers between 8 and 32 (9 to 31)

Where,

Frist number = 9   Last number =31

Average = (Frist number + Last number)/2

$\Rightarrow$ Average = (9 + 31)/2 = 40/2

$\Rightarrow$ Average = 20

∴ The required answer is 20.

---

38. Answer: a

Explanation:

Detailed solution:-

⇒ P = Q and Q = R,

⇒ P/Q = 5/6

So let's assume P = 5M and Q = 6M... (1)

⇒ Q = R

⇒ Q/R = 4/5

So let's assume Q = 4Z and R = 5Z. .....(2)

We get   6M = 4Z

⇒ Z = 1.5M

  [From (1) & (2)]

Value of 2P : 3Q : 4R = 2 × 5M : 3 × 6M : 4 × 5Z

⇒ 10M: 18M: 20Z

Put the value of z above the ratio

⇒ 10M: 18M: 20 × 1.5M

⇒ 10M: 18M: 30M

⇒ 5: 9: 15

∴ The required answer is 5: 9: 15

---

39. **Answer: d**

Explanation:

Given:-

(1)   A boat can travel 21 km in 3 hours going upstream.

(2) It can travel 55 km in 5 hours going downstream.

Formula used:-

(1) Upstream = (u – v) km/hr

(2) Downstream = (u + v)Km/hr

where "u" is the speed of the boat in still water

and "v" is the speed of the stream

Calculation:-

Let's assume the speed of the boat in still water and

the speed of the stream is 'u' and 'v' respectively.

 A boat can travel 21 km in 3 hours going upstream.

⇒ u – v = 21/3
⇒ u – v = 7 km/hr ....(1)
It can travel 55 km in 5 hours going downstream.
⇒ u + v = 55/5
⇒ u + v = 11km/hr..............(2)
Subtracting Equation (2) to equation(1)
⇒ u + v – (u –v) = 11 – 7
⇒ 2v = 4
Speed of the stream (v) = 2
∴ The required answer is 2.

---

40. Answer: d

Explanation:

Detailed solution:-
Two numbers are in the ratio 3 : 5.
Let's assume the two numbers are 3M and 5M respectively.
If 4 is subtracted from each of these two numbers, the new numbers then are in the ratio 4 : 7

$$\frac{3M - 4}{5M - 4} = \frac{4}{7}$$

⇒ 21M – 28 = 20M – 16
⇒ 21M – 20M = 28 – 16
⇒ M = 12
Smaller of the two original numbers = 3M
⇒ 3 × 12 = 36
∴ The required answer is 36.

---

41. Answer: b

Explanation:

Given:-

(1)   A, B, and C together can complete a work in 10 days.

(2) A and B together can do the same work in 12 days

(3)   A, B, and C received ₹ 9,000 for doing the work together,

Formula used:-

(1) Work Done = Time Taken × Rate of Work

(2) Amount will be shared among them as per their efficiencies

Calculation:-

	Time	Efficiency	Total work
A+B+C	10	6	60
A+B	12	5	

The efficiency of C = (A + B + C) Efficiency - (A +B) Efficiency

⇒ The efficiency of C = 6 - 5 = 1 unit/day

A, B, and C received ₹9,000 for doing the work together,

We know that,

 The amount will be shared among them as per their efficiencies

Share of C from the above amount = 9000 × (1/6)

⇒ 1500

∴ The required answer is 1500.

42. Answer: c

Explanation:

Given:

$$\frac{75}{28} \times \frac{7}{12} + \left[\frac{5}{12} + \left\{ \frac{5}{7} + \left(\frac{8}{12} \text{ of } \frac{36}{24} - \frac{1}{2} \right) \right\} \right]$$

Concept used:

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

Calculation:

$$\frac{75}{28} \times \frac{7}{12} + \left[\frac{5}{12} + \left\{ \frac{5}{7} + \left(\frac{8}{12} \text{ of } \frac{36}{24} - \frac{1}{2} \right) \right\} \right]$$

$$\Rightarrow \frac{75}{28} \times \frac{7}{12} + \left[\frac{5}{12} + \left\{ \frac{5}{7} + \frac{1}{2} \right\} \right]$$

$$\Rightarrow \frac{75}{28} \times \frac{7}{12} + \left[\frac{5}{12} + \left\{ \frac{17}{14} \right\} \right]$$

$$\Rightarrow \frac{25}{16} + \frac{274}{168}$$

$$\Rightarrow \frac{1073}{336}$$

∴ The required answer is $\frac{1073}{336}$.

43. **Answer: b**

Explanation:

Calculation:-
$\Rightarrow$ 34 + 16 – a × [40 ÷ 5 – 3] = 15
$\Rightarrow$ 50 – a × [8 – 3] = 15
$\Rightarrow$ 50 – a × 5 = 15
$\Rightarrow$ 5a = 50 – 15
$\Rightarrow$ a = 35/5
$\Rightarrow$ a = 7
∴ The required answer is 7.

44. Answer: c

Explanation:

Given:-

(1) A man completes his journey in (T) 6 hours

(2) He covers half the distance at 10 km/h and the rest at 20 km/h

Formula used:-

Time = Distance/Speed

Calculation:-

Let's assume the total distance is 2D

We know that

$\Rightarrow$ Time = Distance/Speed

$\Rightarrow \frac{D}{10} + \frac{D}{20} = 6$

$\Rightarrow \frac{(2D+D)}{20} = 6$

$\Rightarrow$ 3D = 120

$\Rightarrow$ D = 40

$\Rightarrow$ Total distance = 2D = 80

$\therefore$ The required answer is **80**.

45. Answer: a

Explanation:

Given:-

The radius of the base and the height of a closed cylinder are 14 cm and 14 cm

Formula used:-

(1) The total surface area of the cylinder = $2\pi r(r + h)$

Where r = The radius of a closed cylinder

h = The height of a closed cylinder

(2) The area of a circle = πR^2

Where R = The radius of a circle

Calculation:-

As per the question,

The total surface area of the cylinder = The area of a circle

$\Rightarrow 2\pi r(r+h) = \pi R^2$

$\Rightarrow 2r(r+h) = R^2$

Put the value of r and h in the above equation

$\Rightarrow 2 \times 14 (14+14) = R^2$

$\Rightarrow R^2 = 282 \quad \Rightarrow R = 28$ cm

Diameter of the circle = 2R

$\Rightarrow 2 \times 28 = 56$ cm

∴ The required answer is 56.

---

46. **Answer: c**

Explanation:

Given:-

A sum of ₹7,000 deposited at compound interest becomes triple of itself after 4 years

Formula used:-

(1) Amount = Principal + Compound Interest

(2) $C.I = P(1 + \frac{R}{100})^T$

Where C. I = Compound Interest,

P = Principal

R = Rate

T = Time

Calculation:-

A sum of ₹7,000 deposited at compound interest becomes triple of itself after 4 years.

So money after 4 years = 7000 × 3 = 21000

We know that Amount = Principal + $P(1 + \frac{R}{100})^T$

$\Rightarrow 21000 = 7000(1 + (R/100)^4$

$\Rightarrow (1 + (R/100)^4 = 3$

Now apply the cube in the above equation.

$\Rightarrow \left[\ \left(1+(R/100)^4\ \right]^3\ = 33\right.$

.

$\Rightarrow \left[\ \left(1+(R/100)\ \right]^{12}\ = 27\right.$

So from the above equation,

We can say that after 12 years money will be 27 times itself

Hence money after 12 years = 27 × 7000 = 189000

.

∴ The required answer is 189000.

---

47. **Answer: a**

Explanation:

Given:-

A shopkeeper marks up his price by 12% and then allows a 12% discount.

Formula used:-

 Loss percentage = (Loss/CP) × 100

Calculation:-

Let's assume the cost price is 100y.

A shopkeeper marks up his price by 12%.

Marked price = 100y of (100+12)%

$\Rightarrow$ 100y of 112%

$\Rightarrow$ (100y × 112)/100 $\Rightarrow$112y

Then allows a 12% discount.

Selling price = 112y of (100-12)%

$\Rightarrow$ 112y of 88% = 98.56y

Loss percentage = (Loss/CP) × 100

$\Rightarrow$ [(100y - 98.56y)/100y] × 100

$\Rightarrow$ 1.44%

∴ **Option 1 is the correct answer.**

---

48. Answer: c

Explanation:

Given:-
The average of nine consecutive even numbers is 24.
Formula used:-
Average = {Sum of Observations} ÷ {Total number of Observations}.
Calculation:-
Let's assume nine consecutive even numbers are y, (y+2), (y+4),
(y+6), (y+8), (y+10), (y+12), (y+14) and (y+16)….
The average of nine consecutive even numbers is 24
Average = {Sum of Observations} ÷ {Total number of Observations}.
$\Rightarrow [y + (y + 2) + (y + 4)………+(y + 16)]/9 = 24$
$\Rightarrow 9y + 72 = 24 \times 9$
$\Rightarrow 9y = 216 - 72$
$\Rightarrow y = 16$
Average of the smallest three of these 9 given numbers
$= [y+ (y+2)+ (y+4)]/3 = [3y + 6]/2 = y + 2$
Put the value y above the equation
$\Rightarrow 16 + 2 = 18$
∴ The required answer is 18.

