

SSC MTS 2020 Tier I : 11

Oct S1

Mock Test Questions & Solutions

Mock Test Solutions in English

Questions

1. Select the most appropriate option to substitute the underlined segment. If no substitution is required, select 'No substitution required'.

You will never become a good reader until reading are done with a purpose.

- A. No substitution required
 - B. when reading has
 - C. until reading will be
 - D. unless reading is

2. Select the most appropriate meaning of the given idiom.

Fly the nest

- A. Children returning home after studying abroad
 - B. To run at a very fast pace to reach home
 - C. To lose direction and not reach one's destination
 - D. Children leaving their parents' home to live on their own

3. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required.'

Many industrialists are coming onward to help migrant workers find employment in their villages and cities.

- A. No substitution required
 - B. towards
 - C. forward
 - D. backward

4. Select the most appropriate one-word substitution for the given group of words. A gentle song sung to put a child to sleep

- A. Lullaby
 - B. Chorus
 - C. Prayer
 - D. Hymn

5. Select the most appropriate option to substitute the underlined segment in the given sentence.

When have you been waiting for me here?

- A. How long
 - B. How far
 - C. What time
 - D. How late

6. Select the most appropriate ANTONYM of the given word.

SUBTLE

- A. crafty
 - B. harsh
 - C. faint
 - D. Slight

7. Select the INCORRECTLY spelt word.

- | | |
|-----------|------------|
| A. Manual | B. Grajual |
| C. Mutual | D. Usual |

8. Fill in the blank with the most appropriate word.

These discount coupons are _____ for only six months from the date of issue.

- A. attested
 - B. tested
 - C. valid
 - D. Solid

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

STERN

- A. strict
 - B. mild
 - C. lenient
 - D. Gentle

10. Identify the segment in the sentence which contains a grammatical error.

Why did you spent so much money on old and useless furniture?

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

PROVOKE

- | | |
|------------|------------|
| A. enrage | B. gratify |
| C. placate | D. hinder |

12. Identify the segment in the sentence which contains a grammatical error.

They went on talking while the teacher were teaching an important lesson

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Undue favour shown to one's relatives

- A. Nepotism
- B. Nationalism
- C. Despotism
- D. Narcissism

14. Fill in the blank with the most appropriate word.

My employers _____ my salary last year.

- A. rise
- B. rose
- C. raise
- D. raised

15. Fill in the blank with the most appropriate word.

I am tired _____ reminding you to clean your room.

- A. at
- B. by
- C. of
- D. to

16. Fill in the blank with the most appropriate word.

Swami Dayanand _____ the Arya Samaj.

- A. invented
- B. developed
- C. founded
- D. discovered

17. Select the most appropriate ANTONYM of the given word.

CEASE

- A. stop
- B. catch
- C. halt
- D. start

18. Identify the segment in the sentence which contains a grammatical error.

The elegance furnished drawing room indicated that the owner had good taste.

- A. drawing room indicated
- B. that the owner
- C. had good taste
- D. The elegance furnished

19. Select the INCORRECTLY spelt word.

- A. Mediocre
- B. Legible
- C. Opaque
- D. Sugestion

20. Select the most appropriate meaning of the given idiom.

Your guess is as good as mine

- A. To have the same idea as another
- B. To have no idea of the answer
- C. To play a guessing game
- D. To have a better idea than others

21. **Direction:** In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Albert soon got to learn the language of (1) _____ native people. Now, he could talk to (2) _____ about their problems. They too began to (3) _____ him for advice. Some people, (4) _____, were too shy to share their concerns. Albert eventually (5) _____ them that he was there to assist them in all matters.

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

- A. a
- B. an
- C. the
- D. One

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

- A. them
- B. you
- C. himself
- D. Us

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

- A. appear
- B. approach
- C. advance
- D. Arrange

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

- A. furthermore
- B. however
- C. therefore
- D. Moreover

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

- A. assured
- B. settled
- C. decided
- D. Confirmed

26. Among six objects F, G, H, J, K and L:

- i. H is twice as heavy as K, and J is one and half times as heavy as F.
- ii. G is half as heavy as J.

iii. F and J together are less heavy than H.

iv. J and L together are twice as heavy as F.

If the objects are arranged in descending order of their weight, which object will be second from the bottom?

A. K

B. L

C. F

D. G

27. Select the option that is related to the third number in the same way as the second number is related to the first number.

7 : 294 :: 9 : ?

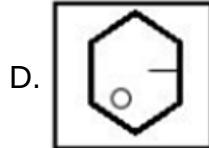
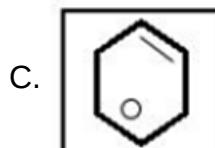
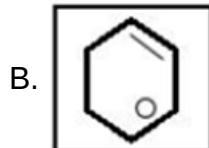
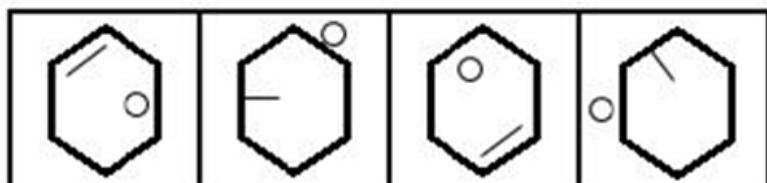
A. 648

B. 576

C. 881

D. 452

28. Which option figure would come next in the following figure series?



29. Choose the set of numbers that is similar to the following set.

{21, 29, 20}

A. {8, 17, 15}

B. {19, 28, 17}

C. {33, 35, 12}

D. {7, 26, 24}

30. If WIDOWER is coded as VKAOXCU, then how would FORTIFY be coded?

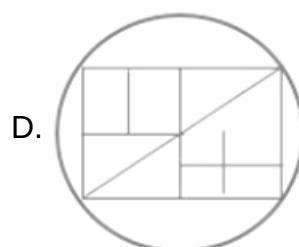
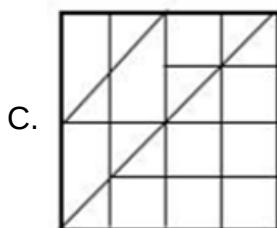
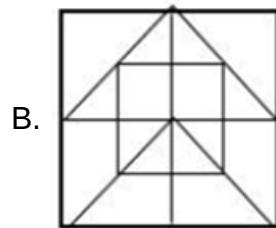
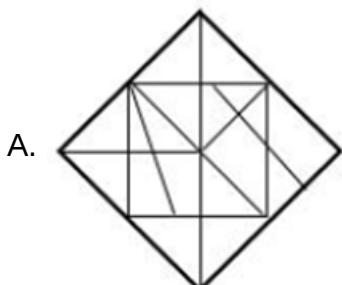
A. EQOTJDB

B. GMUSHDV

C. EOQSJCD

D. EPPTHDC

31. Select the option in which the given figure is embedded (rotation is Not allowed).



32. If POUNDAGE is coded as NOPUEGAD, then how would STAMPING be coded?

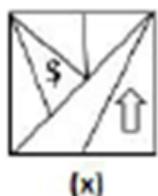
A. AMSTGNIP

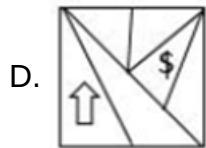
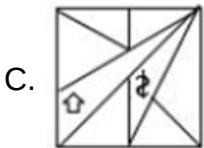
B. TSMGNPIA

C. TAMSGINP

D. AMTSGNIP

33. Select the mirror image of the figure marked 'X', when the mirror is placed on the right side of the figure.





Statements:

- 1) Some streams are rivers.
 - 2) No river is a lake.

Conclusions:

36. Six boys A, B, C, D, E and F are standing in a queue.

- i. There are two boys between B and D, and D is just in front of E

- ii. A and C are adjacent to B

37. If the signs + and \times are interchanged, then which of the following equations would be correct?

A. $9 \times 3 - 7 + 9 = 19$

B. $10 \times 5 \div 10 + 10 = 10$

C. $4 \div 8 + 6 \times 3 = 8$

D. $18 \times 3 \div 12 + 8 = 20$

38. 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. LOTTERY : WQMTBTF :: SECULAR : ?

A. BDRTQZK

B. GTFUCUM

C. FGTUUCM

D. DFTUSBM

39. Eight friends P, Q, R, S, T, U, V and W are sitting in a row facing North.

i. Q sits to the immediate right of P, who is at one of the extreme ends of the line.

ii. Q sits third to the left of T.

iii. There are two persons between W and T.

iv. U is not an immediate neighbour of S and sits to the immediate left of V.

v. There are three persons between V and R.

Who are sitting between Q and T?

A. R and S

B. U and V

C. R and U

D. V and S

40. 'Literature' is related to 'Poetry' in the same way as 'Painting' is related to '_____':

A. Colour

B. Portrait

C. Expression

D. Frame

41. Which two signs should be interchanged to make the given equation correct?

$$10 \div 5 - 4 \times 3 + 6 = 13$$

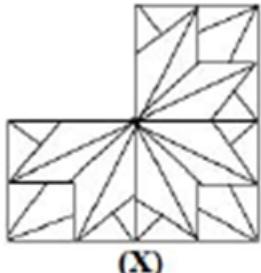
A. + and \div

B. - and \times

C. \div and \times

D. + and -

42. Select the option figure, which when placed in the blank space of the figure marked 'X' would complete the pattern.



- The figure consists of four separate square diagrams labeled A, B, C, and D. Each square contains several thin black lines forming various geometric shapes. Diagram A shows a large triangle on the left and several smaller triangles on the right. Diagram B shows a large triangle at the bottom and several smaller triangles at the top. Diagram C shows a large triangle at the bottom-left and several smaller triangles at the top-right. Diagram D shows a large triangle at the top-left and several smaller triangles at the bottom-right.

43. If CROWN is coded as 68 and DEPEND is coded as 42, then how would IMAGERY be coded?

44. Which number will replace the question mark (?) in the following number series?

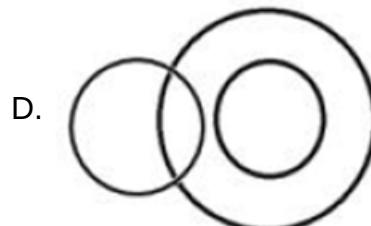
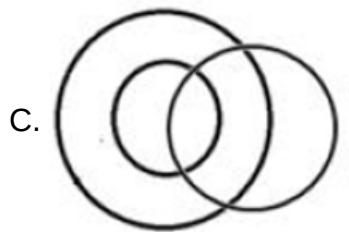
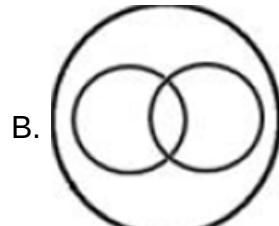
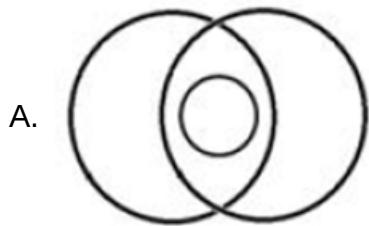
7, 9, 13, 16, 25, 29, ?, 50

45. 'Play' is related to 'Actor' in the same way as 'Concert' is related to ' '.

- | | |
|-------------|-------------|
| A. Symphony | B. Piano |
| C. Musician | D. Director |

46. Select the Venn diagram that best illustrates the relationship among the following classes.

Women, Employed, mothers



47. Three statements are followed by three conclusions numbered I, II and III. Assuming the statements to be true even if they do not conform to real-world knowledge, decide which of the conclusions logically follows/follow from the statements.

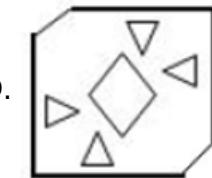
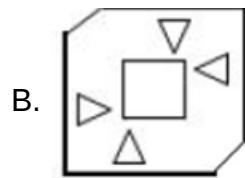
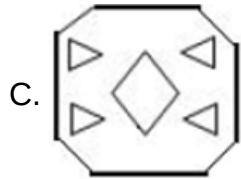
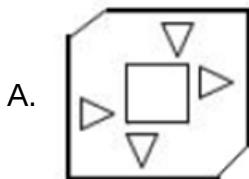
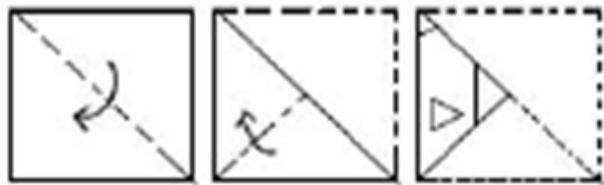
Statements:

- 1) All towns are cities.
- 2) No city is a village.
- 3) Some cities are corporations.

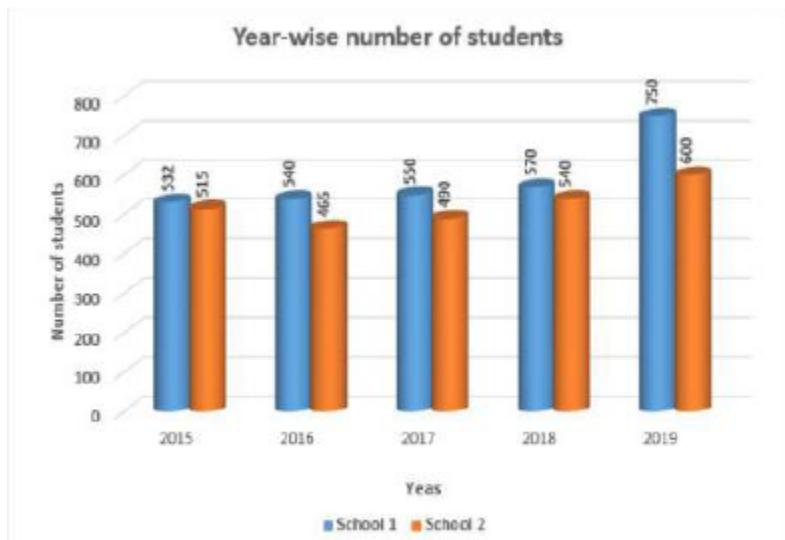
Conclusions:

- I. Some corporations are villages.
 - II. Some towns are corporations.
 - III. No corporation is a village.
- | | |
|--|-------------------------------------|
| A. Only conclusion I follows | B. Only conclusions I and II follow |
| C. Either conclusion I or conclusion III follows | D. Only conclusion II follows |

48. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the figures below. How would the paper look when unfolded?



53. An almirah was sold at a profit of 15%. If its cost had been 5% less and it had been sold for Rs. 1,470 less, then the profit would have been 10%. What is the cost price of the almirah?
- A. Rs. 14,000 B. Rs. 29,400
 C. Rs. 16,100 D. Rs. 2,94,000
54. The year-wise student enrolment of two schools over a period of 5 years has been presented in the following bar graph.



In which year is the difference of enrolment in the two schools, the least?