49. Answer: d

Explanation:

Given:-
(1) The number of pages read by Rishi = 60
(2) The number of pages read by Neha =50
Formula used:-
Percentage more = [(higher value - lower value)/lowervalue] × 100
Calculation:-
As per the question,

The Percentage of more Rishi
read than Neha = [(60 – 50)/50] × 100

⇒ (10/50) × 100

⇒ 20%

∴ The required answer is 20%.

---

50. Answer: c

Explanation:

Given:-
A sum of money amounts to 5 times itself in 20 years

Formula used:-
S.I = (P × T × R)/100
S.I = Amount – P
 Here,
P = Sum or principal
T = time
R = rate
Calculation:-
Let the sum be P and the rate be R
Here,
Amount = 5P
So, interest = 5P – P = 4P
 Now,
⇒ 4P = (P × 20× R)/100
⇒ R = 400P/20P
⇒ R = 20 %
∴ The required answer is20%

---

51. Answer: a

Explanation:

The correct answer is No error

⭐ <u>**Key Points**</u>

- **The sentence is grammatically correct.**
- The sentence formation is also correct , subject, object and verbs are used at correct places.
- The tense used in this sentence has no error.
- The punctuation marks used are also correct.

---

52. **Answer: d**

Explanation:

The correct answer is – **4) Abuse.**

⭐ <u>**Key Points**</u>

- Revile means to **criticize, insult, or speak about someone or something in a very critical and abusive way.**
- Therefore, among the given options, the most appropriate synonym for "Revile" is "**Abuse**" which means **to treat someone or something with cruelty or violence, or to speak in a way that is insulting, offensive, or critical.**
- **Option 1) Silence** means to **make someone or something silent or to have no sound.**
- **Option 2) Incite** means to **encourage or urge someone to do something, often something negative or violent**.
- **Option 3) Discourage** means to **prevent or make someone feel less confident about something or to make them feel less enthusiastic about it.**
- Other three options are not synonyms of Revile.

---

53. **Answer: a**

Explanation:

the correct answer is - The correct answer is - to waste time on useless things.

⭐ **Key Points**

- The idiom "flogging a dead horse" means to continue to waste time or energy on a particular task or situation that is already failed or concluded, and it cannot be brought back to life, like a dead horse.
- In this sentence, the speaker is suggesting to stop wasting time on something that has no potential, and instead focus on something more productive, such as their career.
- Therefore, the correct option is "To waste time on useless things."

54. **Answer: a**

Explanation:

The correct answer is – **Autocrecy.**

⭐ **Key Points**

- The correct spelling is **Autocracy**, which means **a system of government by one person with absolute power.**
- The word "**Bureaucracy**" refers to a system of government in which most of the important decisions are made by state officials, rather than by elected representatives.
- The word "**Autonomy**" refers to the freedom or power to govern oneself.
- The word "**Anarchy**" refers to a state of disorder and chaos caused by the absence of government or authority.
- The word "**Autocracy**" refers to a system of government in which one person has complete control or power over a country or state.

Therefore, the correct answer is Autocracy.

---

55. Answer: c

Explanation:

The correct option is – "**make plans**."

⭐ **Key Points**

- We need to **make plans** for next week, so are you in or out?
- To "make plans" means **to arrange or organize something in advance.**
- In the given sentence, the speaker is suggesting that they need to plan something for next week and is asking the listener if they would like to participate.
- The other options, "make noise," "make a mess," and "make a mistake," do not fit the context of the sentence and do not convey the intended meaning.

---

56. Answer: a

Explanation:

The correct option is – "**readily respond to these stimuli.**"

⭐ **Key Points**

- The plants **readily respond to these stimuli.**
- The word "stimulus" is a singular noun, and the verb "respond" should agree with it in number.
- Since the sentence refers to **multiple stimuli, the plural form of the noun "stimuli" should be used.**
- Therefore, the correct sentence would be: "The plants readily respond to these stimuli."

- Option 1 provides the correct plural form of the noun and is the most appropriate improvement to the sentence.
- Options 2 and 3 are incorrect because they do not agree with the number of the subject, and option 4 is not applicable as the sentence requires improvement.

---

57. Answer: a

Explanation:

The correct synonym of the word "fright" is **"dread."**

⭐ <u>Key Points</u>

- "**Fright**" is a noun that means **a sudden intense feeling of fear or anxiety**.
- "**Dread**" is a noun that means **a strong feeling of fear or apprehension**.
- Both "fright" and "dread" share a similar meaning and can be used interchangeably in many contexts.
- Therefore, **option 1 is the correct synonym of the given word.**
- **Option 2, "mockery**," is an antonym of "fright" and means **ridicule or derision**, which has a completely different meaning.
- **Option 3, "composure**," refers to **calmness and self-control**, which is the opposite of "fright."
- **Option 4, "bravery**," means **courageous behavior or valor**, which is also an antonym of "fright."

---

58. Answer: c

Explanation:

The correct answer is - 3) environment are not.

⭐ <u>Key Points</u>

- The part of the sentence that contains an error is "**environment are not.**"
- The correct form should be "environment is not."
- Therefore, option 3 contains the error.
- The corrected sentence would be: "We are all aware that our environment is not what it used to be."

---

59. Answer: b

Explanation:

The correctly spelt word is - "**Resonate**" (option 2).

⭐ **Key Points**

Option 1, "**Escapeade,**" is spelled incorrectly.
Option 3, "**Progresion,**" has an extra "s" and is spelled incorrectly.
Option 4, "**Disccovery,**" has an extra "c" and is spelled incorrectly.

Therefore, the correct answer is option 2, "**Resonate,**" which means **to evoke or suggest images, memories, or emotions.**

---

60. Answer: c

Explanation:

The phrase "based on limited studies" means that **the carbon-trapping mechanisms have only been studied to a limited extent, and we have identified them based on that limited research.**

On the other hand, the phrase "based at limit studies" does not make sense in this context, as "at limit" does not convey any clear meaning. Hence, it is an error in the original sentence.

The corrected sentence would be: "Most of the carbon-trapping mechanisms that we have identified are based on limited studies."

61. Answer: c

Explanation:

The correct option that can be used as a one-word substitute for the given group of words is "**infallible**."

⭐ **Key Points**

- The word "**infallible**" means **incapable of making mistakes or being wrong**. Therefore, it accurately reflects the meaning of the given group of words.
- The other options do not accurately reflect the meaning of the given group of words.
- A "**fatalist**" is someone who believes that events are predetermined and inevitable, a "**fanatic**" is someone who is excessively enthusiastic or devoted to a particular cause or belief, and a "**cynic**" is someone who believes that people are motivated purely by self-interest.

62. Answer: c

Explanation:

The correct meaning of the underlined idiom is: "**A very small part of something big or whole.**"

⭐ **Key Points**

- The idiom "a drop in the bucket" is used **to describe a small amount of something that is considered insignificant compared to the overall amount needed or required.**
- In the given sentence, the speaker is saying that half a million dollars is only a small amount in comparison to what is required for the industry, implying that a much larger amount of money is needed.
- The other options do not accurately reflect the meaning of the idiom.

- "**An unreliable person**" is referred to as a "loose cannon," "**unity and functioning together to achieve a goal**" is described as "teamwork," and "**a person or situation having no hope of positive change**" is expressed as "a lost cause."

---

63. Answer: d

Explanation:

The correct answer to fill in the blank is "**abode.**"

⭐ Key Points

- "**Abode**" means **a place of residence or habitation.** In the given sentence, the speaker is referring to a small hut where they will be staying for the next three days.
- Hence, the most appropriate word to fill in the blank is "abode."
- The other options are not appropriate in this context.
- "**Legacy**" refers to something handed down from the past, "scout" means to explore an area to gather information, and "loaf" means to idle away time.

---

64. Answer: b

Explanation:

The most appropriate option to fill in the blank is – "**rage.**"

⭐ Key Points

- "**Love**" means a strong feeling of affection or attachment, and it does not fit the meaning in the given context. Therefore, it is not the correct answer.
- "**Rage**" means a strong feeling of anger or fury, and it fits the meaning in the given context. Therefore, it is the correct answer.
- "**Calmness**" means a state of being peaceful or tranquil, and it does not fit the meaning in the given context. Therefore, it is not the correct answer.

- "**Fortune**" means wealth or financial success, and it does not fit the meaning in the given context. Therefore, it is not the correct answer.
- Therefore, the correct option to fill in the blank is **"rage**," as it conveys the intended meaning that **the person believed he had struck terror in his children's hearts because of his angry or furious behavior.**

---

65. Answer: d

Explanation:

The most appropriate option to fill in the blank is **"peak**."

⭐ **Key Points**

- "**Pick**" means to choose or select, and it does not make sense in the given context. Therefore, it is not the correct answer.
- "**Peek**" means to look quickly or secretly, and it does not fit the meaning in the given context. Therefore, it is not the correct answer.
- "**Peck**" means to give a quick kiss or a series of small bites, and it does not make sense in the given context. Therefore, it is not the correct answer.
- "**Peak**" means the highest point or level of something, and it fits the meaning in the given context. Therefore, it is the correct answer.
- Therefore, the correct option to fill in the blank is "peak," as it conveys the intended meaning that Miss Samantha is at the highest point of her popularity.

---

66. Answer: b

Explanation:

The correct answer is - **Defiant**.

⭐ **Key Points**

- Flexible:able to make or deal with changes.

- E.g.- Our schedule for the weekend is very flexible.
- "**Defiant**" means **disobedient and resistant to authority, which is the opposite of "Flexible.**"
  - E.g.- Despite the criticisms, she remained **defiant**.
- Thus, the correct answer is **Option 2.**

⭐ Additional Information

- "**Compliant**" implies **someone who is obedient and follows rules or requests without resistance.**
- "**Peculiar**" means **strange or unusual, which is not the opposite of "Flexible.**"
- "**Reckless**" means **careless or irresponsible, which is not the opposite of "Flexible.**"

---

67. **Answer: a**

Explanation:

The correct option is 1) woke up from their sleep.

⭐ Key Points

- The given sentence has a **subject-verb agreement** error. The subject "monkeys" is plural, but the verb "its" is singular, which makes the sentence grammatically incorrect.
- The correct verb form should be "their" to match the plural subject "monkeys."
- Therefore, the correct sentence is **"As the tree came crashing down, the monkeys woke up from their sleep and ran from branch to branch.**"

⭐ Additional Information

- Option 2) "No improvement required" is incorrect because the given sentence has an error.
- Option 3) "waken up in their sleep" is incorrect because "waken up" is not a correct verb form to use in this sentence. The correct past participle of "wake" is "woken up."

- Option 4) "wakes up from its sleep" is incorrect because "its" is singular and does not agree with the plural subject "monkeys."

---

68. Answer: a

Explanation:

The correct option is - "is".

⭐ <u>Key Points</u>

- The sentence requires a singular verb to agree with the subject "age."
- "Age" is a singular noun, and hence, it should be followed by the singular verb "is."

Therefore, the correct sentence is "The age of the participants is an important factor in this competition."

⭐ <u>Additional Information</u>

- Option 2) "do" is incorrect because it is a plural verb, and it does not agree with the singular subject "age."
- Option 3) "has" is also incorrect because it is a singular verb, but it is used for a singular subject that is not appropriate for this sentence.
- Option 4) "are" is also incorrect because it is a plural verb and does not agree with the singular subject "age."
- Hence, the correct option to fill in the blank is 1) is.

---

69. Answer: c

Explanation:

The correct option is 3) No other information.

⭐ <u>Key Points</u>

- The given sentence has an error in **subject-verb agreement** and incorrect use of the noun "information."
- "Information" is an uncountable noun and does not take an "s" at the end.
- Therefore, the correct sentence should be "No other information was conveyed to

- ⭐ <u>Additional Information</u>

- Option 1) "No other's information" is incorrect because it uses an apostrophe "s," which is not needed and incorrect.
- Option 2) "No improvement required" is incorrect because the sentence has an error that needs to be corrected.
- Option 4) "None another information" is incorrect because it is not grammatically correct and does not convey the intended meaning of the sentence.
- Therefore, the correct option that will improve the underlined part of the sentence is 3) No other information.

---

70. **Answer: b**

Explanation:

The correct answer is - Mercenary.

⭐ <u>Key Points</u>

- A "**mercenary**" is **a person who is hired to work or act for money or other rewards.** They are motivated by financial gain rather than by principles or loyalty.
- A "**Debtor**" is a person who owes money to others.
- A "**Contractor**" is a person or company who is hired to perform work or provide services to another party.
- A "**Player**" is **a person who participates in a game or a sport.**
- Therefore, out of the given options, the most appropriate one-word substitute is "Mercenary."

71. Answer: c

Explanation:

Correct answer - 3) Born

⭐ Key Points

- The sentence talks about Mahalia Jackson's family and her birth. The appropriate option to fill in the blank would be "**Born**".
- Mahalia Jackson's background and upbringing are being introduced in the first sentence.
- The word "born" is the appropriate option to fill in the blank as it describes her entry into the world and her family's status as preachers.
- Therefore, option 3) "Born" is the correct answer.

72. Answer: a

Explanation:

The correct answer is - "**Whisper**".

⭐ Key Points

- This is because the sentence is referring to Mahalia Jackson's childhood habit of singing to herself before she went to sleep, which suggests a soft, quiet singing voice.
- "**Whisper**" is a verb that describes **speaking or singing in a quiet voice**, making it the most suitable option in this context.
- Therefore, the completed sentence would read: **"As a little girl, she would whisper to herself before she went to sleep, 'Someday the sun is going to shine down on me in some faraway place.'"**

73. Answer: c

Explanation:

The most appropriate option to fill in blank number 3 is " scrubbed".

⭐ <u>Key Points</u>

- The sentence is referring to Mahalia Jackson's hands and how she used them in her performances.
- The verb "**scrubbed**" here suggests that **she had been doing hard physical work, most likely cleaning floors, and that her hands had become rough and calloused as a result**.
- The other options, "stubbed", "clubbed", and "grubbed", do not make sense in this context.

---

74. Answer: b

Explanation:

The most appropriate option to fill in blank number 4 is "**Laundered.**"

⭐ <u>Key Points</u>

- The sentence mentions that Mahalia used her hands to work as a maid and laundress in her mid-teens.
- Therefore, it makes sense that she continued to work as a laundress to earn a living in Chicago.
- **Option 2, "Laundered,"** refers to the **process of washing clothes and linens, which would have been a common job for a young woman in that era**.
- **Option 1, "Pondered,"** means to think deeply about something, which does not fit the context of the sentence.
- **Option 3, "Unsoldered,"** means to disconnect or separate something that has been soldered together, which is not relevant to the sentence.

- Option 4, "**Considered**," means to think about something carefully before making a decision, which also does not fit the context of the sentence.

---

75. Answer: b

Explanation:

The most appropriate option to fill in blank number 5 is "**Voice**".

⭐ **Key Points**

The previous sentence mentions Mahalia's increasing invitations to sing at various events, which implies that her singing talent is being recognized and appreciated. Therefore, it makes sense to describe her "remarkable" quality as her "Voice".

---

76. Answer: d

Explanation:

The correct answer is **Option 4**.

⭐ **Key Points**

- Autotrophs: Organisms that are able to produce their own food from raw materials and energy are called autotrophic organisms.
  - They are also known as producers.
  - Autotrophs fulfilled energy requirements by photosynthesis.
  - Green plants, algae, and cyanobacteria are examples of autotrophs.
- There are mainly two types of autotrophs available:
  - Photoautotrophs: Organisms use sunlight to prepare their food.
  - Chemoautotrophs: Organisms that use chemical energy to prepare their food.

⭐ **Additional Information**

- Heterotrophic is a type of nutrition that involves the intake of complex material prepared by other organisms.
- Different types of heterotrophic nutrition:
    - Saprophytic: They obtain nutrients from dead and decaying matter.
    - Parasitic: A type of nutrition in which an organism lives inside the body or at the body surface of another organism for its survival is known as Parasitic nutrition.
    - Holozoic: Nutrition takes place in organisms that take solid or liquid food inside their body known as Holozoic nutrition.
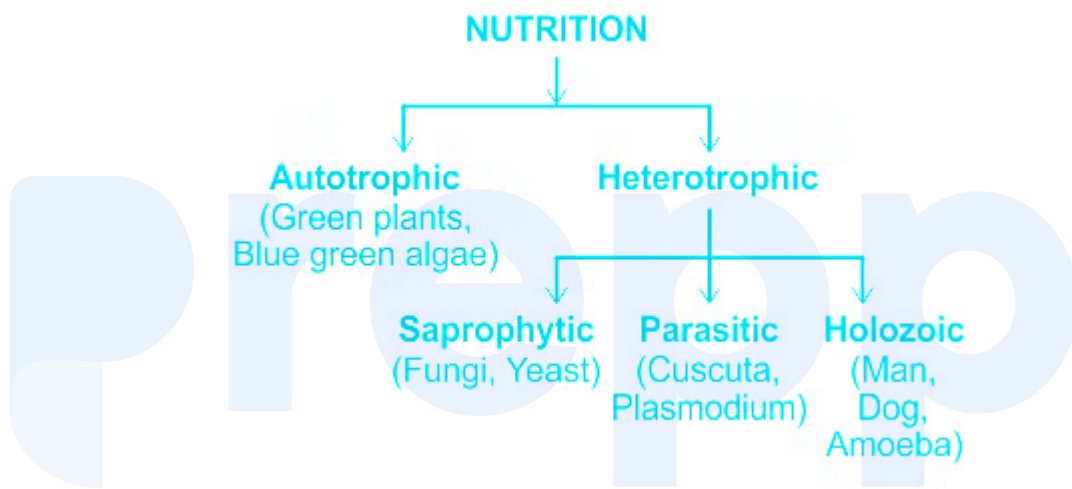
77. **Answer: c**

Explanation:

The correct answer is Option 3.

⭐ Key Points

- Maiden -
    - **Maiden** over is related to the game of Cricket.
    - In Cricket an over consists of six legal deliveries of ball towards the batsman.
    - In the Maiden over, no run is scored which can be counted against the bowler, i.e. runs may be scored through leg byes.