- A. 2015 B. 2016
 C. 2018 D. 2017

55. The Simplified value of $\frac{119 - [48 \div 6 - 7 \{5 \times 12 \div 3 - (15 - 3 - 8)\}]}{24 \div 3 - 9 \text{ of } 3 + (52 - 8 - 4) \div 6}$ is:
- A. $-\frac{111}{11}$ B. $-\frac{127}{27}$
 C. $\frac{127}{43}$ D. $\frac{111}{11}$
56. A wire is in the form of a square of side 33 cm. If the wire is moulded to form a circle, then what is the radius of the circle?

(Use $\pi = \frac{22}{7}$)

- A. 21 cm B. 33 cm

C. 16.5 cm

D. 42 cm

57. From a wooden cubical block of side 10 cm, a sphere of radius 4.2 cm is carved out. How much wood is wasted in the process?

(Use $\pi = \frac{22}{7}$)A. 476.2 cm^2 B. 689.536 cm^3 C. 310.464 cm^3 D. 523.8 cm^3

58. The product of two positive numbers is 1344 and their ratio is 7 : 12. The smaller of these numbers is:

A. 16

B. 28

C. 112

D. 48

59. Two dealers offer an item at the same marked price Rs. 3,000. The first dealer allows successive discounts of 10% and 15%. The other dealer allows successive discounts of 20% and 5%. Find the difference in the selling price of the item under the two offers.

A. Rs. 15

B. Rs. 20

C. Rs. 10

D. Rs. 25

60. A bus moves from station A towards station B, which is at a distance of 189 km. An hour later, a car, the ratio of whose speed with the bus is 3 : 2, starts from station A and moves towards station B. Find the speed of the bus (in km/h), if the car arrives at station B half an hour earlier than the bus.

A. 41

B. 37.8

C. 42

D. 63

61. Kavita purchased fabric worth Rs. 800 for a dress, and spent Rs. 350 on embroidery and stitching. If she sold the dress at a profit of 20%, then the selling price is:

A. Rs. 1,220

B. Rs. 1,380

C. Rs. 1,500

D. Rs. 1,310

62. In a joint family of 16 persons, the eldest and the youngest members have an age difference of 82 years. If these two are left out of the counting, then the average age of the remaining 14 persons is 28. The average age of the entire family being 30, what is the age of the eldest person?

A. 85 years

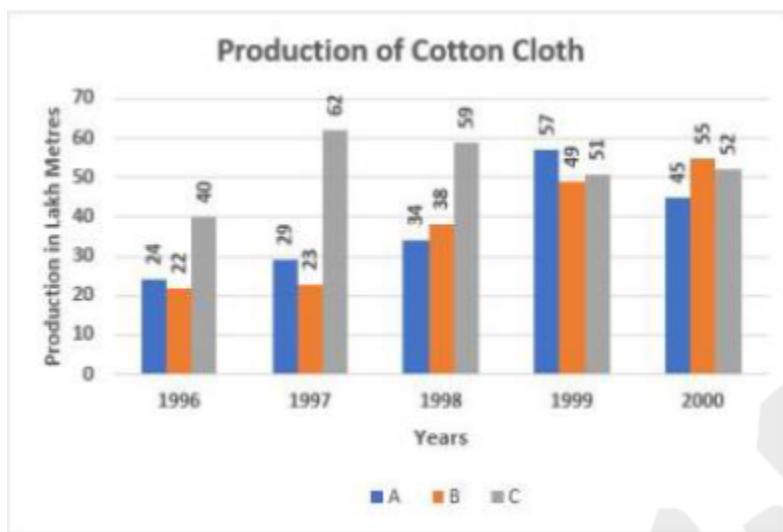
B. 88 years

C. 76 years

D. 60 years

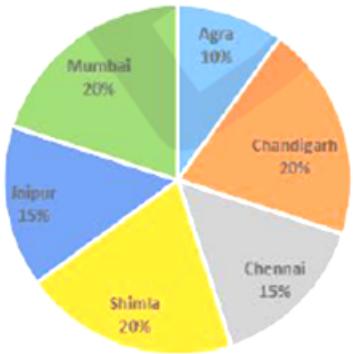
63. If the mode of the following data is 11, then find the value of k .

11, 8, 9, (2k - 1), 11, 12, 12, 18, 14, 16



In which year the production of company C is 81.94% (correct to 2 decimal places) of the combined production of company A and company B?

68. A large container has a 50 litre mixture of juice and water in the ratio 3 : 2. To this, a 60 litre juice and water mixture is added, that has a juice to water ratio of 2 : 1. After this, 11 litres of the solution is replaced with pure juice. What is the ratio of water to juice in the final mixture?
- A. 37 : 18 B. 29 : 81
C. 4 : 7 D. 18 : 37
69. The cost of levelling a square field at the rate of Rs. $52/m^2$ is Rs. 1,30,000. What will be the cost of fencing its boundary at the rate of Rs. 35/m?
- A. Rs. 2,500 B. Rs. 7,000
C. Rs. 87,500 D. Rs. 3,500
70. Seats in a college for a B. Sc. Course for Physics, Chemistry and Biology, are in the proportion 7 : 5 : 8. There is a proposal to increase these seats by 50%, 40% and 25%, respectively. What will be the proportion of increased seats?
- A. 12 : 9 : 33 B. 21 : 14 : 20
C. 57 : 45 : 33 D. 7 : 4 : 4
71. A survey was conducted on 80 families to know about their most favourite place to visit out of 6 particular locations. The same has been shown in the following pie chart.



What is the central angle for the families who showed interest for visiting Jaipur?

- A. 15° B. 25°
C. 54° D. 60°
72. Ankit invests some money at 9% simple interest for 2 years, and the same sum for 4 years at 10% per annum. He earns Rs. 1,740 in all. The sum invested in each case is:
- A. Rs. 4,350 B. Rs. 3,000
C. Rs. 6,000 D. Rs. 4,500

A. Verghese Kurien

C. Baba Amte

B. Azar Iqbal

D. Sunderlal Bahuguna

100. 'Ace against Odds' is an autobiography by _____.

A. Hima Das

C. Dutee Chand

B. Sania Mirza

D. Mary Kom

Solutions

1. D

Sol. **The underlined part of the sentence is grammatically incorrect.**

- * Underlined part needs correction in conjunction and helping verb.
- * “Until” as a conjunction means up to the point in time or the event mentioned.

For example:

Let us wait **until** the rain stops.

- * “Unless” as a conjunction is used to say that something can only happen or be true in a particular situation.

For example:

I won’t get paid for time off **unless** I have a doctor’s note.

- * In the given sentence, the occurrence of “becoming good reader is not possible” in a situation when someone is “not reading it with a purpose”. This meaning of the sentence goes in consonance with the usage of conjunction “unless”.
- * As per the Subject Verb agreement, verb should be in accordance with the subject. Singular verb should be used with singular subject. Plural verb should be used with plural subject.

In the given sentence, “reading” is a subject (uncountable noun). We know that uncountable nouns take singular helping verbs but we have used plural helping verb “are”. This is wrong. As per subject verb agreement, a singular helping verb “is” should be used here.

- * Hence, “**unless reading is**” is the correct substitution.

Thus, the correct sentence will be: **You will never become a good reader unless reading is done with a purpose.**

Hence, **option D** is the correct answer.

2. D

Sol. The idiom “**fly/leave the nest**” means to move away from your parent’s home because you are an adult.

Example: The old man told me that his son had **frown/left the nest**.

Hence, **option D** is the correct answer.

3. C

Sol. **The underlined part of the sentence is grammatically incorrect.**

* Underlined part needs correction in phrasal verb.

* “Come forward” is a phrasal verb. It means to offer your help, services etc.

For example:

Police have asked witnesses of the accident to **come forward**.

Several people **came forward** with information.

* “Onward” is an adjective and it simply means continuing or moving forward.

For example:

The cavalcade swept **onward** through the gates.

* In the given sentence, the sentence is not talking about the simple forward movement. It mentions the offering of help (by the “industrialists”) for the migrant workers. Thus, it is appropriate to use “forward” in place of “onward”.

* Hence, “**forward**” is the correct substitution.

Thus, the correct sentence will be: **Many industrialists are coming forward to help migrant workers find employment in their villages and cities.**

Hence, **option C** is the correct answer.

4. A

Sol. Lullaby: a soft, gentle song sung to make a child go to sleep.

Chorus: part of a song that is sung after each verse.

Prayer: words that you say to God giving thanks or asking for help.

Hymn: a song of praise, especially one praising a God and sung by Christians.

Hence, **option A** is the correct answer.

5. A

Sol. **The underlined part of the sentence is grammatically incorrect.**

* Underlined part needs correction in adverb.

* “When” as an adverb is used to show “which/what time”.

For example:

When did you last see him?

* “How” is an adverb. It is used before adjectives or adverb to ask about the amount, degree, etc. of something.

* “How long” is used to ask about the duration/period of time.

For example:

How long have you been in your present job?

* “How far” is used to ask about the distance or extent of something.

For example:

How far is human nature determined by biology?

* In the given sentence, the sentence is not talking about the exact or specific time. So, the usage of adverb “When” is wrong.

- * Sentence is focused on “duration of waiting time”. Thus, it is appropriate to use “How long” in place of “When”.
- * Hence, “**How long**” is the correct substitution.

Thus, the correct sentence will be: **How long have you been waiting for me here?**

Hence, **option A** is the correct answer.

6. B

Sol. Let's understand the meaning of the given words:

Subtle= not easy to notice or not very strong

E.g.: There are **subtle** differences between the two versions.

Crafty = clever at getting what you want, especially by indirect or dishonest methods.

Harsh = cruel, severe and unkind.

E.g.: The minister received some **harsh** criticism.

Faint = that cannot be clearly seen, heard, or smelt.

Slight = very small in degree.

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

7. B

Sol. **Option B has incorrectly spelt word.**

“Gradual” is the correct spelling of the incorrect word “Grajual”. It means happening slowly over a long period.

The meaning of other words are:

Manual: involving use of hands or physical strength.

Mutual: shared by two or more people

Usual: normal

8. C

Sol. Let us understand the meaning of the given words:-

- * Attested = to show or prove that something is true.
- * Tested = to find out how much someone knows or what they can do by asking them questions or giving them activities to perform.
- * Valid = something that is legally or officially acceptable.
- * Solid = something that is hard.

Now let's find out the correct fit for the blank:

- * "Attested" is used in context of "to prove something". Thus, option A is incorrect.
- * "Tested" is used in context of "check someone's knowledge". Thus, option B is incorrect.
- * "Solid" is used in context of "hard or difficult". Thus, option D is incorrect.
- * "Valid" is used in context of "legally acceptable".
- * Here in the given sentence, it is used to mention that the discount coupons are legally acceptable only for six months from the date of issue.

Thus, "Valid" becomes the correct word to fill in the blank.

Thus the correct sentence will be: **These discount coupons are valid for only six months from the date of issue.**

9. A

Sol. Let's understand the meaning of the given words:

Stern= serious and often showing that you do not approve of someone/something.

E.g.: He always seemed to have the same **stern** expression on his face.

Strict = that must be obeyed exactly.

E.g.: There are **strict** guidelines on how the work is to be carried out.

Mild = not severe or strong.

Lenient = not as strict as expected when punishing someone

Gentle =calm and kind.

Hence, **option A** is the correct answer.

10. C

Sol. The sentence is grammatically incorrect, and the error lies in **option C**. The error is related to **Tense**.

* In simple past tense, we use first form of verb after "did" i.e. "did + first form of verb".

For example:

We **did** not **receive** any news during her long absence.

Why **did** you **take** on this assignment if you are so busy?

* In the given sentence, we have used second form of the verb "spent" after the helping verb "did". This is wrong.

- * Thus, first form of verb “spend” should be used in place of a second form of verb “spent”.
- * Hence, “**Why did you spend**” is the correct substitution.

Thus, the correct sentence will be: **Why did you spend so much money on old and useless furniture?**

11. A

Sol. Let's understand the meaning of the given words:

Provoke= to cause a particular reaction

E.g.: The announcement **provoked** a storm of protests across the city.

Enrage = to make someone very angry.

E.g.: He was **enraged** at her stupidity.

Gratify = to please or satisfy someone.

Placate = to make someone feel less angry about something.

Hinder = to make it difficult for someone to do something or for something to happen.

Hence, **option A** is the correct answer.

12. B

Sol. The sentence is grammatically incorrect, and the error lies in **option B**. The error is related to **Subject Verb Agreement**.

* In simple past tense, we use first form of verb after “did” i.e. “did + first form of verb”.

* As per the Subject Verb agreement, verb should be in accordance with the subject. Singular verb should be used with singular subject. Plural verb should be used with plural subject.

For example:

These **shoes have** given me blisters on my heels.

Shoes: Plural subject.

Have: Plural helping verb

* In the given sentence, we have used plural helping verb “were” for the singular subject “teacher”. This is wrong. Thus, singular helping verb “was” should be used in place of plural helping verb “were”.

* Hence, “**teacher was teaching**” is the correct substitution.

Thus, the correct sentence will be:

They went on talking while the teacher was teaching an important lesson.

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

13. A

Sol. Nepotism: giving unfair advantages to your own family if you are in power, especially by giving them jobs

Nationalism: a feeling of loving your country very much and being very proud of it.

Despotism: the rule of despot i.e. a leader with great power, especially one who uses it in a cruel way.

Narcissism: the habit of admiring yourself too much, especially your appearance.

Hence, **option A** is the correct answer.

14. D

Sol. Let us understand the meaning of the given words:-

* Rise = to come or go upwards

- * Rose = second form of verb “rise”
- * Raise = to increase the amount or level of something
- * Raised = second form of verb “raise”.

Now let's find out the correct fit for the blank:

- * “Rise” is used in context of “go upwards”. Thus, option A is incorrect.
- * “Rose” is the second form of verb “rise” and it is used in context of “going upwards”. Thus, option B is incorrect.
- * “Raise” is used in context of “increase in amount”. But it is the base form of verb. Thus, option C is incorrect.
- * "Raised" is the second form of verb and it is used in context of “increase in amount”.
- * Here in the given sentence, we have time word “last year” that shows the sentence is set in past tense. So, it is appropriate to use the second form of verb. Also, we need the contextual meaning of “increase in salary amount”.

Thus, "Raised" becomes the correct word to fill in the blank.

Thus the correct sentence will be: **My employers raised my salary last year.**

Hence, **option D** is the correct answer.

15. C

Sol. Let us understand the meaning of the given words:-

- * At = (preposition) is used to show where something/someone is or where something happens.

- * By = (preposition) is used for showing how or in what way something is done.
- * Of = (preposition) is used after adjectives to connect with something it relates to.
- * To = (preposition) is used for “towards something”

Now let's find out the correct fit for the blank:

- * “At” as a preposition is used to show “location” of something/someone. Thus, option A is incorrect.
- * “By” as a preposition is used for showing way of doing things. Thus, option B is incorrect.
- * “To” as a preposition is used for showing the direction of something. Thus, option D is incorrect.
- * "Of" as a preposition is used after some adjectives before mentioning someone/something that a feeling relates to.
- * Here in the given sentence, it is used after the adjective (tired) to show that the act of “reminding” has been done too many times. The sentence is trying to relate this act with the feeling of “tiredness”.