- Leg before wicket (LBW) is one of the ways in which a batsman can be dismissed in the sport of cricket.
  - Following an appeal by the fielding side, the umpire may rule a batter out lbw if the ball would have struck the wicket but was instead intercepted by any part of the batter's body.
  - The umpire's decision will depend on a number of criteria, including where the ball was pitched, whether the ball hit in line with the wickets, the ball's expected future trajectory after hitting the batsman, and whether the batter was attempting to hit the ball.
  - Leg before wicket first appeared in the laws of cricket in 1774, as batsmen began to use their pads to prevent the ball from hitting their wicket.
- **The term Yorker** is used in **Cricket**. **Yorker** is a ball that is bowled on the cricket pitch just before the cricketer's leg.
  - It is a ball that is bowled in such a way that it may strike at the place where the ball is kept and if the bat is lifted up, it may hit the stumps.

⭐ <u>Additional Information</u>

- Slam Dunk -
  - A basketball slam dunk occurs when a player jumps in the air and drives the basketball through the hoop while touching the rim with one or two hands.
  - A successful dunk is worth two points for the offense team.
  - The official score of the play is a field goal for that player since it is an attempt to score.
  - If the offensive player misses the dunk, it will count against their field goal percentage.

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78. **Answer: d**

Explanation:

The correct answer is <u>Option 4.</u>

⭐ <u>Key Points</u>

- **Ugadi** is one of the famous festivals celebrated among **the Hindus** with great pomp and fanfare. **Ugadi** is celebrated as the New Year of the **Telugu** and **Kannada people**.
- The festival of Ugadi is celebrated on the first day of Chaitra month according to the Hindu calendar.
- On the other hand, according to the Gregorian calendar, this festival falls in March or April.
- With the arrival of spring, this festival also marks the arrival of a new crop for the farmers.
- On the day of Ugadi, Lord Brahma, the creator of the universe, is worshipped.
- This festival brings us very close to nature and on this day a drink called Pachadi is made which is very healthy.
- On this auspicious day, people in South India also start new work, such as starting a new business, home entry etc.

⭐ **Additional Information**

- Onam -
  - Onam is the most popular festival in Kerala.
  - It is a harvest festival that commemorates the annual visit of mythical king Mahabali.
  - Onam is the official festival of the state.
  - The Panchangam, which happens on the 22nd Nakshatra Thiruvonam in the month Chingam of the Malayalam calendar, is used to determine the date.
  - Maturaikkci, a Tamil poetry from the Sangam era, contains the oldest recorded reference to Onam.
  - During the Onam festival, households are adorned with exquisite floral carpets (Pookkalam), and traditional art forms and games are seen everywhere.
- Gudi Padwa -
  - Gudi Padwa, which is mostly observed in the state of Maharashtra, ushers in the harvest season.
  - According to the lunisolar Hindu calendar, Maharashtrians celebrate the day as New Year's Day.

- Gudi, which refers to Brahma's flag, and Padwa, Padva, or Paddava, which refers to the first day of the moon's bright phase, are the two terms that make up the phrase "Gudi Padwa."
  - According to the Hindu lunisolar calendar, Gudi Padwa is observed on the first day of Chaitra, which, according to the Gregorian calendar, often occurs between March and April.
  - In 2022, Gudi Padwa was celebrated on 2nd April.
- Pongal -
  - Pongal is a four-day-long harvest festival celebrated mostly in the states of South India, especially in Tamil Nadu.
  - It is celebrated in the month of January every year.
  - The harvest festival is named after the Tamil word, Ponga, which means to boil.
  - The first day of Pongal is called <u>Bhogi</u> and is celebrated in honor of Lord Indra.
  - The second day of Pongal is known as Surya Pongal and is dedicated to the Sun God.
  - The third day of Pongal is called Mattu Pongal and is celebrated in the name of cows.
  - The fourth and final day of Pongal is called Kaanum Pongal, which marks the end of the harvest festival for the year.

79. **Answer: c**

Explanation:

The correct answer is <u>Option 3</u>.

⭐ <u>Key Points</u>

- Bhopal Gas Tragedy :
  - It happened on December 3, 1984.
  - It was happened due to leakage of Methyl Isocyanate (CH_3NCO) from the pesticide plant of Union Carbide (now Dow Chemicals), an MNC, in Madhya Pradesh capital Bhopal.

- It is estimated that about 40 tonnes of gas and other chemicals leaked from the Union Carbide factory.
- Methyl isocyanate is an extremely toxic gas and if its concentration in the air touches 21ppm (parts per million), it can cause death within minutes of inhaling the gas.
- It is one of the worst chemical disasters globally and still continues to have its ill effects on the people of the affected areas.
- After the tragedy, the government of India enacted a Public Liability Insurance Act (1991) that meant to provide immediate relief to victims of accidents involving hazardous industries.

⭐ **Additional Information**

- Methyl isocyanate is an intermediate chemical in the production of carbamate pesticides.
- Methyl Bromide is a colourless, odourless, nonflammable gas and a known ozone-depleting chemical.
- Aluminium phosphide is a highly toxic inorganic compound used as a wide band gap semiconductor and a fumigant.
- Carbon dioxide is a colourless and non-flammable gas at normal temperature and pressure.

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80. **Answer: c**

Explanation:

The correct answer is Option 3.

⭐ **Key Points**

- Most of the seals were made of steatite, which is a kind of soft stone.
- Harappan Civilisation was a Bronze Age civilization.
- The most interesting part of the discovery relates to the seals-more than 2000 in number, made of soapstone, terracotta, and copper.
- The seals give us useful information about the civilization of Indus valley civilization.

- The seals even have an inscription of a sort of pictorial writing.
- Most of the seals have been written on both sides.
- The writings are in the Kharosthi style (right to left).
- Some seals have mathematical images and might be used for educational purposes.
- The most famous seal is the Pashupati Seal of Harappan civilization from the Mohenjodaro site.

⭐ <u>Additional Information</u>

- Some seals have also been found in gold and ivory.
- They all bear a great variety of motifs, most often of animals including those of the bull, with or without **the hump, the elephant, tiger, goat, and also monsters.**
- Sometimes trees or human figures were also depicted.
- The most remarkable seal is the one depicted with a figure in the center and animals around.
- This seal is generally identified as the Pashupati Seal by some scholars whereas some identify it as the female deity.
- This seal depicts a human figure seated cross-legged. An elephant and a tiger are depicted to the right side of the seated figure, while on the left a rhinoceros and a buffalo are seen.
- In addition to these animals, two antelopes are shown below the seat.
- Seals such as these date from between **2500 and 1500 BCE** and were found in considerable numbers in sites such as the ancient city of **Mohenjodaro** in the **Indus Valley**.
- Figures and animals are carved in intaglio on their surfaces.

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81. **Answer: d**

Explanation:

The correct answer is <u>Option 4</u>.

⭐ <u>Key Points</u>

- The correct answer is **Pandit Ravi Shankar**. Sitar maestro **Pandit Ravi Shankar** will be honoured with a Grammy Lifetime Achievement Award posthumously, organizers of the Recording Academy announced, the first Indian to get the prestigious award.

⭐ <u>Additional Information</u>

- The Grammy Awards were first presented by NARAS (National Academy of Recording Arts & Sciences) in Los Angeles in 1959, when 28 prizes were given.
- Winners included Ella Fitzgerald, Frank Sinatra, and the Kingston Trio. The number of awards has increased as musical genres have emerged.
- Rock was first recognized as a genre by the academy at the 1980 ceremony and rap at the 1989 presentation. An award for best music video was first handed out in 1982 to acknowledge the growing influence of the medium.
- In 2011 NARAS radically restructured the Grammy category system and reduced the total number of awards from 109 to 78. Gender-based categories were eliminated, as were those that distinguished between solo and group efforts.
- Awards recognizing genres such as Hawaiian music, Native American music, and zydeco were folded into a single category, dubbed "regional roots music," and instrumental categories were drastically scaled back. Further adjustments were made in subsequent years, and by **2017** the number of awards stabilized at **84**.

---

82. **Answer: c**

Explanation:

The correct answer is <u>Option 3</u>.

⭐ <u>Key Points</u>

- If a **fundamental right of a citizen of India** is **violated**, he has the choice of either approaching the **Supreme court** directly or **the High court.**
- **Provision for Laws Violating Fundamental Rights:** Article 13 of the Indian **constitution** declares that **all laws that are inconsistent with or in derogation of any of the fundamental rights shall be void.**

- This power has been conferred on the **Supreme Court (Article 32)** and the **high courts (Article 226)**.Further, the article declares that a constitutional amendment cannot be challenged (as it is not a law).
- The courts can issue various kinds of **writs**. These writs are **habeas corpus, mandamus, prohibition, quo warranto and certiorari. Dr. B. R. Ambedkar** rightly declared Right to constitutional remedies as **"the heart and soul"** of Indian constitution. When a national or state emergency is declared, this right is suspended by the central government.

⭐ <u>Additional Information</u>

- The Constitution of India protects the Fundamental Rights of citizens of India.
- Fundamental rights are those rights that are essential for the intellectual, moral, and spiritual development of citizens of India.
- They are enshrined in Articles 12-35 in Part III of the constitution. It is a borrowed feature from the constitution of the USA.
- This includes equality before the law, freedom of speech and freedom of expression, religious and cultural freedom, Freedom of assembly, freedom of religion, right to constitutional remedies for the protection of civil rights.
- There are Six fundamentals rights recognized by the Indian constitution.
    - Right to Equality **(Articles 14-18)**
    - Right to freedom **(Articles 19-22)**
    - Right Against Exploitation **(Articles 23-24)**
    - Right to freedom of Religion **(Articles 25-28)**
    - Cultural and Educational Rights **(Articles 29-30)**
    - Right to constitutional Remedies **(Articles 32-35)**

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83. **Answer: a**

Explanation:

The correct answer is <u>Option 1</u>.

⭐ <u>Key Points</u>

- **Sonu Nigam** is the most recent recipient of a Grammy as he took home the award in the category of 'Mubarakan Album' for 'Mubarakan'.
- **Grammy Award**, any of a series of awards presented annually in the **United States** by the National Academy of Recording **Arts & Sciences**.
- Winners are selected from more than **25 fields**, which cover such genres as **pop, rock, rap, R&B, country, reggae, classical, gospel,** and **jazz**, as well as production and postproduction work, including packaging and album notes.

⭐ Additional Information

- **The Grammy Awards** were first presented by **NARAS (National Academy of Recording Arts & Sciences)** in **Los Angeles** in **1959,** when **28 prizes** were given.
- Winners included **Ella Fitzgerald, Frank Sinatra, and the Kingston Trio.** The number of awards has increased as musical genres have emerged.
- **Rock** was first recognized as a genre by the academy at the **1980** ceremony and **rap** at the **1989** presentation. An award for best music video was first handed out in **1982** to acknowledge the **growing influence of the medium**.
- In **2011 NARAS** radically restructured the **Grammy category system** and reduced the total number of awards from **109 to 78**. Gender-based categories were eliminated, as were those that distinguished between solo and group efforts.
- Awards recognizing genres such as Hawaiian music, Native American music, and zydeco were folded into a single category, dubbed "regional roots music," and instrumental categories were drastically scaled back. Further adjustments were made in subsequent years, and by 2017 the number of awards stabilized at 84.

---

84. **Answer: a**

Explanation:

The correct answer is _Option 1_.

⭐ Key Points

- The countries that belong to the polar regions are **Canada, Greenland, Iceland, Norway, Sweden, Finland, Alaska in USA and Siberian region of Russia**.

- **Polar region**, area around the **North Pole or the South Pole**. The northern polar region consists mainly of floating and pack ice, **7–10 feet (2–3 m) thick** , floating on the Arctic Ocean and surrounded by land masses.
- **Polar region** are covered with snow and it is very cold for most part of the year. Sun does not set at the pole for **six months** and sun does not rise for other **six months**. Temperature goes as low as **-37 degree C** in winters.
- The **Polar Bear, Caribou, Snowy Owl, Arctic Hare, Arctic Fox, Narwhal, Walrus, Musk ox and the Beluga Whale** are some of the animals which live in the Arctic.

⭐ <u>Additional Information</u>

- Both the **Arctic (North Pole)** and the **Antarctic (South Pole)** are very cold because they get very little direct **sunlight**. The Sun is always low on the horizon, even in the **middle of summer**. In **winter**, the Sun is so far below the horizon that it doesn't come up at all for months at a time.
- Since the weather is so so cold, there are not very many animals that live in these polar climates. Animals that do live in these areas have adapted over the years to be able to survive in freezing temperatures, tons of snow, and strong, blowing winds.
- The most well-known animal that lives in polar climates is the polar bear, a huge mammal that has a thick layer of body fat and a fur coat that is water-repellent to protect it from the freezing waters.
- There are many things that threaten the polar region, but the biggest of these is climate change, which is when the temperature of the earth gets hotter. As the temperature of the earth continues to rise, the ice in the polar areas melts, which makes the land and coastlines get smaller.

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85. **Answer: b**

Explanation:

The Correct answer is <u>option 2</u>.

⭐ <u>Key Points</u>

- Kathak is one of the eight major forms of Indian classical dance.

- It is the classical dance form of Uttar Pradesh.
- Kathak is derived from the Vedic Sanskrit word.
- Katha which means "story", and Kathakar which means "the one who tells a story", or "to do with stories".
- Kathak evolved during the Bhakti movement, incorporating the childhood and stories of the Hindu god Krishna.
- During Mughal rule, the emperors were patrons of Kathak dance and actively promoted it in their royal courts.
- It is the only Indian classical dance form to feature Persian elements.

⭐ Additional Information

- Tamilnadu –
  - The **Bharatanatyam** is one of the major classical dances of India which finds it is origin from **Tamilnadu**.
  - This Tamil Nadu dance is performed by ladies showcasing south Indian religious themes.
  - This solo dance is noted for remarkable footwork and sign language based on gestures of hands and ages. Most of the themes of the dance are based on the Hindu legends.
  - There is a deep spiritual meaning behind **bharatanatyam**, and it is believed that it is the best form of dance.
  - This ancient form of dance is a living art form that has evolved over the past two centuries. Its beautiful hand and eye movements make it a visual treat, and it is considered the personification of the music.
- Manipur –
  - Manipur dance has a large repertoire, however, the most popular forms are the **Ras, the Sankirtanaand the Thang-Ta**.
  - There are five principal Ras dances of which four are linked with specific seasons, while the fifth can be presented at any time of the year. In Manipuri Ras, the main characters are **Radha, Krishna and the gopis**.
  - The themes often depict the pangs of separation of the gopis and Radha from Krishna. The parengs or pure dance sequences performed in the Rasleela dances follow the specific rhythmic patterns and body movements, which are traditionally handed down. TheRas costume consists of a richly embroidered stiff skirt which extends to the feet.

- Assam -
  - **Satriya Nritya** is the classical dance form of Assam which represents the Satriya culture, the basis of the religious and cultural fabric of Assam. It is one among eight principal classical Indian dance traditions.
  - Whereas some of the other traditions have been revived in the recent past, Satriya has remained a living tradition since its creation by the founder of Vaishnavism in Assam, the great saint Srimanta Sankardeva, in 15th century Assam.
  - The core of Satriya Nritya has usually been mythological stories. This was an artistic way of presenting mythological teachings to the people in an accessible, immediate, and enjoyable manner.

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86. **Answer: d**

Explanation:

The correct answer is <u>Option 4</u>.

⭐ <u>Key Points</u>

- Saikhom Mirabai Chanu is a weightlifter who hails from Manipur, India.
  - She competed in the women's 49-kilogram division at the Olympic Games in Tokyo in 2020 and earned the silver medal.
  - Because of her hard work and dedication to the sport, the government of India honoured her with the Padma Shri award in 2018.
  - In 2018, the Government of India honoured her with Major Dhyan Chand Khel Ratna for her achievements in the athletic world.
  - **Mirabai Chanu** won the first **gold** for India with a **combined lift of 201kg** in the **Women's 49kg** weightlifting final at the **Commonwealth Games 2022** in **Birmingham** on **July 30, 2022**.

⭐ <u>Additional Information</u>

- Imphal serves as the capital of the Manipur state in northeastern India.
- Its borders are formed by the Indian states of Nagaland to the north, Assam to the west, and Mizoram to the south. In addition, it has shared borders with two

regions of Myanmar: Sagaing Region to the east and Chin State to the south.

- For more than 2,500 years, Manipur has served as a hub for commercial and cultural interchange throughout Asia.
- Manipur's economy is predominantly agrarian, but it has tremendous potential for producing hydroelectric electricity. Daily flights from Imphal Airport, the second-largest in northeastern India, connect it to neighbouring regions.

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87. **Answer: a**

Explanation:

The correct answer is **Option 1**.

⭐ **Key Points**

- **Broad money** is a category for measuring the **amount of money circulating in an economy.**
- It is defined as the most **inclusive method of calculating** a given **country's money supply.**
- **Central banks** tend to keep tabs on broad money growth to help **forecast inflation.**
- **Central banks** often look at **broad money, alongside narrow money**, to set **monetary policy.**
- The value of the currency depreciates as inflation rises. This is why the RBI keeps track of money supply by categorizing it as 'reserve money,' 'narrow money,' and 'broad money.
- Money supply refers to the total amount of money in circulation among the general population at any one moment. M1, M2, M3, and M4 are the four money supply measurements released by the RBI.
- M1 includes money in circulation plus checkable deposits in banks.
- M2 includes M1 plus savings deposits and money market mutual funds.
- M3 includes M2 plus large-time deposits in banks.
- M0 includes the narrowest forms, and M4 includes the broadest forms – M0/M1/M2/M3/M4.

⭐ <u>Additional Information</u>

Mo(Reserve Money)	Currency in circulation + Bankers' deposits with the RBI + 'Other' deposits with the RBI
M1 (Narrow Money)	Currency with the public + Deposit money of the public
M2	M1 + Savings deposits with Post office savings banks
M3 (Broad Money)	M1+ Time deposits with the banking system
M4	M3+ All deposits with the post office savings banks.

88. **Answer: a**

Explanation:

The correct answer is <u>Option 1</u>.

⭐ <u>Key Points</u>

- **Damon Galgut** has been shortlisted three times for th**e Booker Prize** and won in **2021** for his ninth book, **The Promise**. He is a South African playwright and novelist, who wrote his first novel aged 17.