Thus, "Of" becomes the correct word to fill in the blank.

Thus the correct sentence will be: **I am tired of reminding you to clean your room.**

Hence, **option C** is the correct answer.

16. C

Sol. Let us understand the meaning of the given words:-

- * Invented = to produce or design something that has not existed before

- * Developed = having many industries and a complex economic system.
- * Founded = to start something such as an organisation or institution.
- * Discovered = be the first person to become aware that a particular place or thing exists.

Now let's find out the correct fit for the blank:

- * "Invented" is used in context of "designing something that has not been done before". Thus, option A is incorrect.
- * "Developed" is used in context of "affluent environment of living, plethora of industries and proper economic system". Thus, option B is incorrect.
- * "Discovered" is used in context of "becoming first to be aware of some place/thing". Thus, option D is incorrect.
- * "Founded" is used in context of "establishing an organisation".
- * Here in the given sentence, it is used to mention that "Swami Dayanand" established an organisation known as "Arya Samaj".

Thus, "Founded" becomes the correct word to fill in the blank.

The correct sentence will be: **Swami Dayanand founded the Arya Samaj.**

Hence, **option C** is the correct answer.

17. D

Sol. Let's understand the meaning of the given words:

Cease= to stop happening or existing.

E.g.: The commander ordered his troops to **cease** fire.

Stop = to no longer move

Catch = to stop and hold a moving object or person, especially in your hands.

Halt = to make someone/something stop

Start = to begin doing or using something.

E.g.: She has just **started** a new job.

Hence, **option D** is the correct answer.

18. D

Sol. The sentence is grammatically incorrect, and the error lies in **option D**. The error is related to **Adverb**.

* Adverb is used to qualify adjectives.

For example:

The guest lounges are **elegantly furnished** with cushy sofas and wide armchairs.

Here, “furnished” is an adjective (acting like a subject complement). “Elegantly” is an adverb and it is qualifying the adjective “furnished”.

* “Elegantly” as an adverb means in an attractive way and showing a good sense of style.

* In the given sentence, a noun “elegance” is used to qualify an adjective “furnished”. This is wrong.

* An adverb is used to qualify an adjective. Thus, an adverb “elegantly” should be used in place of a noun “elegance”.

* Hence, “**The elegantly furnished**” is the correct substitution.

Thus, the correct sentence will be: **The elegantly furnished drawing room indicated that the owner had good taste.**

Hence, **option D** is the correct answer.

19. D

Sol. **Option D has incorrectly spelt word.**

“Suggestion” is the correct spelling of the incorrect word “Sugestion”. It means an idea or plan that you mention for someone else to think about.

The meaning of other words are:

Mediocre: not very good; of only average standard

Legible: clear enough to read

Opaque: not clear enough to see through.

20. A

Sol. The idiom “**your guess is as good as mine**” is used to tell someone that you do not know any more about a subject than the person that you are talking to does.

Example:

Ramesh: “Who is going to win?”

Rakesh: “I have no idea. **Your guess is as good as mine.**”

Hence, **option A** is the correct answer.

21. C

Sol. The given passage is about “**Albert's interaction with the Natives**”.

“A” as an indefinite article is used before the countable nouns (no vowel sounds) that have not been mentioned before. Thus, option A is wrong.

“An” as a definite article is used before the countable nouns (having vowel sounds) that have not been mentioned before. Thus, option B is wrong.

“One” as a pronoun is used to avoid repeating a noun, when you are referring to someone/something that has already been mentioned. Thus, option D is wrong.

“The” is a definite article. It is used to introduce the nouns for the first time.

Here in the given sentence, it is used to introduce the “native people” for the first time in the paragraph.

Hence, **option C** is the correct answer.

22. A

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“You” is a pronoun in subjective case. But we need objective case in the filler. Thus, option B is wrong.

“Himself” is a reflexive pronoun. There is no context that necessitates the usage of reflexive pronoun in the filler. Thus, option C is wrong.

“Us” is an objective case pronoun. It is used when we have “We” as a subject. Thus, option D is wrong.

“Them” is a pronoun. It is used to refer the nouns (animals, people) that are plural in nature.

Here in the given sentence, it is used to refer the “native people” mentioned in the previous sentence. “People” is a plural noun.

Hence, **option A** is the correct answer.

23. B

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“Appear” means to start to be seen. Thus, option A is wrong.

“Advance” means to move forward towards someone in order to attack or threaten someone. Thus, option C is wrong.

“Arrange” means to plan or organize something in advance. Thus, option D is wrong.

“Approach” means to speak to someone about something, especially to ask them for something.

In the given sentence, it is used to mention that the “native people” came to “Albert” for seeking advice.

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

24. B

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“Furthermore” is an adverb. It means “in addition to what has just been stated”. Thus, option A is wrong.

“Therefore” is an adverb. It is used to introduce the logical result of something that has just been mentioned. Thus, option C is wrong.

“Moreover” is an adverb. It is used to introduce some new information that adds to what you have said previously. Thus, option D is wrong.

“However” is an adverb. It is used to introduce a statement that contrasts with something that has just been said. Here in the given sentence, it is used to contrast the “some people were too shy to share their concerns” with the previous sentence i.e. “They too began to approach him for advice”.

Here, contrast lies in having two groups of people. One group was coming to him whereas the other one was shy to share their problems with him.

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

25. A

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“Settled” means to put an end to an argument or a disagreement. Thus, option B is wrong.

“Decided” means to think carefully about the different possibilities that are available and choose one of them. Thus, option C is wrong.

“Confirmed” means “to state that something is definitely true”. Thus, option D is wrong.

“Assured” means guaranteed.

In the given sentence, it is used to mention that “Albert” ultimately managed to convince the native people that he could help them out in resolving their problems.

Hence, **option A** is the correct answer.

26. D

Sol. Arranging the given object in descending order as per the given information the order will be:

H
K
F
J
G
L

Thus, the second from the bottom will be ‘G’.

Hence, option D is the correct answer.

27. A

Sol. The pattern is:

$$7^3 - 7^2 = 343 - 49 \Rightarrow 294$$

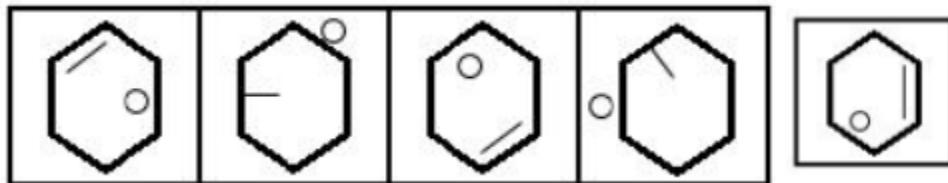
Similarly,

$$9^3 - 9^2 = 729 - 81 \Rightarrow 648$$

Hence, option A is the correct answer.

28. A

Sol. Here the circle is moving in anticlockwise direction changing its position from inside to outside. Also the line is moving following a pattern of horizontal and vertical positioning.



Hence, option A is the correct answer.

29. A

Sol. The pattern is as follows:

The triplets (21, 29, 20) form Pythagoras triplets.

The two smallest numbers are 20 & 21. The sum of their square is:

$$20^2 + 21^2 = 400 + 441 \Rightarrow 841; \text{ which is the square of } 29.$$

Similarly,

The triplets (8, 17, 15) form Pythagoras triplets.

The two smallest numbers are 8 & 15. The sum of their square is:

$$8^2 + 15^2 = 64 + 225 \Rightarrow 289; \text{ which is the square of } 17.$$

Hence, option A is the correct answer.

30. A

Sol. The pattern is as follows:

W	I	D	O	W	E	R
-1	+2	-3	+0	+1	-2	+3
V	K	A	O	X	C	U

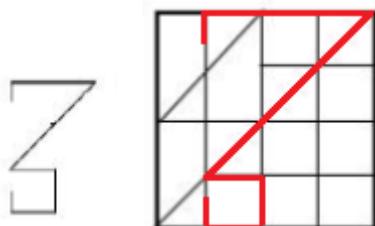
Similarly,

F	O	R	T	I	F	Y
-1	+2	-3	+0	+1	-2	+3
E	Q	O	T	J	D	B

Hence, option A is the correct answer.

31. C

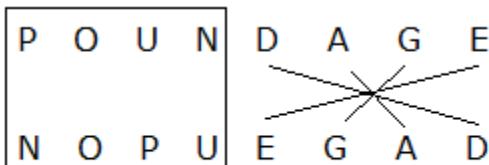
Sol. The given figure is perfectly embedded in the option figure (C) as shown below:



Hence, option C is the correct answer.

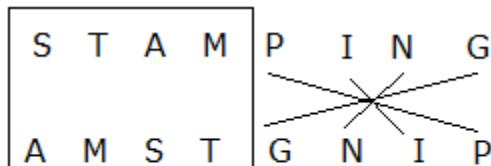
32. A

Sol. Logic: the first four letters of the word are written as per their place in Alphabetical order, and the last four are arranged as per a pattern as shown below:



letters arranged in alphabetical order

Similarly,

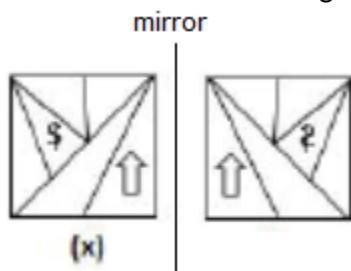


letters arranged in alphabetical order

Hence, option A is the correct answer.

33. B

Sol. The correct mirror image is as shown below:



Hence, option B is the correct answer.

34. D

Sol. Here the code of the following letters is given as:

G - 15

R - 4

U - 27

D - 18

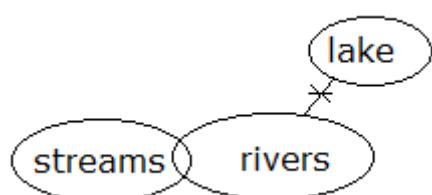
G - 15

E - 11

Hence, option D is the correct answer.

35. B

Sol. The least possible Venn-diagram will be:



Conclusions:

I. No stream is a lake – It is not a definite case, hence false.

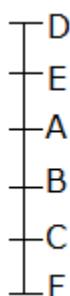
II. Some rivers are streams – It is a definite case, hence true.

Thus, only II follows.

Hence, option B is the correct answer.

36. D

Sol. As per the given information the arrangement will be as shown:



Clearly, A and B are exactly in the middle positions.

Hence, option D is the correct answer.

37. D

Sol. After we check all the given options we find that the equation given in option (D) will be correct when the signs interchanged as:

$$18 + 3 \div 12 \times 8 = 20$$

On solving the L.H.S we get;

$$\rightarrow 18 + 2 = 20$$

Thus L.H.S = R.H.S

Hence, option D is the correct answer.

38. C

Sol. The pattern is as follows:

12	15	20	20	5	18	25
L	O	T	T	E	R	Y
+1	+2	+3		+1	+2	+3
W	Q	M	T	B	T	F
23	17	13	20	28	20	6

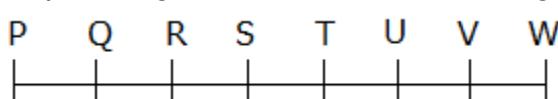
Similarly,

19	5	3	21	12	1	18
S	E	C	U	L	A	R
+1	+2	+3		+1	+2	+3
F	G	T	U	U	C	M
6	7	20	21	21	3	13

Hence, option C is the correct answer.

39. A

Sol. As per the given information the arrangement will be as follows:



Thus it is clear that R and S sits between Q and T.

Hence, option A is the correct answer.

40. B

Sol. Poetry is a type of literature in the same way a portrait is a painting in which there is a description of something or somebody.

Hence, option B is the correct answer.

41. A

Sol. By checking all the options we can check for the correct signs that make the equation correct:

$$10 + 5 - 4 \times 3 \div 6 = 13$$

On solving the L.H.S,

$$15 - 2 = 13$$

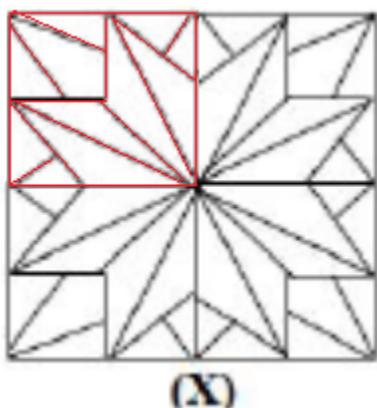
So, L.H.S = R.H.S

As we get the correct answer thus there is no need to check further options.

Hence, option A is the correct answer.

42. C

Sol. The option figure (C) will complete the given pattern as shown below:



Hence, option C is the correct answer.

43. C

Sol. The pattern is as follows: (sum of the letters in the word) – (number of letters in the word)

$$\text{CROWN} - > 3+18+15+23+14 = 73 - 5 = 68$$

$$\text{DEPEND} - > 4+5+16+5+14+4 = 48 - 6 = 42$$

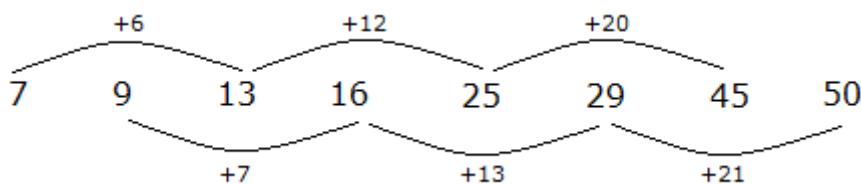
Similarly,

$$\text{IMAGERY} \rightarrow 9+13+1+7+5+18+25 = 78 - 7 = 71$$

Hence, option C is the correct answer.

44. D

Sol. The pattern is as follows:



Hence, option D is the correct answer.

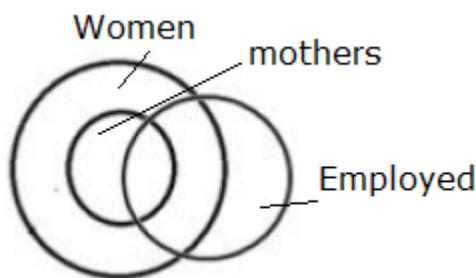
45. C

Sol. A play features an actor in same way a musician performs in concerts.

Hence, option C is the correct answer.

46. C

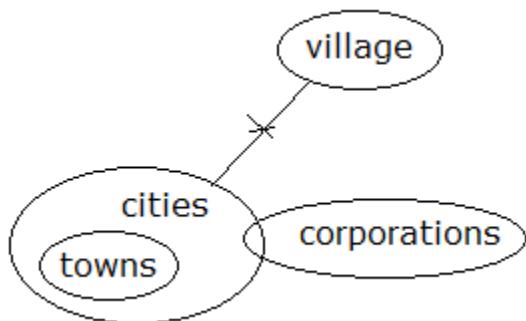
Sol. The given classes are best represented by the Venn- diagram given in option (C);



Hence, option C is the correct answer.

47. C

Sol. The least possible Venn-diagram will be:



Conclusions:

- I. Some corporations are villages – It is not a definite case, hence false.
- II. Some towns are corporations - It is not a definite case, hence false.
- III. No corporation is a village - It is not a definite case, hence false.