⭐ <u>Additional Information</u>

- **Great Circle** –
  - Great Circle is a relentlessly exciting story about a **woman maneuvering her way between tradition and prejudice to get what she wants** . It's also a culturally rich story that takes full advantage of its extended length to explore the changing landscape of the 20th century.

- Great Circle is a 2021 novel by American writer Maggie Shipstead, published on May 4, 2021.
- **A Passage North -**
    - A Passage North is a **2021 novel** written by **Anuk Arudpragasam**. The novel is set in **Sri Lanka** following the end of the **Civil War**.
- **The Fortune Men -**
- The Fortune Men is a **2021 novel** by the **Somali-British** author **Nadifa Mohamed**, published on **27 May 2021**, by the Viking Books imprint of Penguin General.

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89. Answer: b

Explanation:

The correct answer is **Option 2**.

⭐ **Key Points**

- **The workforce population** typically includes individuals between the ages of **15 and 59**, as they are considered to be in their prime working years and are most likely to participate in the labor force.
- This age range is also associated with the ability to bear and raise **children**, which is an important factor in determining the **size and composition** of a **country's labor force**.
- While individuals above the **age of 59** may still be actively engaged in the workforce, they are typically not included in the workforce population due to **retirement, disability,** or other factors that may limit their ability to work.
- Similarly, children under the **age of 15** are considered economically inactive, as they are not yet of legal working age and are primarily dependent on adults for their basic needs.
- It's important to note that while the workforce population is a useful demographic indicator for assessing a country's labor force and economic productivity, it is not the only factor that determines the strength and vitality of an economy.
- Other factors, such as education, training, technological innovation, and social policies, can also play a significant role in shaping the economic landscape of a

country.

⭐ Additional Information

- While the population of a nation can be broadly categorized into these three groups, it is important to note that these categories are not fixed and can vary depending on the specific context and demographic characteristics of a given population. Additionally, the age ranges for each category can also vary depending on cultural and societal norms.
- Furthermore, it is important to recognize that each category has unique needs and contributions to society. Children may not be economically productive, but they are the future of a nation and investing in their education and well-being is essential for long-term development. Similarly, while the aged may not be as physically productive as those in the age-at-work category, they often have valuable knowledge and experience that can be utilized in various ways, such as through volunteering or mentoring.
- Overall, a holistic approach that recognizes the diverse needs and contributions of different age groups is necessary for sustainable development and societal progress.

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90. **Answer: d**

Explanation:

the correct answer is **Option 4.**

⭐ Key Points

- Neon -
  - It is achemical element with the symbol Ne and atomic number 10.
  - It is a noble gas. Neon is a colorless, odorless, inert monatomic gas under standard conditions, with about two-thirds the density of air.
  - Neon gas is found inside neon sign bulbs.

⭐ Additional Information

- Fluorine is an halogen element.
  - It is represented by the symbol F.
  - Fluorine is the most reactive non-metal element.
  - Fluorine alone cannot cause ozone depletion, only the compounds containing fluorine like chlorofluorocarbons (CFC) are responsible for ozone depletion.
  - Fluorine is an halogen element.
  - It is the most electronegative element of periodic table.
- **Silicon** is obtained from sand and is a **poor conductor of electricity**.
  - But, by chemical processes, it becomes a good conductor.
  - The surface and the interior of a silicon 'chip' are called Integrated Circuits (IC).
  - Silicon is used to make alloys like aluminium-silicon and ferrosilicon (iron-silicon).
  - Silicon:
    - Symbol: Si
    - Atomic number: 14
    - Atomic mass: 28 u
- Nitrogen gas is a diatomic molecule composed of two N atoms. Therefore, it exists as N2.
  - Nitrogen can form pπ-pπ multiple bonds.
  - In the case of nitrogen, there is no repulsion between non-bonded electrons of the inner core, as it has only 1s electrons in the inner shell so the overlap of p orbitals to form pi bonds is easy.
  - Therefore, it exists as a diatomic molecule.
  - Nitrogen has atomic number 7 and electronic configuration [He] 2s2 2p3.
  - Nitrogen was first discovered and isolated by Scottish physician Daniel Rutherford in 1772.
  - Nitrogen is the fourth most abundant element in the body.
  - It is the fifth most abundant element in the universe and makes up about 78% of the earth's atmosphere.
  - The largest use of nitrogen is for the production of ammonia (NH3).

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91. **Answer: b**

Explanation:

The correct answer is <u>Option 2</u>.

⭐ <u>Key Points</u>

- Singer-composer Bappi Lahiri popularised disco music in Indian cinema in the 80s and 90s.
- He was 69.
- He had multiple health issues.
- He died due to OSA (obstructive sleep apnea).
- Bappi Lahiri was born Alokesh Lahiri in 1952 in West Bengal's Jalpaiguri.
- His father Aparesh Lahiri and mother Bansari Lahiri were Bengali singers and musicians.
- He began his musical journey at the age of 3.
- He learned to play the tabla and impressed one and all.
- The singer went on to be known as the King Of Disco.
- He was nominated for the Best Music Director for the Filmfare Awards 6 times between 1982-2018.
- The veteran singer took home the Lifetime Achievement Award by Filmfare in 2018.

⭐ <u>Additional Information</u>

- **Anupam Shyam Ojha** was an **Indian film and television actor**, who usually played villainous roles.
- **Vanraj Bhatia** was an **Indian composer** best known for his work in **Indian New Wave cinema**. He was also one of the leading composers of **Western classical music in India**.
- **G. Chandrashekhar** is an Independent Director on the Agriwise Board. He is an economist with passion for analyzing agriculture, agribusiness and commodity markets (including metals and energy products) as also international trade and developmental issues. He is M.A. (Economics) and LL.M. (Constitution & Administrative Law), Bombay University.

92. Answer: b

Explanation:

The correct answer is <u>Option 2</u>.

⭐ <u>Key Points</u>

- **Tarabai Shinde**, a Maharashtrian housewife, wrote **Stree Purush Tulana (or Comparison of Men and Women)** in 1882.
- The book was written in opposition to the double standards of a society that is governed by men.
- The premise of the story: A young Brahmin widow was sentenced to death by the courts for killing her child since it was an illicit pregnancy, but no attempt had been taken to find or punish the guy who had fathered the child.
- When **Stripurushtulna** was released, it caused quite a sensation.

⭐ <u>Additional Information</u>

- Pandita Ramabai-
  - Great Sanskrit scholar Pandita Ramabai felt that Hinduism was restrictive to women and authored a book about their sad existence as upper-caste ladies in Hinduism.
  - To help widows who had been mistreated by their husbands' families, she established a widows' house in Poona. Here, women received training to enable them to sustain themselves financially.
- **Shashi Deshpande** is an **Indian novelist**. She is a recipient of the **Sahitya Akademi Award** and the **Padma Shri Award** in **1990** and **2009** respectively.
- Anita Desai, original name Anita Mazumdar, (born June 24, 1937, Mussoorie, India), **English-language Indian novelist and author of children's books** who excelled in evoking character and mood through visual images ranging from the meteorologic to the botanical.

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93. Answer: c

Explanation:

The correct answer is <u>Option 3</u>.

⭐ <u>Key Points</u>

- The most famous **Kushana ruler was Kanishka**, who ruled around 1900 years ago. He organised 4th Buddhist council, where scholars met and
- discussed important matters.
- The first year of Kanishka's era was **127 AD**.
- His warlike exploits and the strength of his kingdom are remarkable indeed, and it is felt by most historians that his reign marked the height of Kushan dominance in central Asia.

⭐ <u>Additional Information</u>

- The Mughal dynasty was founded by Babur.
  - He established the Mughal dynasty in 1526 by defeating Ibrahim Lodi.
  - Name of Babur was Zahir ud-Din Muhammad.
  - Babur was born in Andijan in the Fergana Valley the eldest son of Umar Sheikh Mirza governor of Fergana and a great-great-grandson of Timur.
- Chandra Gupta Maurya:
  - Chandragupta Maurya founded the Maurya Empire in 322 BCE when he conquered the kingdom of Magadha and the northwestern Macedonian satrapies.
  - Maurya Empire was founded in 322 BCE by Chandragupta Maurya.
  - They had overthrown the Nanda Dynasty and rapidly expanded their power westward across central and western India in order to take advantage of the disruptions of local powers in the wake of the withdrawal by Alexander the Great's armies.
  - According to legend, the teacher Chanakya convinced his disciple, Chandragupta Maurya, to conquer the kingdom of Magadha (the Nanda Empire) when he was insulted by its king Dhana Nanda.
  - Chandragupta Maurya expanded the Maurya Empire north and west as he conquered the Macedonian Satrapies and won the Seleucid-Mauryan war.
- **Gupta Dynasty -**

- Sri Gupta is widely known as the founder of the Gupta era which starts with his accession in 320 A.D.
    - The Guptas are believed to have been feudatories of the Kushanas.
    - The original kingdom of the Gupta comprised Uttar Pradesh and Bihar.
    - The Gupta made good use of iron ore reserves.
    - The Gupta period in ancient India is referred to as the 'Golden Age'.
    - Ir is because of the numerous achievements in the field of arts, literature, science & technology.
    - It also brought about the political unification of the subcontinent.