Here conclusion I and III both have a complementary pair thus either I or II is true.

Hence, option C is the correct answer.

48. B

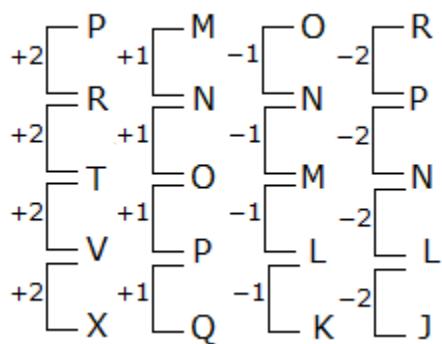
Sol. When the given sheet of paper is unfolded it will appear as shown below:



Hence, option B is the correct answer.

49. B

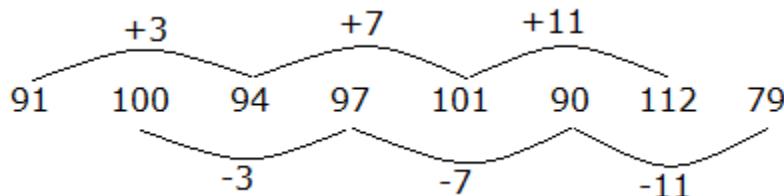
Sol. The pattern is as follows:



Hence, option B is the correct answer.

50. D

Sol. The pattern is as follows:



Hence, option D is the correct answer.

51. A

Sol. Given:

Principal = Rs. 22500, Rate of Interest = 16% p.a. or 8% per period (16/2) and Time = 1 year or 2 periods (1×2)

$$\text{Now, Compound Interest} = \text{Principal} \times \left(1 + \frac{r}{100}\right)^t - \text{Principal}$$

$$= 22500 \times \left(1 + \frac{8}{100}\right)^2 - 22500$$

$$= 22500 \times (1.08)^2 - 22500$$

$$= 22500 \times 1.1664 - 22500$$

$$= 26244 - 22500 = \text{Rs. 3744}$$

Hence, option A is the correct answer.

52. B

Sol. Let the total painting work be $192x$ units.

$$\text{Then efficiency of a man} = \frac{\text{Total work}}{\text{Time taken}} = \frac{192x}{12 \times 8} = 2x \text{ units/day}$$

$$\text{And efficiency of a woman} = \frac{\text{Total work}}{\text{Time taken}} = \frac{192x}{16 \times 12} = x \text{ units/day}$$

Now, work done by 8 men in 6 days = $8 \times (2x) \times 6 = 96x$ units

Remaining work = $192x - 96x = 96x$ units

Now, efficiency of 6 men and 4 women after replacement of 2 men with 4 women = $6 \times (2x) + 4 \times (x) = 12x + 4x = 16x$ units/day

$$\text{Time taken by them to complete the remaining work} = \frac{\text{Remaining work}}{\text{Efficiency}} = \frac{96x}{16x} = 6 \text{ days.}$$

Hence, option B is the correct answer.

53. A

Sol. Let the cost price of the almirah be Rs. x.

Then, selling price in case of profit of 15%

$$= \text{Cost} + \text{Profit} = (x) + (x) \times 15\% = x + 0.15x = \text{Rs. } 1.15x$$

Now, in new situation,

$$\text{New cost price} = (x) - (x) \times 5\% = x - 0.05x = \text{Rs. } 0.95x$$

And selling price = $\text{Rs. } 1.15x - \text{Rs. } 1470$

$$\therefore \text{Cost} + \text{Profit} = 1.15x - 1470$$

$$\therefore 0.95x + (0.95x) \times 10\% = 1.15x - 1470$$

$$\therefore 0.95x + 0.095x = 1.15x - 1470$$

$$\therefore 1.15x - 1.045x = 1470$$

$$\therefore 0.105x = 1470$$

$$\therefore x = 1470/0.105 = 14000$$

Therefore, the cost price of the almirah is Rs. 14000.

Hence, option A is the correct answer.

54. A

Sol. Difference of enrolment in the two schools in 2015 = $532 - 515 = 17$

Difference of enrolment in the two schools in 2016 = $540 - 465 = 75$

Difference of enrolment in the two schools in 2017 = $550 - 490 = 60$

Difference of enrolment in the two schools in 2018 = $570 - 540 = 30$

Therefore, difference of enrolment in the two schools is the least in 2015.

Hence, option A is the correct answer.

55. A

Sol.

$$\frac{119 - [48 \div 6 - 7 \{5 \times 12 \div 3 - (15 - 3 - 8)\}]}{24 \div 3 - 9 \text{ of } 3 + (52 - 8 - 4) \div 6}$$

$$= \frac{119 - [48 \div 6 - 7 \{5 \times 12 \div 3 - (15 - (-5))\}]}{24 \div 3 - 9 \text{ of } 3 + (52 - 4) \div 6}$$

$$= \frac{119 - [48 \div 6 - 7 \{5 \times 12 \div 3 - (15 + 5)\}]}{24 \div 3 - 9 \text{ of } 3 + 48 \div 6}$$

$$= \frac{119 - [48 \div 6 - 7 \{5 \times 4 - 20\}]}{8 - 27 + 8}$$

$$= \frac{119 - [48 \div 6 - 7 \{20 - 20\}]}{16 - 27}$$

$$= \frac{119 - [48 \div 6 - 7 \times 0]}{16 - 27}$$

$$= \frac{119 - [8 - 0]}{-11}$$

$$= \frac{119 - 8}{-11} = -\frac{111}{11}$$

Hence, option A is the correct answer.

56. A

Sol. Given:

A wire is in the form of a square of side 33 cm.

Therefore, the length of the wire (i.e. perimeter of square)

$$= 4 \times \text{side} = 4 \times 33 = 132 \text{ cm}$$

This is also the perimeter of the circle.

Therefore, $2\pi r = 132 \text{ cm}$

$$\tilde{A} r = \frac{132}{2\pi}$$

$$\tilde{A} r = \frac{132 \times 7}{2 \times 22}$$

$$\tilde{A} r = 21 \text{ cm}$$

Hence, option A is the correct answer.

57. B

Sol. Given:

From a wooden cubical block of side 10 cm, a sphere of radius 4.2 cm is carved out.

Now, volume of cubical block = $\text{side}^3 = 10^3 = 1000 \text{ cm}^3$

$$\text{And volume of sphere} = \frac{4}{3}\pi r^3 = \frac{4}{3} \times \frac{22}{7} \times (4.2)^3$$

$$= 310.464 \text{ cm}^3$$

Wood wasted in the process = Volume of cubical block – volume of sphere

$$= 1000 - 310.464 = 689.536 \text{ cm}^3$$

Hence, option B is the correct answer.

58. B

Sol. Let the smaller of the numbers be $7x$.

$$\text{Then, greater number} = (7x) \times \frac{12}{7} = 12x$$

Now, given:

$$\text{Product of the numbers} = 1344$$

$$\therefore (7x) \times (12x) = 1344$$

$$\therefore 84x^2 = 1344$$

$$\therefore x^2 = 1344/84 = 16$$

$$\therefore x = \sqrt{16} = 4$$

$$\text{Therefore, smaller number} = 7 \times 4 = 28$$

Hence, option B is the correct answer.

59. A

Sol. Given:

$$\text{Marked price} = \text{Rs. } 3000$$

Selling price of first dealer (offering successive discounts of 10% and 15%):

$$\text{Price after first discount of } 10\% = 3000 - 3000 \times 10\% = 3000 - 300 = \text{Rs. } 2700$$

$$\text{Final Price after discount of } 15\% = 2700 - 2700 \times 15\% = 2700 - 405 = \text{Rs. } 2295$$

Selling price of second dealer (offering successive discounts of 20% and 5%)

$$\text{Price after first discount of } 20\% = 3000 - 3000 \times 20\% = 3000 - 600 = \text{Rs. } 2400$$

$$\text{Final Price after discount of } 5\% = 2400 - 2400 \times 5\% = 2400 - 120 = \text{Rs. } 2280$$

Difference between both selling prices = $2295 - 2280 = \text{Rs. } 15$

Hence, option A is the correct answer.

60. C

Sol. Given:

A bus moves from station A towards station B, distance = 189 km

Let the speed of Bus be $2x$ km/h and time taken by bus be ' t ' hours

Then, speed of Car = $(2x) \times \frac{3}{2} = 3x$ km/h

And time taken by it = $t - 1 - 0.5 = (t - 1.5)$ h

Since distance is same in both the conditions (Speed \times Time)

$$(2x) \times t = (3x) \times (t - 1.5)$$

$$\therefore 2t = 3t - 4.5$$

$$\therefore 3t - 2t = 4.5$$

$$\therefore t = 4.5$$

Therefore, speed of the bus = Distance/Time = $189/4.5 = 42$ km/h

Hence, option C is the correct answer.

61. B

Sol. Given:

Cost of fabric purchased by Kavita = Rs. 800

Embroidery and stitching cost = Rs. 350

Therefore, total cost = $800 + 350 = \text{Rs. } 1150$

Selling price (in case of profit of 20%) = Cost + Profit = $1150 + 1150 \times 20\%$

$$= 1150 + 230 = \text{Rs. } 1380$$

Hence, option B is the correct answer.

62. A

Sol. Given:

Difference between age of eldest and youngest member = 82 years

Average age of entire family = 30 years

Average age of 14 persons excluding eldest and youngest members = 28 years

Now, total age of entire family = $16 \times 30 = 480$ years

And total age of 14 persons excluding eldest and youngest members = 14×28

= 392 years

Total age of eldest and youngest member = $480 - 392 = 88$ years

Age of eldest person = $\frac{88 + 82}{2} = 170/2 = 85$ years

Therefore, the age of the eldest person is 85 years

Hence, option A is the correct answer.

63. B

Sol. Given:

Data - **11, 8, 9, $(2k - 1)$, 11, 12, 12, 18, 14, 16**

And mode of the data is 11.

In above data, since 11 and 12 are repeated 2 times, therefore, in order to make '11' mode we need to have one more 11.

Therefore, $(2k - 1)$ is equal to 11.

$$2k - 1 = 11$$

$$\therefore 2k = 11 + 1 = 12$$

$$\therefore k = 12/2 = 6$$

Therefore, value of k is 6.

Hence, option B is the correct answer.

64. D

Sol. Given:

$$\text{Average of 9 numbers} = 19$$

$$\text{Average of the first four numbers} = 14$$

$$\text{Total of all 9 numbers} = 9 \times 19 = 171$$

$$\text{Total of the first four numbers} = 4 \times 14 = 56$$

$$\begin{aligned}\text{Total of the last 5 numbers} &= \text{Total of all 9 numbers} - \text{Total of the first four numbers} = 171 - 56 \\ &= 115\end{aligned}$$

$$\text{Therefore, average of the last 5 numbers} = 115/5 = 23$$

Hence, option D is the correct answer.

65. C

Sol. Let one of the numbers be x .

$$\text{Then, the other number} = x - 10$$

Now, we know that

$$\text{LCM} \times \text{HCF} = \text{multiplication of numbers}$$

$$\therefore 120 \times 10 = (x) \times (x - 10)$$

$$\therefore 1200 = x^2 - 10x$$

$$\tilde{A} x^2 - 40x + 30x - 1200 = 0$$

$$\tilde{A} x (x - 40) + 30 (x - 40) = 0$$

$$\tilde{A} (x - 40) (x + 30) = 0$$

$$\tilde{A} x - 40 = 0 \text{ or } x + 30 = 0$$

$$\tilde{A} x = 40 \text{ or } x = -30 \text{ (not possible)}$$

Therefore, $x = 40$

And the other number $= 40 - 10 = 30$

Sum of the numbers $= 40 + 30 = 70$

Hence, option C is the correct answer.

66. C

Sol.

$$\begin{aligned}& \left(16\frac{2}{3} \div 10\right) - \left[\left(\frac{8}{3} \times \frac{5}{4}\right) \text{ of } \frac{2}{5} + \frac{16}{3} \times \frac{11}{8} - \left(\frac{1}{4} \div \frac{1}{28}\right) \right] \\&= \left(\frac{50}{3} \div 10\right) - \left[\left(\frac{10}{3}\right) \text{ of } \frac{2}{5} + \frac{16}{3} \times \frac{11}{8} - \left(\frac{1}{4} \times 28\right) \right] \\&= \left(\frac{5}{3}\right) - \left[\frac{4}{3} + \frac{16}{3} \times \frac{11}{8} - 7 \right] \\&= \left(\frac{5}{3}\right) - \left[\frac{4}{3} + \frac{22}{3} - 7 \right] \\&= \left(\frac{5}{3}\right) - \left[\frac{4 + 22 - 21}{3} \right] \\&= \left(\frac{5}{3}\right) - \left[\frac{5}{3} \right] \\&= 0\end{aligned}$$

Hence, option C is the correct answer.

67. B

- Sol. Combined production of company A and company B in 1996 = $24 + 22 = 46$
Combined production of company A and company B in 1998 = $34 + 38 = 72$
Combined production of company A and company B in 1999 = $57 + 49 = 106$
Combined production of company A and company B in 2000 = $45 + 55 = 100$
Ratio of production of company C to the combined production of company A and company B
$$\text{in 1996} = \frac{40}{46} \times 100 = 86.96\%$$

Ratio of production of company C to the combined production of company A and company B
$$\text{in 1998} = \frac{59}{72} \times 100 = 81.94\%$$

Ratio of production of company C to the combined production of company A and company B
$$\text{in 1999} = \frac{51}{106} \times 100 = 48.11\%$$

Ratio of production of company C to the combined production of company A and company B
$$\text{in 2000} = \frac{52}{100} \times 100 = 52\%$$

Therefore, in 1998 the production of company C is 81.94% of the combined production of company A and company B.
Hence, option B is the correct answer.

68. D

Sol.

69. B

Sol. Given:

$$\text{Cost of levelling a square field at the rate of } \text{Rs. } 52/\text{m}^2 = \text{Rs. } 1,30,000$$

Therefore, its area = $130000/52 = 2500 \text{ m}^2$

$$\text{Area} = 2500$$

$$\text{Side} = \sqrt{2500} = 50 \text{ m}$$

Now, perimeter of square field = $4 \times 50 = 200 \text{ m}$

Therefore, cost of fencing its boundary = $200 \times 35 = \text{Rs. } 7000$

Hence, option B is the correct answer.

70. B

Sol. Given:

Proportion of seats in a college for a B. Sc. Course for Physics, Chemistry and Biology = 7 : 5 : 8

Let the total number of seats in college be $40x$.

Then, seats for Physics = $(40x) \times \frac{7}{20} = 14x$

And seats for Chemistry = $(40x) \times \frac{5}{20} = 10x$

And seats for Biology = $(40x) \times \frac{8}{20} = 16x$

Now, increased seats for Physics = $14x + (14x) \times 50\% = 14x + 7x = 21x$,

Increased seats for Chemistry = $10x + (10x) \times 40\% = 10x + 4x = 14x$

And increased seats for Biology = $16x + (16x) \times 25\% = 16x + 4x = 20x$

Therefore, new proportion = $21x : 14x : 20x = 21 : 14 : 20$

Hence, option B is the correct answer.

71. C

Sol. No. of families who showed interest for visiting Jaipur = $80 \times 15\% = 12$

Central angle for the families who showed interest for visiting Jaipur

$$= 360^\circ \times \frac{12}{80} = 54^\circ$$

Hence, option C is the correct answer.

72. B

Sol. Let the sum invested in each case be Rs. x.

Then, interest in first case = Principal \times Rate \times Time = $(x) \times 9\% \times 2 = 0.18x$

And interest in second case = Principal \times Rate \times Time = $(x) \times 10\% \times 4 = 0.40x$

Total Interest = Rs. 1740 (given)

$$0.18x + 0.40x = 1740$$

$$0.58x = 1740$$

$$x = 1740/0.58 = 3000$$

Therefore, the sum invested in each case is Rs. 3000

Hence, option B is the correct answer.

73. C

Sol. Let the efficiency of B be x units/day.

Then, total work = Efficiency \times Time = $(x) \times 13 = 13x$ units

And efficiency of A = $(x) + (x) \times 30\% = x + 0.3x = 1.3x$ units/day

Time taken by A to finish the work

$$= \text{Total Work/Efficiency} = 13x/1.3x = 10 \text{ days}$$

Hence, option C is the correct answer.

74. A

Sol. Since the typist leaves a margin of 2 cm each on all the sides,

$$\text{Total typing area} = (32 - 2 \times 2) \times (20 - 2 \times 2) = 28 \times 16 = 448 \text{ cm}^2$$

Now, if he leaves a margin of 1 cm each on all the sides,

$$\text{Then, total typing area} = (32 - 1 \times 2) \times (20 - 1 \times 2) = 30 \times 18 = 540 \text{ cm}^2$$

$$\text{Increase in the area available for typing} = \frac{540 - 448}{448} \times 100 = \frac{92}{448} \times 100 = 20.54\%$$

Hence, option A is the correct answer.

75. B

Sol. Given:

Amit covers a certain distance on his bike at a speed of 40 km/h in 15 min.

$$\text{Therefore, total distance} = \text{Speed} \times \text{Time} = 40 \times \frac{15}{60} = 10 \text{ km}$$

Required speed to cover above distance in 12 min

$$\begin{aligned} \frac{\text{Distance}}{\text{Time}} &= \frac{10}{12} = 10 \times \frac{60}{12} \\ &= \frac{60}{12} = 50 \text{ km/h} \end{aligned}$$

Hence, option B is the correct answer.

76. D

Sol. • Portuguese built the first European fort in India in the year 1503.
• Portuguese viceroy Afonso de Albuquerque built the first European fort in India.
• Portuguese first came to India in search of spices and the first Portuguese came to India was Vasco da Gama.

- The first Portuguese factory was established in Calicut, India in 1500 AD.
- Portugal is the oldest continuously existing nation-state on the Iberian Peninsula and one of the oldest in Europe.

77. B

- Sol.
- Sikkim became the first fully organic farming state in India in 2016.
 - It became a fully organic farming state by converting around 75,000 hectares of agricultural land into sustainable cultivation.
 - It adopted organic farming and banned the imports of chemical fertilizers in 2003.
 - It is the least populous and second smallest among the Indian states.
 - It accounts for the largest share of cardamom production in India and is the second-largest producer of spice.
 - Goa is India's smallest state by area & fourth-smallest by population and It has the highest GDP per capita among all Indian states.

78. D

- Sol.
- South Central Asia part of the world has the highest density of population as of September 2020.
 - The countries in Southcentral Asia are Afghanistan, Bangladesh, Bhutan, India, Kyrgyzstan, Kazakhstan, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan and Uzbekistan.
 - Bangladesh is the most densely populated in the larger countries with 1,252 people per square kilometre.
 - East Africa is the eastern subregion of the African continent.
 - North America is a continent in the Northern Hemisphere and almost entirely within the Western Hemisphere.

79. A

- Sol.
- The transparent front part of the eye is Cornea.

- It is the **clear outer layer at the front of the eye** and It **helps to focus light so you can see clearly**.
- The **retina** is a **layer of tissue in the back of your eye** that **senses light** and **sends images to your brain**.
- It is the **innermost, light-sensitive layer of tissue of the eye** of most vertebrates and some molluscs.
- The **pupil** is a **black hole located in the center of the iris of the eye** and **allows light to strike the retina**.
- The **Iris controls** the **amount of light that enters the eye** by **opening and closing the pupil**.

80. D

- Sol.
- **Chennai was included in the UNESCO Creative Cities Network for its contribution to music in November 2017.**
 - It is the **third Indian city on the list of UNESCO Creative Cities list**.
 - The **UNESCO Creative Cities Network** was **created in 2004**.
 - It was created to **promote cooperation with and among cities** that have identified **creativity as a strategic factor for sustainable urban development**.
 - The Network covers seven creative fields:
 - a) **Film**
 - b) **Music**
 - c) **Design**
 - d) **Gastronomy**
 - e) **Literature**
 - f) **Crafts and Folk Arts**
 - g) **Media Arts**
 - The **full form of UNESCO** is **United Nations Educational, Scientific and Cultural Organization**.

81. D

- Sol.
- **Nitrogen** is an essential element used in the synthesis of proteins in plants.
 - It was first discovered and isolated by Scottish physician Daniel Rutherford in 1772.
 - It is the most abundant uncombined element in Earth's atmosphere and the fourth most abundant element in the human body.
 - **Chlorine** is the second lightest and the second-most abundant halogen.
 - It is an extremely reactive element and a strong oxidising agent.
 - **Calcium** is the most abundant mineral in the human body.
 - **Sodium** is the sixth most abundant element in the Earth's crust and it was first isolated by Humphry Davy in 1807.

82. C

- Sol.
- The Chalukya Dynasty ruled in Vatapi which is in the modern-day Indian state of Karnataka.
 - It was a Classical Indian dynasty that ruled large parts of southern and central India.
 - It marks an important milestone in the history of South India and a golden age in the history of Karnataka.
 - It was established by Pulakeshin I in 543.
 - Karnataka is the sixth largest Indian state by area and the eighth-largest state by population.
 - It is also famous for its magical hill stations, spectacular waterfalls and pilgrimage centres.

83. A

- Sol.
- Ramanathan Krishnan became the first Asian player to win the Boys' Singles title at Wimbledon in 1954.
 - He would become and stay India No. 1 for almost two decades.
 - Ramesh Krishnan became India's Davis Cup captain in 2007.

- Wimbledon is the **oldest tennis tournament in the world** and It is **widely regarded as the most prestigious**.
- It is **played on outdoor grass courts** and It is **one of the four Grand Slam tennis tournaments**.
- **Wimbledon Championships 1954** was held from **21 June – 3 July 1954**.

84. A

- Sol.
- **Allicin** is one of the main active sulphur-containing compounds present in garlic and onion.
 - It is a **sulfoxide & a botanical anti-fungal agent** and It has a **role as an antibacterial agent**.
 - It is a **thioester of sulfenic acid** and It is also known as **allyl thiosulfinate**.
 - It was **first isolated and described by Cavallito and Bailey in 1944**.
 - **Cellulose** is an **important structural component of the primary cell wall of green plants**.
 - It is the **most abundant organic polymer on Earth**.
 - **Phenol** is both a **manufactured chemical and a natural substance**.

85. A

- Sol.
- **Pochampally Ikat sarees and dress materials, famous for their traditional geometric patterns, belong to the state of Telangana.**
 - It is **one of the oldest dyed prints in the state** and it is **amongst the most famous sarees of southern India**.
 - It received **Intellectual Property Rights Protection or Geographical Indication status in 2005**.
 - **Telangana** is famous worldwide for its amazing **Bronze castings** that require exquisite skills for creating **incredible idols**.
 - **Tamil Nadu** is famous for its **temples, festivals and celebration of the arts**.

- Kerala is well-known for its **mesmerizing backwaters, ecotourism initiatives, scenic beauty, amazing beaches and mouthwatering cuisine.**

86. C

Sol. • **Vallam Kali is a kind of traditional Boat race.**

- It is **mainly conducted during the season of the harvest festival Onam in spring.**
- It is **one of the most picturesque and traditional festivals in southern India.**
- It is a **form of canoe racing and uses paddled war canoes.**
- It is also known as the **snake boat race** and It is a **major tourist attraction.**
- It is **world-famous for its enthusiasm, postcard-perfect moments and grandeur.**

87. A

Sol. • **'Ratvai' is a dance form associated with the Mewati tribes of India.**

- **Mewati** is a prominent Muslim Rajput tribe from North-Western India.
- **Khasis** were the earliest immigrant tribes who came from Myanmar and they are famous for weaving cane mats, stools and baskets.
- **Jatapus** are numerically a small tribe of Odisha hardly numbering 14 thousand persons as per the 2001 Census.
- They are also known as **Jatapu Dora** and **Samanthulu**.
- **Bhils** are considered **one of the oldest tribes in India** and **one of the largest tribal groups.**

88. D

Sol. • **'Muya Awandru' is a traditional food of Tripura.**

- It is a **bamboo shoot boiled, rice flour-based gravy, cooked with fermented fish, green chilli pepper and parsley.**
- **Tripura** is the **third-smallest state and one of the most literate states in India.**
- It has the **highest number of primate species found in any Indian state.**

- It is known for its **handicraft**, particularly hand-woven cotton fabric, wood carvings and bamboo products.
- It is famous for its **cultivations**, tea plantations, beautiful gardens, toy trains and fruit gardens.

89. B

- Sol.
- A paper instructing the bank to pay a specific amount from a person's account to another person in whose name it has been issued is known as **Cheque**.
 - **Cheques** are a type of bill of exchange that was developed as a way to make payments without the need to carry large amounts of money.
 - **Cash** is money in the physical form of currency, such as **banknotes** and **coins**.
 - A **passbook** is a paper book used to record bank or building society transactions on a deposit account.
 - **Currency** is a medium of exchange for goods and services.
 - It is a written order to pay which you sign and give to another party as payment.

90. A

- Sol.
- **Radha Krishna Mathur** was appointed as the First Lieutenant Governor of Ladakh in October 2019.
 - He was also appointed as the **Chief Information Commissioner of India**.
 - **Girish Chandra Murmu** was the 1st Lieutenant Governor of Jammu and Kashmir.
 - He is the **14th Comptroller and Auditor General of India** & the external auditor of the Inter-Parliamentary Union.
 - **Anil Baijal** is the 21st Lieutenant Governor of Delhi and served as **Union Home Secretary** under the Atal Bihari Vajpayee government.
 - **Dineshwar Sharma** was an Indian police officer and He was the **chief of the Indian Intelligence Bureau**.

91. D

- Sol. • If two forces act on an object from opposite directions, then the magnitude of the net force acting on it is the Difference of the magnitudes of the two forces.
- If two forces act in the same directions on an object, the net force acting on it is the sum of the two forces.
- Force is an influence that can change the motion of an object and Its SI unit is Newton.
- It is an external agent capable of changing the state of rest or motion of a particular body.
- There are two types of forces:
- a) Non-contact forces
 - b) Contact forces

92. A

- Sol. • The maximum amount of investment permissible per senior citizen under Pradhan Mantri Vaya Vandana Yojana is Rs 10 lakh.
- Pradhan Mantri Vaya Vandana Yojana is a retirement and pension scheme.
- It is operated and managed by the Life Insurance Corporation of India.
- It is subsidised by the government and It was launched in May 2017.
- It pays out regular pension and the frequency can be monthly, quarterly or yearly.
- It is an excellent alternative to traditional bank deposits and The rate of interest is fixed at 8% to 8.3% for 10 years.

93. B

- Sol. • India and Pakistan had signed the Simla Pact under which the two countries agreed to sort out differences and disputes bilaterally.
- It was a peace treaty signed between India and Pakistan on 2 July 1972 in Shimla.
- It was signed by Zulfiqar Ali Bhutto, the President of Pakistan, and Indira Gandhi, the Prime Minister of India.
- Lucknow Pact was an agreement reached between the Indian National Congress and the Muslim League at a joint session of both parties.

- It was seen as a beacon of hope to Hindu–Muslim unity.
- Agra summit was a historic two-day summit meeting between India and Pakistan that lasted from 14–16 July 2001.

94. B

- Sol.
- Rani Rudrama Devi was a famous ruler of the Kakatiya dynasty.
 - She was one of the very few women to rule as monarchs in India and promoted a male image to do so.
 - Kakatiya dynasty was a South Indian dynasty that ruled most of the eastern Deccan region.
 - Chola Dynasty is one of the longest-ruling dynasties in world history.
 - Chera dynasty was one of the principal lineages to have ruled over southern India in early history.
 - Pandya dynasty was the second important dynasty in south India during this period.

95. D

- Sol.
- India gave shelter to Dalai Lama, the Tibetan spiritual leader in 1959.
 - The Dalai Lama's escape to India marked a crucial moment, not just in Tibetan history, but also in the evolution of the Indo-Chinese relationship.
 - 14th Dalai Lama is the current Dalai Lama, the highest spiritual leader and former head of the state of Tibet.
 - He is also the leader of the Gelug school, the newest school of Tibetan Buddhism.
 - He is the Chief Patron of the Maha Bodhi Society of India.
 - He was awarded the Nobel Peace Prize in 1989 and the US Congressional Gold Medal in 2006.

96. C

- Sol.
- Peat is low-grade brown coal that is soft with high moisture content.

- It is **thick, muddy** and **when harvested, looks like dark, earthen bricks** and It is the **forgotten fossil fuel**.
- **Anthracite** is a **hard, compact variety of coal** that has a **submetallic lustre**.
- It is the **most metamorphosed type of coal** and It has the **highest carbon content**.
- **Bituminous coal** is the **most abundant rank of coal** and It is a **type of coal containing a tar-like substance**.
- **Lignite** is a **soft, brown, combustible, sedimentary rock** formed from naturally **compressed peat**.

97. D

- Sol.
- **Ursa Major** is one of the most famous constellations that we can see during summertime in the early part of the night.
 - It is the **third largest of the 88 modern constellations**.
 - **Orion** is a prominent constellation located on the celestial equator and visible throughout the world.
 - It is **one of the most conspicuous and recognizable constellations in the night sky**.
 - **Ursa Minor** is a **constellation in the Northern Sky** and It is also known as the **Little Bear**.
 - **Cassiopeia** is **easily recognizable** due to its **distinctive 'W' shape, formed by five bright stars**.

98. B

- Sol.
- **India ranks fifth in the world as of April 2020 in terms of coal reserves**.
 - It is the **second-largest producer and consumer of coal**.
 - **Coal** is a **combustible black or brownish-black sedimentary rock** and It is **primarily used as a fuel**.
 - It is the **largest anthropogenic source of carbon dioxide contributing to climate change**.
 - **China** is the **largest consumer and importer of coal in 2020**.
 - **The United States** is the **world's largest proven coal reserves**. As of 2020.