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94. Answer: b

Explanation:

The correct answer is **Option 2**.

⭐ **Key Points**

- **Sultan Ghiyasuddin Balban** succeeded Razia as the **ninth Sultan in the Mamluk dynasty**. He was originally named **Bahauddin** and was of **Turkish origins**.
- **Balban** was purchased as a slave by **Iltutmish** and rose up the ranks quickly, eventually becoming the wazir of **Iltutmish's grandson, Nasir-ud-din-Mahmud**. After **Nasir's death**, **Balban** declared himself the **Sultan** since **Nasir** had no male heirs.
- **Balban** was known for his successful military campaigns as an officer and carried out significant military and civil reforms in administration, earning him the position of the greatest Sultanate ruler after **Iltutmish** and **Alauddin Khalji**.
- He was a strict ruler, and his court was the symbol of austerity and strict obedience to the emperor. Balban even demanded that people prostrate before the king, and he laid out severe punishments for the slightest of offenses by his courtiers. He had a spy system to keep his nobles in check.
- During his rule, **Balban** introduced the Persian festival of **Navroz in India**, and **Punjab** saw large-scale conversions. After his death, his grandson **Qaiqubad** succeeded him as the **Sultan of Delhi**.

- However, **Qaiqubad** died of a stroke in 1290, and his three-year-old son, **Shamsuddin Kayumars,** succeeded him. Unfortunately, **Kayumars** was murdered by **Jalal ud-Din Firuz Khalji**, bringing an end to the **Mamluk Dynasty** and replacing it with the **Khalji Dynasty**.

⭐ Additional Information

- Iltutmish -
  - He was the **third ruler** of the **Delhi Sultanate**.
  - Born to a slave, he rose to power and became the ruler of Delhi.
  - Since **Iltutmish** was the **1st Muslim sultan** to establish **Delhi** as an imperial capital, he was regarded as the genuine founder of the Delhi Sultanate.
  - He was also the **Khalifa's first recognition** of an **Indian Sultan**.
  - He successfully defended **Delhi's throne** from **Yeldoz, Qubacha raids, and Mongol invasions**.
  - He strengthened his dominance over them by destroying the northern Rajput forces.
  - He produced coinage in his honour, made Delhi a splendid capital, and made his dominion hereditary.
  - He built a lot of mosques in **Delhi** and was a patron of the arts and architecture.
- Prithviraj Chauhan was the most important ruler of the Chauhan dynasty.
  - Chand Bardai was the court poet of Prithviraj Chauhan.
  - Chand Bardai is the author of the famous book Prithviraj Raso.
  - Chandbardai was known for his excellence in poetry.
  - He was born in Lahore in 1148 AD.
  - He acquired immense knowledge of the language, literature, grammar, mythology, astrology etc.
  - It is considered the first epic of Hindi.
- Qutbuddin Aibak (1206-1210) :
  - Qutbuddin Aibak was a slave of Muhammad Ghori, who made him the Governor of his Indian possessions.
  - He set up his military headquarters at Indraprastha, near Delhi.
  - After the death of Ghori in 1206, Aibak declared his independence.
  - Thus, he is known as the founder of the Slave dynasty as well as the Delhi Sultanate.

- ○ Aibak patronized the great scholar Hasan Nizami.
- ○ He started the construction of Qutub Minar, Delhi and constructed A dhai Din Ka Jhonpra at Ajmer.

---

95. Answer: b

Explanation:

The correct answer is <u>Option 2</u>.

⭐ <u>Key Points</u>

- Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat launched the Sujalam 2.0 campaign for greywater management at a virtual event hosted by the Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti to mark the World Water Day, 2022.
- Sujlam was a 100-day campaign to regulate the discharge of wastewater into the village pond and manage grey water through soak pits, leach pits, and magic pits
- Sujlam 2.0 Awardee State:
- Karnataka(1st)
- Telangana(2nd)
- Odisha(2nd) both Odisha and Telangana share 2nd place

⭐ <u>Additional Information</u>

- The "Sujlam 2.0" campaign is launched with the objective to manage greywater through people's participation.
- Under the campaign, the plan is to mobilize communities, our institutions like panchayats, schools, and Anganwadi to undertake greywater management.
- Nine ministries sign a joint advisory to undertake greywater activities as part of the campaign.
- It was launched by the Ministry of Jal Shakti.

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96. **Answer: d**

Explanation:

The correct answer is <u>Option 4</u>.

⭐ <u>Key Points</u>

- **India** shares a **3488 km** border with **China**, which touches several Indian states including **Himachal Pradesh, Arunachal Pradesh, Jammu and Kashmir, Sikkim, and Uttarakhand** . **China's capital** is **Beijing** and the official language spoken is **Mandarin.**
- **China** has **26 provinces** and is currently the world's most populous country with the fastest-growing economy.

⭐ <u>Additional Information</u>

- India, the world's **second-most populous country,** is situated near the **Bay of Bengal and the Arabian Sea**. It shares its borders with **China, Nepal, Bhutan, Pakistan, Myanmar, Sri Lanka, and Bangladesh.** The Indian coastline stretches over **7,516.6 km** and shares borders with **Sri Lanka** and **Myanmar.**
- The land borders of India span over **15,106.7 km**. Among the Indian Union Territories, only **Ladakh shares its borders with three international countries,** namely **Afghanistan, China,** and **Pakistan.** This article provides a list of India's neighboring countries and their respective border lengths.
- **Neighboring countries of India** -
    - **Afghanistan**: Located in South Asia, Afghanistan has a population of approximately 38 million people. The country has a rich cultural history and is known for its traditional music, dance, and poetry. Afghanistan has faced significant political and security challenges in recent years.
    - **Bhutan**: Situated in the eastern Himalayas, Bhutan is a small country with a population of around 750,000 people. The country has a unique approach to measuring development, known as Gross National Happiness, which takes into account factors beyond just economic growth.
    - **Bangladesh**: With a population of over 160 million people, Bangladesh is one of the most densely populated countries in the world. The country has

made significant progress in reducing poverty and improving access to healthcare and education in recent years.

- **Myanmar -** The India-Myanmar border stretches 1,643 kilometers and passes through Arunachal Pradesh, Nagaland, Mizoram, and Manipur. Myanmar's capital is Yangon, and its official language is Burmese.
- **Nepal -** The India-Nepal border is 1,751 kilometers long and runs through the states of Bihar, Uttarakhand, West Bengal, Sikkim, and Uttar Pradesh. Nepal's capital is Kathmandu, and its official language is Nepali. Nepal is divided into seven provinces.
- **Pakistan -** The India-Pakistan border is 3,323 kilometers long and touches Jammu and Kashmir, Punjab, Gujarat, and Rajasthan. Pakistan's capital is Islamabad, and its official language is Urdu. Pakistan is divided into four provinces.
- **Sri Lanka -** The India-Sri Lanka border is a coastline separated by the Gulf of Mannar. Sri Lanka's capital is Sri Jayavardenepura, and Colombo serves as its executive capital. The official languages of Sri Lanka are Sinhala and Tamil. Sri Lanka is divided into nine provinces.

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97. **Answer: c**

Explanation:

The correct answer is <u>Option 3</u>.

⭐ <u>Key Points</u>

- Official Secrets Act has its roots in the British colonial era.
  - The original version was the Indian Official Secrets Act (Act XIV), 1889.
  - It was amended and made more stringent in the form of the Indian Official Secrets Act, 1904, during Lord Curzon's tenure as Viceroy of India.
- In 1923, a newer version was notified.
  - The Indian Official Secrets Act (Act No XIX of 1923) was extended to all matters of secrecy and confidentiality in governance in the country.
  - It broadly deals with two aspects - spying or espionage, covered under Section 3, and disclosure of other secret information of the government,

under Section 5.

- Secret information can be any official code, password, sketch, plan, model, article, note, document, or information.

- Under Section 5, both the person communicating the information and the person receiving the information can be punished.

⭐ <u>Additional Information</u>

- The **Official Secrets Act, 1923**, extended its provisions to protect the privacy and secrecy of the governance of the country especially for the national security of the country. The Act lays down **several provisions** out of which some are:
  - **Section 5** puts forth the provision of offense caused by **"wrongful communication of information."** If someone reveals a secret official code or password or any sketch, plan, model, article, note, document or information, a prohibited place or a similar place, whose sufficient information could help a potential enemy, or a high official under a government who has been conferred with the responsibility of protecting such confidential information, or a person employed under such an official or bound by a contract or holds a contract on behalf of the government if fails to properly conduct himself and cause harm to the information held, uses such details and knowledge for helping a foreign power or in a way 'prejudicial to the safety of the State,' or purposefully communicates such details to someone who is not authorized is held to be guilty under this section.
  - **Section 4** highlights that **"foreign agent"** means any person who has reasonable grounds for being suspected as he or she is employed by a foreign power by any means, for the purpose of carrying out an act with or without compliance to the safety of the state [India], prejudicial to the safety or interests of the State, or who can be suspected for committing or trying to commit the act for the interest of the foreign power.
  - **Section 4(c)** further highlights that any location or address with the perfect reason of being suspected for receiving communications for an agents purpose or where a foreign agent resides, gives or receives information, or could be where he carries out any business, maybe assumed as an address of a foreign agent, and communications addressed is to be known as connecting with a foreign agent.