99. A

- Sol. • **Verghese Kurien** helped Kaira District Co-operative Milk Producers' Union Ltd expand its work, ushering in the White Revolution.
- He is also known as the **Father of the White Revolution in India**.
 - He was the **Founder Chairman of the National Dairy Development Board from 1965 to 1998**.
 - **Azhar Iqbal** is a **name widely recognized and followed in the world of Urdu poetry and literature**.
 - **Baba Amte** is also known as the modern **Gandhi of India**.
 - **Sunderlal Bahuguna** was one of the early environmentalists of India.

100. B

- Sol. • 'Ace against Odds' is an autobiography by **Sania Mirza**.
- It is her **official biography chronicling her journey to becoming one of India and the world's top female tennis players**.
 - It was released at the hands of **Shah Rukh Khan** at a function in Hyderabad in July 2016.
 - **Hima Das** is the **first Indian athlete to win a gold medal in a track event at the IAAF World U20 Championships**.
 - **Dutee Chand** is the **first Indian to win a gold medal in a 100m race in a global competition**.
 - **Mary Kom** is the **only woman to win the World Amateur Boxing Championship six times**.

Mock Test Solutions in Hindi

Questions

1. Select the most appropriate option to substitute the underlined segment. If no substitution is required, select 'No substitution required'.

You will never become a good reader until reading are done with a purpose.

- A. No substitution required
 - B. when reading has
 - C. until reading will be
 - D. unless reading is

2. Select the most appropriate meaning of the given idiom.

Fly the nest

- A. Children returning home after studying abroad
 - B. To run at a very fast pace to reach home
 - C. To lose direction and not reach one's destination
 - D. Children leaving their parents' home to live on their own

3. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required.'

Many industrialists are coming onward to help migrant workers find employment in their villages and cities.

- | | |
|-----------------------------|-------------|
| A. No substitution required | B. towards |
| C. forward | D. backward |

4. Select the most appropriate one-word substitution for the given group of words. A gentle song sung to put a child to sleep

- | | |
|------------|-----------|
| A. Lullaby | B. Chorus |
| C. Prayer | D. Hymn |

5. Select the most appropriate option to substitute the underlined segment in the given sentence.

When have you been waiting for me here?

- A. How long
 - B. How far
 - C. What time
 - D. How late

6. Select the most appropriate ANTONYM of the given word.

SUBTLE

- A. crafty
 - B. harsh
 - C. faint
 - D. Slight

7. Select the INCORRECTLY spelt word.

- | | |
|-----------|------------|
| A. Manual | B. Grajual |
| C. Mutual | D. Usual |

8. Fill in the blank with the most appropriate word.

These discount coupons are _____ for only six months from the date of issue.

- A. attested
 - B. tested
 - C. valid
 - D. Solid

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

STERN

- A. strict
 - B. mild
 - C. lenient
 - D. Gentle

10. Identify the segment in the sentence which contains a grammatical error.

Why did you spent so much money on old and useless furniture?

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

PROVOKE

- | | |
|------------|------------|
| A. enrage | B. gratify |
| C. placate | D. hinder |

12. Identify the segment in the sentence which contains a grammatical error.

They went on talking while the teacher were teaching an important lesson

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Undue favour shown to one's relatives

- A. Nepotism
- B. Nationalism
- C. Despotism
- D. Narcissism

14. Fill in the blank with the most appropriate word.

My employers _____ my salary last year.

- A. rise
- B. rose
- C. raise
- D. raised

15. Fill in the blank with the most appropriate word.

I am tired _____ reminding you to clean your room.

- A. at
- B. by
- C. of
- D. to

16. Fill in the blank with the most appropriate word.

Swami Dayanand _____ the Arya Samaj.

- A. invented
- B. developed
- C. founded
- D. discovered

17. Select the most appropriate ANTONYM of the given word.

CEASE

- A. stop
- B. catch
- C. halt
- D. start

18. Identify the segment in the sentence which contains a grammatical error.

The elegance furnished drawing room indicated that the owner had good taste.

- A. drawing room indicated
- B. that the owner
- C. had good taste
- D. The elegance furnished

19. Select the INCORRECTLY spelt word.

- A. Mediocre
- B. Legible
- C. Opaque
- D. Sugestion

20. Select the most appropriate meaning of the given idiom.

Your guess is as good as mine

- A. To have the same idea as another
- B. To have no idea of the answer
- C. To play a guessing game
- D. To have a better idea than others

21. **Direction:** In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Albert soon got to learn the language of (1) _____ native people. Now, he could talk to (2) _____ about their problems. They too began to (3) _____ him for advice. Some people, (4) _____, were too shy to share their concerns. Albert eventually (5) _____ them that he was there to assist them in all matters.

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

- A. a
- B. an
- C. the
- D. One

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

- A. them
- B. you
- C. himself
- D. Us

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

- A. appear
- B. approach
- C. advance
- D. Arrange

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

- A. furthermore
- B. however
- C. therefore
- D. Moreover

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

- A. assured
- B. settled
- C. decided
- D. Confirmed

26. छह वस्तुओं अर्थात् F, G, H, J, K और L में से:

- i. H, K से दोगुना भारी है, और J, F से डेढ़ गुना भारी है।
- ii. G, J से आधा भारी है।

iii. F और J एक साथ मिलकर H से कम भारी हैं।

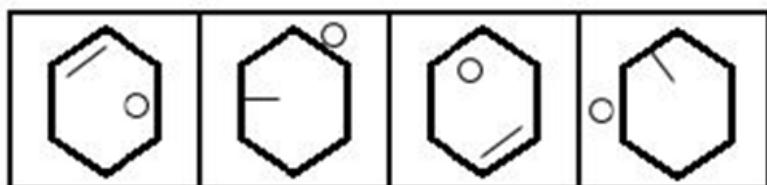
iv. J और L एक साथ मिलकर F से दोगुने भारी हैं।

यदि वस्तुओं को उनके भार के अवरोही कूरम में व्यवस्थित किया जाए, तो कौन-सी वस्तु नीचे से दूसरे स्थान पर होगी?

27. उस विकल्प का चयन करें जो तीसरी संख्या से उसी प्रकार संबंधित है जिस प्रकार दूसरी संख्या पहली संख्या से संबंधित है।

7 : 294 : : 9 : ?

28. निम्नलिखित आकृति शरूँखला में कौन सी विकल्प आकृति आगे आएगी?



- A. 

B. 

C. 

D. 

29. संख्याओं के उस समच्चय का चयन करें जो निम्नलिखित समच्चय के समान हो।

{21, 29, 20}

- A. {8, 17, 15} B. {19, 28, 17}
C. {33, 35, 12} D. {7, 26, 24}

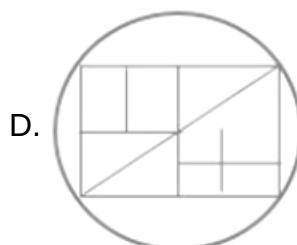
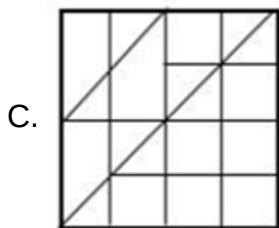
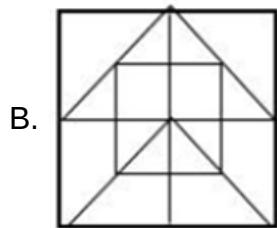
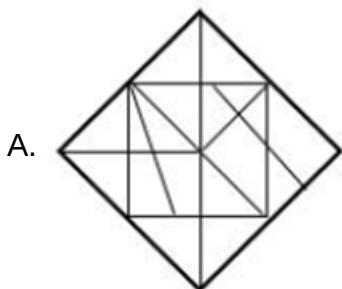
30. यदि WIDOWER को VKAOXCU के रूप में कूटबद्ध किया जाता है, तो उसी भाषा में FORTIFY को किस प्रकार कूटबद्ध किया जाएगा?

- A. EQOTJDB B. GMUSHDV

C. EOQSJCD

D. EPPTHDC

31. उस विकल्प का चयन करें जिसमें दी गई आकृति अंतर्निहित है (रोटेशन की अनुमति नहीं है)।



32. यदि POUNDAGE को NOPUEGAD के रूप में कूटबद्ध किया जाता है, तो उसी कूट भाषा में STAMPING को किस प्रकार कूटबद्ध किया जाएगा?

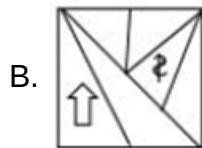
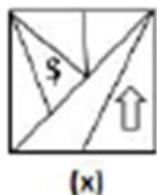
A. AMSTGNIP

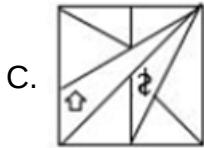
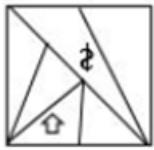
B. TSMGNPIA

C. TAMSGINP

D. AMTSGNIP

33. 'X' के रूप में अंकित आकृति के दर्पण प्रतिबिम्ब का चयन करें, जब दर्पण को आकृति की दाईं ओर स्थापित किया जाता है।





कथनः

- 1) कुछ धाराएं, नदियां हैं।

- 2) कोई नदी, झील नहीं है ।

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- । कोई धारा, झील नहीं है ।

- ॥. कछ नदियां, धाराएँ हैं ॥

- A. केवल निष्कर्ष | अनसरण करता है

- B. केवल निष्कर्ष ॥ अनसरण करता है

- C. न तो निष्कर्ष | न ही निष्कर्ष || अनसरण करता है

- D. दोनों निष्कर्ष | और || अनसरण कहते हैं

36. छह लड़के अर्थात् A, B, C, D, E और F एक कतार में खड़े हैं।

- i. B और D के मध्य दो लड़के हैं, तथा D, E के ठीक सामने हैं।

- ii. A और C, B के आसन्न हैं।

- iii. A, E के ठीक पीछे हैं। तथा C, F के ठीक सामने हैं। कौन से दो लड़के ठीक मध्य की स्थिति में हैं?

- A B और C

- B, C और D

C. A और E

D. A और B

37. यदि प्रतीका + और × को आपस में बदल दिया जाए, तो निम्न में से कौन सा समीकरण सही होगा?
- A. $9 \times 3 - 7 + 9 = 19$ B. $10 \times 5 \div 10 + 10 = 10$
C. $4 \div 8 + 6 \times 3 = 8$ D. $18 \times 3 \div 12 + 8 = 20$

38. उस विकल्प का चयन करें जो तीसरे अक्षर समूह से उसी प्रकार संबंधित है जिस प्रकार दूसरा अक्षर समूह पहले अक्षर समूह से संबंधित है।

LOTTERY : WQMTBTF : : SECULAR : ?

- A. BDRTQZK B. GTFUCUM
C. FG TUUCM D. DFTUSBM

39. आठ मित्र अर्थात् P, Q, R, S, T, U, V और W एक पंक्ति में उत्तर की ओर मुख करके बैठे हैं।

i. Q, P की ठीक दाईं ओर बैठता है, जो पंक्ति के किसी एक अंतिम छोर पर बैठा है।

ii. Q, T की बाईं ओर से तीसरे स्थान पर बैठता है।

iii. W और T के मध्य दो व्यक्ति हैं।

iv. U, S का निकटतम पड़ोसी नहीं है तथा V की ठीक बाईं ओर बैठता है।

v. V और R के मध्य तीन व्यक्ति हैं।

Q और T के मध्य कौन बैठा है?

- A. R और S B. U और V
C. R और U D. V और S

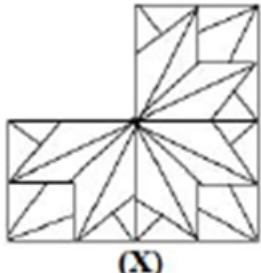
40. जिस प्रकार 'साहित्य' का संबंध 'कविता' से है उसी प्रकार 'चित्रकारी' का संबंध '_____ ' है।
- A. रंग B. चित्र
C. अभिव्यक्ति D. फ्रेम

41. दिए गए समीकरण को सही बनाने के लिए किन दो प्रतीकों को आपस में बदला जाना चाहिए?

$$10 \div 5 - 4 \times 3 + 6 = 13$$

- A. + और ÷ B. - और ×
C. ÷ और × D. + और -

42. उस विकल्प आकृति का चयन करें, जिसे 'X' के रूप में चिन्हित आकृति के रिक्त स्थान में रखे जाने पर पैटर्न पूरा हो जाएगा।



- Figure 1 consists of four separate square diagrams labeled A, B, C, and D. Each square is divided into smaller triangles by several diagonal lines. Diagram A shows a central horizontal band of triangles. Diagram B shows a central vertical band of triangles. Diagram C shows a central L-shaped pattern of triangles. Diagram D shows a central square-like pattern of triangles.

43. यदि CROWN को 68 के रूप में तथा DEPEND को 42 के रूप में कूटबद्ध किया जाता है, तो उसी कूट भाषा में IMAGERY को किस प्रकार कूटबद्ध किया जाएगा?

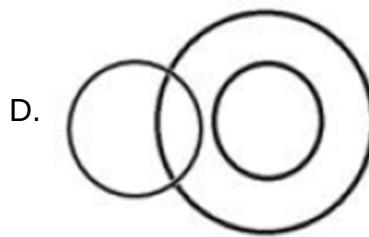
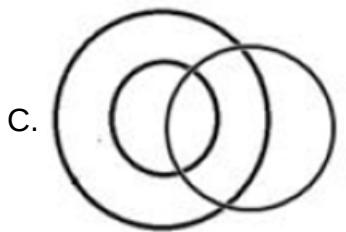
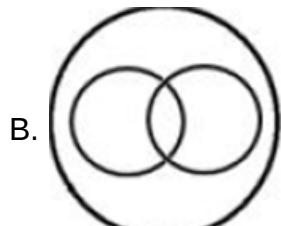
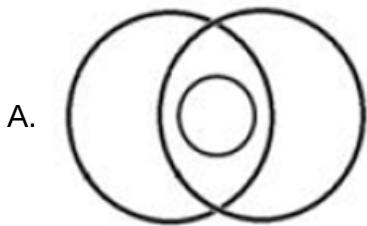
44. निम्नलिखित संख्या श्रृंखला में कौन सी संख्या प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगी?

7, 9, 13, 16, 25, 29, ?, 50

45. जिस प्रकार 'नाटक' का संबंध 'अभिनेता' से है उसी प्रकार 'संगीत कार्यक्रम' का संबंधित किससे है।

46. उस वेन आरेख का चयन करें जो निम्नलिखित वर्गों के बीच संबंध को सर्वोत्तम रूप से दर्शाता है।

महिलाएं, कार्यरत, माताएं



47. तीन कथनों के बाद तीन निष्कर्ष संख्या I, II और III दिए गए हैं। कथनों को सत्य मानते हुए, भले ही वे वास्तविक दुनिया के ज्ञान के अनुरूप न हों, निर्णय करें कि कौन सा/से निष्कर्ष तार्किक रूप से दिए गए कथनों का अनुसरण करता है/हैं।

कथनः

- 1) सभी टाउन, सिटी हैं।
 - 2) कोई सिटी, विलेज नहीं है।
 - 3) कछ सिटी, कॉर्पोरेशन हैं।

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- ।. कछ कॉर्पोरेशन. विलेज हैं ।

- ॥. कछ टाउन. कॉर्पोरेशन हैं ॥

- III. कोई कॉर्पसेशन विलेज नहीं है।

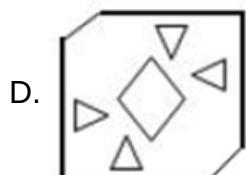
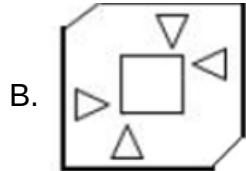
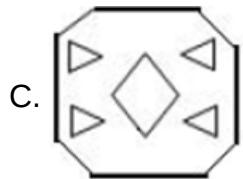
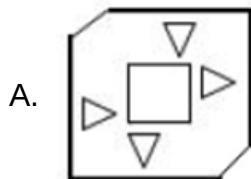
- A. केवल निष्कर्ष। अनसरण करता है

- C. या निष्कर्ष | या निष्कर्ष || अनस्रण करता है

- B. केवल निष्कर्ष | और || अनसरण करते हैं

- D. केवल निष्कर्ष ॥ अनसरण करता है

48. कागज के एक टुकड़े को मोड़ने का क्रम और जिस तरीके से मोड़े गए कागज को काटा गया है, उसे नीचे की आकृतियों में दर्शाया गया है। कागज खोले जाने पर कैसा दिखाई देगा?



49. निम्नलिखित शृंखला में कौन सा अक्षर समूह प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगा?

PMOR, RNNP, TOMN, VPLL, ?

- A. XRJK
C. VQJJ

- B. XQKJ
D. YQKJ

50. निम्नलिखित संख्या शृंखला में कौन सी संख्या प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगी?

91, 100, 94, 97, 101, 90, 112, ?

- A. 83
C. 87

- B. 123
D. 79

51. जब ब्याज अर्धवार्षिक रूप से संयोजित किया जाता है, तो 1 वर्ष के लिए 16% प्रति वर्ष की दर से 22,500 रुपये की राशि पर चक्रवृद्धि ब्याज क्या होगा?

- A. 3,744 रु.
C. 3,600 रु.

- B. 3,700 रु.
D. 36,244 रु.

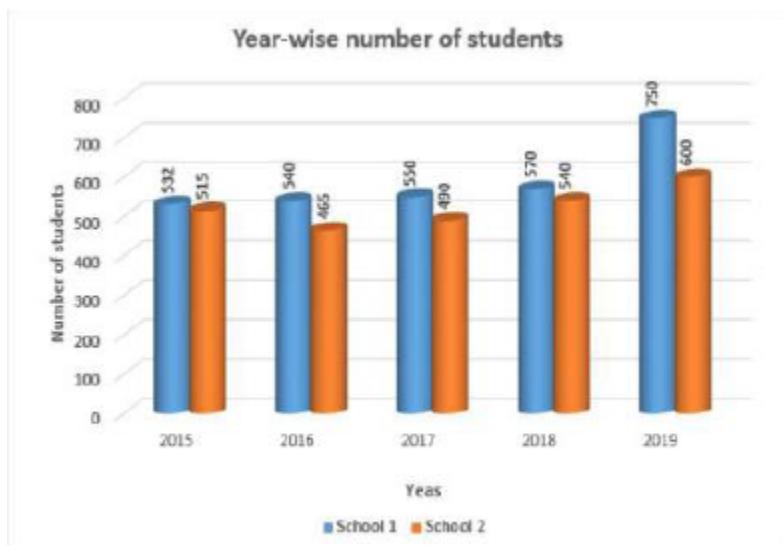
52. 12 पुरुष एक पैटिंग का काम 8 दिनों में पूरा कर सकते हैं हालांकि, 16 महिलाएं उसी पैटिंग का काम 12 दिनों में पूरा कर सकती हैं, 8 पुरुषों ने घर को पैट करना शुरू कर दिया। पैटिंग के 6 दिनों के बाद, 2 पुरुषों को 4 महिलाओं से प्रतिस्थापित किया गया। अब शेष पैटिंग के कार्य को पूरा करने में उन्हें कितने दिन लगेंगे?

- A. 4
B. 6

C. 8

D. 5

53. एक अलमारी को 15% के लाभ पर बेचा गया। यदि इसकी लागत 5% कम होती और इसे 1,470 रुपये कम में बेचा जाता, तो 10% का लाभ होता। अलमारी का क्रय मूल्य क्या है?
- A. 14,000 रु.
B. 29,400 रु.
C. 16,100 रु.
D. 2,94,000 रु.
54. 5 वर्ष की अवधि में दो विद्यालयों के वर्षवार छात्र नामांकन को निम्नलिखित बार ग्राफ में प्रस्तुत किया गया है।



किस वर्ष में दोनों विद्यालयों में नामांकन का अंतर सबसे कम है?

- A. 2015
B. 2016
C. 2018
D. 2017

55. $\frac{119 - [48 \div 6 - 7\{5 \times 12 \div 3 - (15 - 3 - 8)\}]}{24 \div 3 - 9}$ का 3 + $(52 - 8 - 4) \div 6$ को सरल कीजिए:

- A. $-\frac{111}{11}$
B. $-\frac{127}{27}$
C. $\frac{127}{43}$
D. $\frac{111}{11}$

56. एक तार 33 सेमी भुजा वाले वर्ग के आकार का है। यदि तार को एक वृत्त बनाने के लिए ढाला जाता है, तो वृत्त की तिरज्या क्या है?

($p = \frac{22}{7}$ का प्रयोग करने पर)

- A. 21 सेमी
B. 33 सेमी
C. 16.5 सेमी
D. 42 सेमी

57. 10 सेमी भुजा वाले लकड़ी के घनाकृतिक ब्लॉक से 4.2 सेमी तिरज्या का एक गोला बनाया जाता है। इस प्रक्रिया में कितनी लकड़ी बर्बाद

होती है?

($p = \frac{22}{7}$ का प्रयोग करने पर)

- | | |
|--|------------------------------|
| A. 476.2 सेमी ² | B. 689.536 सेमी ³ |
| C. 310.464 सेमी ³ | D. 523.8 सेमी ³ |
| दो धनात्मक संख्याओं का गुणनफल 1344 है और उनका अनुपात 7:12 है। इनमें से छोटी संख्या ज्ञात कीजिए? | |
| A. 16 | B. 28 |
| C. 112 | D. 48 |
| दो डीलर 3,000 रुपये के समान अंकित मूल्य पर एक वस्तु की पेशकश करते हैं। पहला डीलर 10% और 15% की क्रमिक छूट देता है। दूसरा डीलर 20% और 5% की क्रमिक छूट देता है। दोनों प्रस्तावों के अंतर्गत वस्तु के विक्रय मूल्य में अंतर ज्ञात कीजिए? | |
| A. 15 रुपये | B. 20 रुपये |
| C. 10 रुपये | D. 25 रुपये |
| एक बस स्टेशन A से स्टेशन B की ओर चलती है, जो 189 किमी की दूरी पर है। एक घंटे बाद, एक कार, जिसकी बस के साथ गति का अनुपात 3: 2 है, स्टेशन A से शुरू होती है और स्टेशन B की ओर बढ़ती है। बस की गति (किमी/घंटा में) ज्ञात कीजिए, यदि कार बस से आधा घंटा पहले स्टेशन B पर पहुँचती है। | |
| A. 41 | B. 37.8 |
| C. 42 | D. 63 |
| कविता ने एक पोशाक के लिए 800 रुपये का कपड़ा खरीदा और कढ़ाई और सिलाई पर 350 रुपये खर्च किए। यदि वह पोशाक को 20% के लाभ पर बेचती है, तो विक्रय मूल्य क्या है? | |
| A. 1,220 रु. | B. 1,380 रु. |
| C. 1,500 रु. | D. 1,310 रु. |
| 16 व्यक्तियों के संयुक्त परिवार में, सबसे बड़े और सबसे छोटे सदस्यों की आयु में 82 वर्ष का अंतर है। यदि इन दोनों को गिनती से बाहर रखा जाता है तो शेष 14 व्यक्तियों की औसत आयु 28 वर्ष है। पूरे परिवार की औसत आयु 30 वर्ष है, सबसे बड़े व्यक्ति की आयु क्या है? | |
| A. 85 वर्ष | B. 88 वर्ष |
| C. 76 वर्ष | D. 60 वर्ष |
| यदि निम्नलिखित अंकड़ों का बहुलक 11 है, तो K का मान ज्ञात कीजिए। | |
| 11, 8, 9, (2k – 1), 11, 12, 12, 18, 14, 16 | |
| A. 5 | B. 6 |
| C. 7 | D. 4 |
| 9 संख्याओं का औसत 19 है। यदि पहली चार संख्याओं का औसत 14 है, तो अंतिम 5 संख्याओं का औसत ज्ञात कीजिए? | |

A. 20

C. 25.25

B. 10

D. 23

65. दो संख्याओं में 10 का अंतर है। यदि उनका एलसीएम 120 है और एचसीएफ 10 है, तो संख्याओं का योग क्या होगा?

A. 130

B. 120

C. 70

D. 50

66. $\left(16\frac{2}{3} \div 10\right) - \left[\left(\frac{8}{3} \times \frac{5}{4}\right) \text{ का } \frac{2}{5} + \frac{16}{3} \times \frac{11}{8} - \left(\frac{1}{4} \div \frac{1}{28}\right)\right]$ का मान ज्ञात कीजिए?

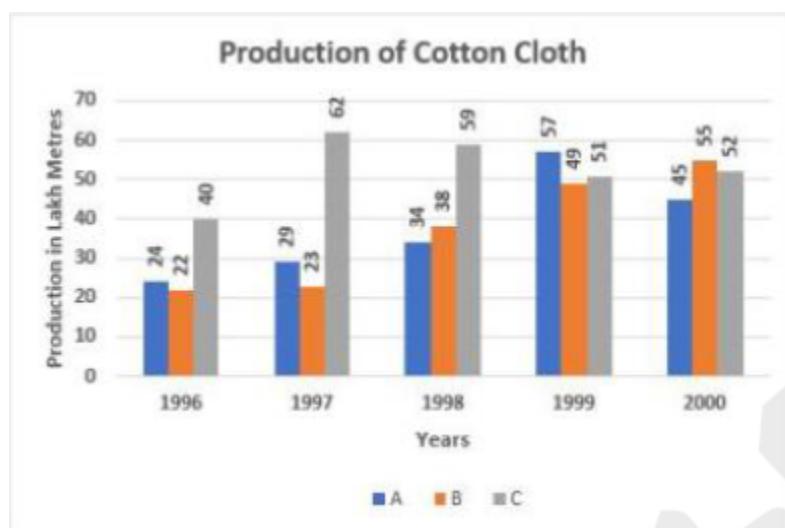
A. 1

B. 5

C. 0

D. 10

67. निम्नलिखित ग्राफ तीन कंपनियों A, B और C द्वारा वर्षों में सूती कपड़े (लाख मीटर में) का उत्पादन दर्शाता है:



किस वर्ष में कंपनी C का उत्पादन कंपनी A और कंपनी B के संयुक्त उत्पादन का 81.94% है।

(दशमलव के दो स्थानों तक सही)

A. 1996

B. 1998

C. 2000

D. 1999

68. एक बड़े कंटेनर में 3 : 2 के अनुपात में 50 लीटर का रस और पानी का मिश्रण है। इसमें 60 लीटर का रस और पानी का मिश्रण मिलाया जाता है, जिसमें रस और पानी का अनुपात 2: 1 है। इसके बाद 11 लीटर घोल को शुद्ध रस से बदल दिया जाता है। अंतिम मिश्रण में पानी और रस का अनुपात कितना है?

A. 37 : 18

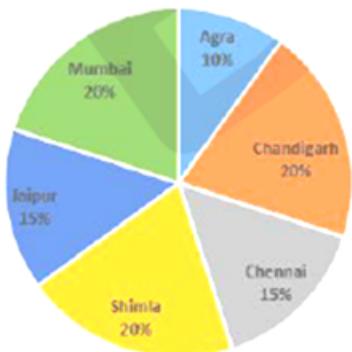
B. 29 : 81

C. 4 : 7

D. 18 : 37

69. एक वर्गाकार खेत को 52 रुपये प्रति वर्ग मीटर की दर से समतल करने की लागत 1,30,000 रुपये है। 35 रुपये प्रति मीटर की दर से

इसकी सीमा पर बाड़ लगाने की लागत क्या होगी?



जिन परिवारों ने जयपुर आने में दिलचस्पी दिखाई, उनके लिए केंद्रीय कोण क्या है?