- Under Section 6 if any person for getting entry or helping another to enter a prohibited area which goes against the safety of the state while doing so if wears an official uniform or a resembling uniform without legal authority for deceiving and representing himself to be someone with authority, or, gets an oral or written declaration or document or makes any false statements, or, deceiving someone represents himself to be an official employed by the government to receive secret and classified information, etc, is held guilty for committing an offense under this Section. Section 6(3) imposes imprisonment for a term of three years, or with a fine, or both for committing an offense under this section.

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98. Answer: d

Explanation:

The correct answer is option 4.

⭐ Key Points

- The A horizon is the top layer of the mineral soil horizons, often referred to as 'topsoil'.
- This layer contains dark decomposed organic matter, which is called "humus".
- Layers of Soil
- The soil profile is composed of a series of horizons or layers of soil stacked one on top of the other.
- These layers or horizons are represented by letters O, A, E, C, B, and R.

The diagram shows:

	ROOT / SOIL WATER ZONE $S \leq 1$	Zone of Aeration
Zone of Rock fracture	INTERMEDIATE ZONE $S < 1$	
Sub atmospheric Pressure →	CAPILLARY ZONE $S < 1$	
Atmospheric Pressure →	GROUND FREE ZONE WATER $S = 1$	Zone of saturation
Super atmospheric Pressure →		
Zone of Rock flowage	INTERNAL WATER	

Under hydrostatic Pressure
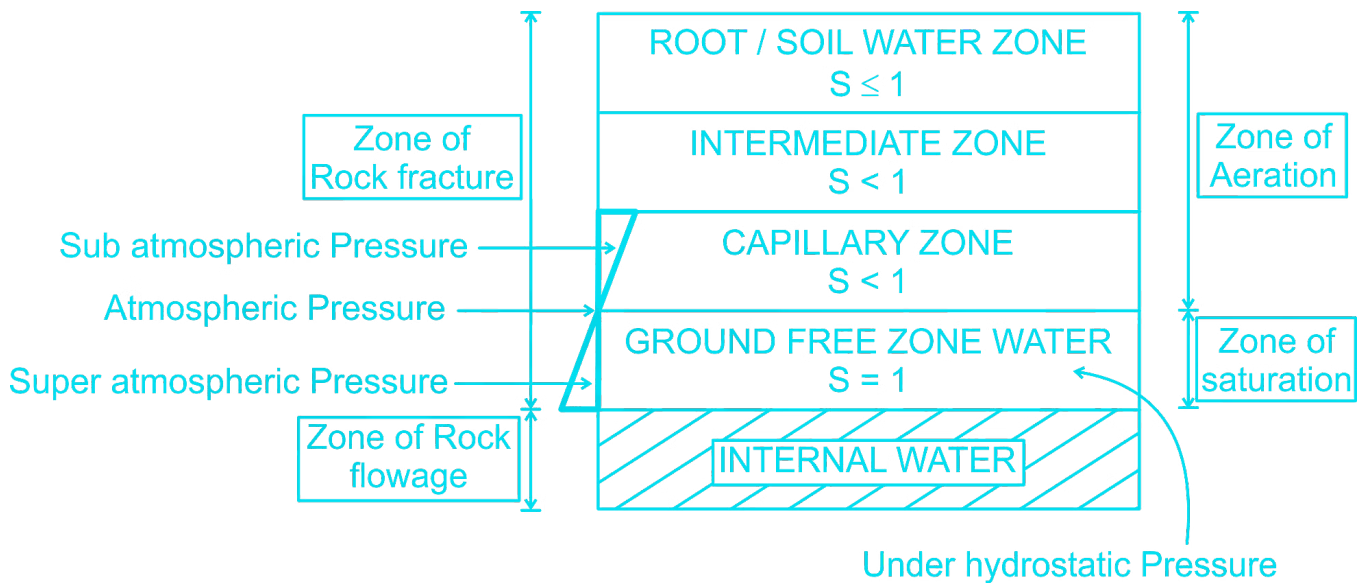
- This layer is rich in organic material and is known as the humus layer. This layer consists of both organic matter and other decomposed materials. The topsoil is soft and porous to hold enough air and water.
- In this layer, the seed germination takes place and new roots are produced which grows into a new plant.
- This layer consists of microorganisms such as earthworms, fungi, bacteria, etc.

⭐ <u>Additional Information</u>

- The O-Horizon
  - The O horizon is the upper layer of the topsoil which is mainly composed of organic materials such as dried leaves, grasses, dead leaves, small rocks, twigs, surface organisms, fallen trees, and other decomposed organic matter.
  - This horizon of soil is often black brown or dark brown in color and this is mainly because of the presence of organic content.
- The E-Horizon
  - This layer is composed of nutrients leached from the O and A horizons.
  - This layer is more common in forested areas and has lower clay content.
  - The B-Horizon or Subsoil
  - It is the subsurface horizon, present just below the topsoil and above the bedrock.
  - It is comparatively harder and more compact than topsoil. It contains less humus, soluble minerals, and organic matter.

- It is a site of deposition of certain minerals and metal salts such as iron oxide.
- This layer holds enough water than the topsoil and is lighter brown due to the presence of clay soil.
- The soil of horizon-A and horizon-B is often mixed while ploughing the fields.
- The C-Horizon or Saprolite
  - This layer is devoid of any organic matter and is made up of broken bedrock. This layer is also known as saprolite.
  - The geological material present in this zone is cemented.
- The R-Horizon
  - It is a compacted and cemented layer.
  - Different types of rocks such as granite, basalt, and limestone are found here.

---

99. **Answer: d**

Explanation:

The correct answer is **Option 4**.

⭐ **Key Points**

- Governor appoints the chairman and members of the State Public Service Commission.
- A member of the SPSC shall maintain the workplace for a time period of six years or until the age of sixty-two years, whichever is beforehand.
- Any individual who has as soon as held the workplace as a member of a Public Service Commission is ineligible for reappointment to that office.
- A member of a State Public Service Commission may additionally resign from his/her workplace with the aid of submitting the written resignation to the Governor of the State.
- Suspension of Members: The Chairman or any different member of SPSC shall solely be eliminated from his/her workplace by way of order of the President of India.

- The Governor of the kingdom shall drop the Chairman or any different member from his/her workplace in recognition of whom a reference has been made to the Supreme Court.
- The prerequisites for elimination of individuals are equal as these of the UPSC.
- Regulating the Conditions of Service: In the case of the SPSC, the Governor of the State performs the equal responsibilities that are carried out with the aid of the President of India in the case of UPSC.
- Restriction of Power: The stipulations of carrier of a member of SPSC shall now not be amended after his/her appointment which may additionally lead to his/her disadvantage.
- Power to Extend Functions: The prerequisites for the electricity to lengthen features are identical as these of the UPSC.

⭐ Additional Information

- Articles 315 – 323 contain elaborate provisions regarding composition, appointment, and removal of members and other matters related to SPSC.
- The chairman and member occupy the office for 6 years or till they reach 62 years.
- Constitution hasn't given any qualifications except that 1/2 of the members should have at least 10 years of experience under central or state government.
- The State Election Commission has been entrusted with the function of conducting free, fair, and impartial elections to the local bodies in the state.
  - Article 243K(1): It states that the superintendence, direction, and control of the preparation of electoral rolls for, and the conduct of, all elections to the Panchayats shall be vested in a State Election Commission consisting of a State Election Commissioner to be appointed by the Governor.
  - Article 243K(2): It states that the tenure and appointment will be directed as per the law made by the state legislature. However, State Election Commissioner shall not be removed from his/her office except in the like manner and on the like grounds as a Judge of a High Court.

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100. **Answer: a**

Explanation:

The correct answer is <u>Option 1</u>.

⭐ <u>Key Points</u>

- **The Chota Nagpur Plateau** is very rich in **minerals** and **precious stones**.
- Some of the important minerals found here include **coal, iron ore, asbestos, chromite, mica, and kyanite. The Indo-Gangetic plains** are poor in mineral deposits.
- It covers Jharkhand, the northern part of Chhatisgarh, and the Purulia district of West Bengal.
- This plateau is composed mainly of Gondwana rocks.
- The Damodar valley has vast coal reserves, and the Hazaribagh region is one of the main sources of mica in the world.

⭐ <u>Additional Information</u>

- Mysore Plateau
  - The name of the plateau is derived from Karnad ("Land of Black Soil").
  - The Karnataka Plateau is composed of ancient volcanic rocks, crystalline schists, and granites of the Precambrian age.
  - There are large reserves of iron ore in the Baba Budan hills and gold in the Kolar Gold Fields.
- Deccan Plateau
  - The Deccan Plateau is a large plateau in western and southern India.
  - Primary mineral ores found in this region are mica and iron ore in the Chhota Nagpur region, and diamonds, gold, and other metals in the Golconda region.
- Malwa Plateau
  - The Malwa Plateau roughly forms a triangle based on the Vindhyan Hills, bounded by the Aravali Range in the west and Madhya Bharat Pathar to the north, and Bundelkhand to the east.