85. पोचमपल्ली इकत (Pochampally Ikat) साड़ी और उनके पारंपरिक ज्यामितीय पैटर्न के लिए प्रसिद्ध पोशाक सामग्री _____ राज्य से संबंधित है।
A. तेलंगाना B. तमिलनाडु
C. कर्नाटक D. केरल

86. 'वल्लम काली' ('Vallam Kali') किस प्रकार का पारंपरिक खेल है?
A. मुक्केबाज़ी B. दौड़
C. नौका दौड़ D. कुश्ती

87. 'रत्वार्इ' भारत की _____ जनजातियों से संबंधित एक नृत्य रूप है।
A. मेवाती B. खासी
C. जटापु D. भील

88. 'मुया अवंडरु' ('Muya Awandru') किस भारतीय राज्य का पारंपरिक भोजन है?
A. गुजरात B. कर्नाटक
C. छत्तीसगढ़ D. त्रिपुरा

89. किसी व्यक्ति के खाते से किसी अन्य व्यक्ति को, जिसके नाम से यह जारी किया गया है, एक विशिष्ट राशि का भुगतान करने के लिए बैंक को निर्देश देने वाले कागज को क्या कहा जाता है?
A. नकद B. चेक
C. पासबुक D. करेंसी

90. निम्नलिखित में से किसे अक्टूबर 2019 में लदाख के पहले उपराज्यपाल के रूप में नियुक्त किया गया था?
A. राधा कृष्ण माथुर B. अनिल बैजल
C. दिनेश्वर शर्मा D. गिरीश चंद्र मुर्मू

91. यदि दो बल किसी वस्तु पर विपरीत दिशाओं से कार्य करते हैं, तो उस पर लगने वाले कुल बल का परिमाण दोनों बलों के परिमाण का _____ होता है।
A. गुणनफल B. योग
C. अनुपात D. अंतर

92. प्रधानमंत्री वय वंदना योजना (Pradhan Mantri Vaya Vandana Yojana) के तहत प्रति वरिष्ठ नागरिक निवेश की अधिकतम राशि कितनी है?
A. 10 लाख रुपये B. 15 लाख रुपये
C. 7 लाख रुपये D. 25 लाख रुपये

93. भारत और पाकिस्तान ने _____ पर हस्ताक्षर किए, जिसके तहत दोनों देश मतभेदों और विवादों को द्विपक्षीय रूप से सुलझाने पर सहमत हुए।
A. कलकत्ता समझौते B. शिमला समझौते

- C. लखनऊ समझौते D. आगरा समझौते

94. रानी रुद्रमा देवी (Rani Rudrama Devi) _____ वंश की एक प्रसिद्ध शासक थीं।
A. पाण्ड्य B. काकतीय
C. चोल D. चेर

95. भारत ने तिब्बती आध्यात्मिक नेता दलाई लामा को किस वर्ष आश्रय दिया था?
A. 1962 B. 1957
C. 1960 D. 1959

96. निम्न में से कौन सा निम्न श्रेणी का भूरा कोयला है जो उच्च नम सामग्री के साथ नरम होता है?
A. बिटुमेनी (Bituminous) B. एंथ्रेसाइट (Anthracite)
C. पीट (Peat) D. लिंग्नाइट (Lignite)

97. आप सबसे प्रसिद्ध नक्षत्रों में से एक को क्या कहते हैं जिसे हम गर्मियों के दौरान रात के शुरुआती भाग में देख सकते हैं?
A. शर्मिष्ठा तारामंडल (कैसिओपिया) B. ध्रुवमत्स्य तारामंडल (उर्स माइनर)
C. कालपुरुष तारामंडल (ओरियन) D. सप्तर्षि तारामंडल (उर्स मेजर)

98. कोयले के भंडार के मामले में, अप्रैल 2020 तक भारत का स्थान विश्व में _____ था।
A. नौवां B. पांचवां
C. सातवां D. तीसरा

99. निम्नलिखित में से किसने कैरा डिस्ट्रिक्ट को-ऑपरेटिव मिल्क प्रोड्यूसर्स यूनियन लिमिटेड को श्वेत क्रांति की शुरुआत करते हुए अपने काम का विस्तार करने में मदद की?
A. वर्गीज कुरियन (Verghese Kurien) B. अजहर इकबाल (Azhar Iqbal)
C. बाबा आम्टे (Baba Amte) D. सुंदरलाल बहुगुणा (Sunderlal Bahuguna)

100. 'ऐस अगेंस्ट ऑड्स' (Ace against Odds') _____ की आत्मकथा है।
A. हिमा दास B. सानिया मिर्जा
C. दृती चंद D. मैरी कॉम

Solutions

1. D

Sol. **The underlined part of the sentence is grammatically incorrect.**

- * Underlined part needs correction in conjunction and helping verb.
- * “Until” as a conjunction means up to the point in time or the event mentioned.

For example:

Let us wait **until** the rain stops.

- * “Unless” as a conjunction is used to say that something can only happen or be true in a particular situation.

For example:

I won’t get paid for time off **unless** I have a doctor’s note.

- * In the given sentence, the occurrence of “becoming good reader is not possible” in a situation when someone is “not reading it with a purpose”. This meaning of the sentence goes in consonance with the usage of conjunction “unless”.
- * As per the Subject Verb agreement, verb should be in accordance with the subject. Singular verb should be used with singular subject. Plural verb should be used with plural subject.

In the given sentence, “reading” is a subject (uncountable noun). We know that uncountable nouns take singular helping verbs but we have used plural helping verb “are”. This is wrong. As per subject verb agreement, a singular helping verb “is” should be used here.

- * Hence, “**unless reading is**” is the correct substitution.

Thus, the correct sentence will be: **You will never become a good reader unless reading is done with a purpose.**

Hence, **option D** is the correct answer.

2. D

Sol. The idiom “**fly/leave the nest**” means to move away from your parent’s home because you are an adult.

Example: The old man told me that his son had **frown/left the nest**.

Hence, **option D** is the correct answer.

3. C

Sol. **The underlined part of the sentence is grammatically incorrect.**

* Underlined part needs correction in phrasal verb.

* “Come forward” is a phrasal verb. It means to offer your help, services etc.

For example:

Police have asked witnesses of the accident to **come forward**.

Several people **came forward** with information.

* “Onward” is an adjective and it simply means continuing or moving forward.

For example:

The cavalcade swept **onward** through the gates.

* In the given sentence, the sentence is not talking about the simple forward movement. It mentions the offering of help (by the “industrialists”) for the migrant workers. Thus, it is appropriate to use “forward” in place of “onward”.

* Hence, “**forward**” is the correct substitution.

Thus, the correct sentence will be: **Many industrialists are coming forward to help migrant workers find employment in their villages and cities.**

Hence, **option C** is the correct answer.

4. A

Sol. Lullaby: a soft, gentle song sung to make a child go to sleep.

Chorus: part of a song that is sung after each verse.

Prayer: words that you say to God giving thanks or asking for help.

Hymn: a song of praise, especially one praising a God and sung by Christians.

Hence, **option A** is the correct answer.

5. A

Sol. **The underlined part of the sentence is grammatically incorrect.**

* Underlined part needs correction in adverb.

* “When” as an adverb is used to show “which/what time”.

For example:

When did you last see him?

* “How” is an adverb. It is used before adjectives or adverb to ask about the amount, degree, etc. of something.

* “How long” is used to ask about the duration/period of time.

For example:

How long have you been in your present job?

* “How far” is used to ask about the distance or extent of something.

For example:

How far is human nature determined by biology?

* In the given sentence, the sentence is not talking about the exact or specific time. So, the usage of adverb “When” is wrong.

- * Sentence is focused on “duration of waiting time”. Thus, it is appropriate to use “How long” in place of “When”.
- * Hence, “**How long**” is the correct substitution.

Thus, the correct sentence will be: **How long have you been waiting for me here?**

Hence, **option A** is the correct answer.

6. B

Sol. Let's understand the meaning of the given words:

Subtle= not easy to notice or not very strong

E.g.: There are **subtle** differences between the two versions.

Crafty = clever at getting what you want, especially by indirect or dishonest methods.

Harsh = cruel, severe and unkind.

E.g.: The minister received some **harsh** criticism.

Faint = that cannot be clearly seen, heard, or smelt.

Slight = very small in degree.

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

7. B

Sol. **Option B has incorrectly spelt word.**

“Gradual” is the correct spelling of the incorrect word “Grajual”. It means happening slowly over a long period.

The meaning of other words are:

Manual: involving use of hands or physical strength.

Mutual: shared by two or more people

Usual: normal

8. C

Sol. Let us understand the meaning of the given words:-

- * Attested = to show or prove that something is true.
- * Tested = to find out how much someone knows or what they can do by asking them questions or giving them activities to perform.
- * Valid = something that is legally or officially acceptable.
- * Solid = something that is hard.

Now let's find out the correct fit for the blank:

- * "Attested" is used in context of "to prove something". Thus, option A is incorrect.
- * "Tested" is used in context of "check someone's knowledge". Thus, option B is incorrect.
- * "Solid" is used in context of "hard or difficult". Thus, option D is incorrect.
- * "Valid" is used in context of "legally acceptable".
- * Here in the given sentence, it is used to mention that the discount coupons are legally acceptable only for six months from the date of issue.

Thus, "Valid" becomes the correct word to fill in the blank.

Thus the correct sentence will be: **These discount coupons are valid for only six months from the date of issue.**

9. A

Sol. Let's understand the meaning of the given words:

Stern= serious and often showing that you do not approve of someone/something.

E.g.: He always seemed to have the same **stern** expression on his face.

Strict = that must be obeyed exactly.

E.g.: There are **strict** guidelines on how the work is to be carried out.

Mild = not severe or strong.

Lenient = not as strict as expected when punishing someone

Gentle =calm and kind.

Hence, **option A** is the correct answer.

10. C

Sol. The sentence is grammatically incorrect, and the error lies in **option C**. The error is related to **Tense**.

* In simple past tense, we use first form of verb after "did" i.e. "did + first form of verb".

For example:

We **did** not **receive** any news during her long absence.

Why **did** you **take** on this assignment if you are so busy?

* In the given sentence, we have used second form of the verb "spent" after the helping verb "did". This is wrong.

- * Thus, first form of verb “spend” should be used in place of a second form of verb “spent”.
- * Hence, “**Why did you spend**” is the correct substitution.

Thus, the correct sentence will be: **Why did you spend so much money on old and useless furniture?**

11. A

Sol. Let's understand the meaning of the given words:

Provoke= to cause a particular reaction

E.g.: The announcement **provoked** a storm of protests across the city.

Enrage = to make someone very angry.

E.g.: He was **enraged** at her stupidity.

Gratify = to please or satisfy someone.

Placate = to make someone feel less angry about something.

Hinder = to make it difficult for someone to do something or for something to happen.

Hence, **option A** is the correct answer.

12. B

Sol. The sentence is grammatically incorrect, and the error lies in **option B**. The error is related to **Subject Verb Agreement**.

* In simple past tense, we use first form of verb after “did” i.e. “did + first form of verb”.

* As per the Subject Verb agreement, verb should be in accordance with the subject. Singular verb should be used with singular subject. Plural verb should be used with plural subject.

For example:

These **shoes have** given me blisters on my heels.

Shoes: Plural subject.

Have: Plural helping verb

* In the given sentence, we have used plural helping verb “were” for the singular subject “teacher”. This is wrong. Thus, singular helping verb “was” should be used in place of plural helping verb “were”.

* Hence, “**teacher was teaching**” is the correct substitution.

Thus, the correct sentence will be:

They went on talking while the teacher was teaching an important lesson.

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

13. A

Sol. Nepotism: giving unfair advantages to your own family if you are in power, especially by giving them jobs

Nationalism: a feeling of loving your country very much and being very proud of it.

Despotism: the rule of despot i.e. a leader with great power, especially one who uses it in a cruel way.

Narcissism: the habit of admiring yourself too much, especially your appearance.

Hence, **option A** is the correct answer.

14. D

Sol. Let us understand the meaning of the given words:-

* Rise = to come or go upwards

- * Rose = second form of verb “rise”
- * Raise = to increase the amount or level of something
- * Raised = second form of verb “raise”.

Now let's find out the correct fit for the blank:

- * “Rise” is used in context of “go upwards”. Thus, option A is incorrect.
- * “Rose” is the second form of verb “rise” and it is used in context of “going upwards”. Thus, option B is incorrect.
- * “Raise” is used in context of “increase in amount”. But it is the base form of verb. Thus, option C is incorrect.
- * "Raised" is the second form of verb and it is used in context of “increase in amount”.
- * Here in the given sentence, we have time word “last year” that shows the sentence is set in past tense. So, it is appropriate to use the second form of verb. Also, we need the contextual meaning of “increase in salary amount”.

Thus, "Raised" becomes the correct word to fill in the blank.

Thus the correct sentence will be: **My employers raised my salary last year.**

Hence, **option D** is the correct answer.

15. C

Sol. Let us understand the meaning of the given words:-

- * At = (preposition) is used to show where something/someone is or where something happens.

- * By = (preposition) is used for showing how or in what way something is done.
- * Of = (preposition) is used after adjectives to connect with something it relates to.
- * To = (preposition) is used for “towards something”

Now let's find out the correct fit for the blank:

- * “At” as a preposition is used to show “location” of something/someone. Thus, option A is incorrect.
- * “By” as a preposition is used for showing way of doing things. Thus, option B is incorrect.
- * “To” as a preposition is used for showing the direction of something. Thus, option D is incorrect.
- * "Of" as a preposition is used after some adjectives before mentioning someone/something that a feeling relates to.
- * Here in the given sentence, it is used after the adjective (tired) to show that the act of “reminding” has been done too many times. The sentence is trying to relate this act with the feeling of “tiredness”.

Thus, "Of" becomes the correct word to fill in the blank.

Thus the correct sentence will be: **I am tired of reminding you to clean your room.**

Hence, **option C** is the correct answer.

16. C

Sol. Let us understand the meaning of the given words:-

- * Invented = to produce or design something that has not existed before

- * Developed = having many industries and a complex economic system.
- * Founded = to start something such as an organisation or institution.
- * Discovered = be the first person to become aware that a particular place or thing exists.

Now let's find out the correct fit for the blank:

- * "Invented" is used in context of "designing something that has not been done before". Thus, option A is incorrect.
- * "Developed" is used in context of "affluent environment of living, plethora of industries and proper economic system". Thus, option B is incorrect.
- * "Discovered" is used in context of "becoming first to be aware of some place/thing". Thus, option D is incorrect.
- * "Founded" is used in context of "establishing an organisation".
- * Here in the given sentence, it is used to mention that "Swami Dayanand" established an organisation known as "Arya Samaj".

Thus, "Founded" becomes the correct word to fill in the blank.

The correct sentence will be: **Swami Dayanand founded the Arya Samaj.**

Hence, **option C** is the correct answer.

17. D

Sol. Let's understand the meaning of the given words:

Cease= to stop happening or existing.

E.g.: The commander ordered his troops to **cease** fire.

Stop = to no longer move

Catch = to stop and hold a moving object or person, especially in your hands.

Halt = to make someone/something stop

Start = to begin doing or using something.

E.g.: She has just **started** a new job.

Hence, **option D** is the correct answer.

18. D

Sol. The sentence is grammatically incorrect, and the error lies in **option D**. The error is related to **Adverb**.

* Adverb is used to qualify adjectives.

For example:

The guest lounges are **elegantly furnished** with cushy sofas and wide armchairs.

Here, “furnished” is an adjective (acting like a subject complement). “Elegantly” is an adverb and it is qualifying the adjective “furnished”.

* “Elegantly” as an adverb means in an attractive way and showing a good sense of style.

* In the given sentence, a noun “elegance” is used to qualify an adjective “furnished”. This is wrong.

* An adverb is used to qualify an adjective. Thus, an adverb “elegantly” should be used in place of a noun “elegance”.

* Hence, “**The elegantly furnished**” is the correct substitution.

Thus, the correct sentence will be: **The elegantly furnished drawing room indicated that the owner had good taste.**

Hence, **option D** is the correct answer.

19. D

Sol. **Option D has incorrectly spelt word.**

“Suggestion” is the correct spelling of the incorrect word “Sugestion”. It means an idea or plan that you mention for someone else to think about.

The meaning of other words are:

Mediocre: not very good; of only average standard

Legible: clear enough to read

Opaque: not clear enough to see through.

20. A

Sol. The idiom **“your guess is as good as mine”** is used to tell someone that you do not know any more about a subject than the person that you are talking to does.

Example:

Ramesh: “Who is going to win?”

Rakesh: “I have no idea. **Your guess is as good as mine.**”

Hence, **option A** is the correct answer.

21. C

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“A” as an indefinite article is used before the countable nouns (no vowel sounds) that have not been mentioned before. Thus, option A is wrong.

“An” as a definite article is used before the countable nouns (having vowel sounds) that have not been mentioned before. Thus, option B is wrong.

“One” as a pronoun is used to avoid repeating a noun, when you are referring to someone/something that has already been mentioned. Thus, option D is wrong.

“The” is a definite article. It is used to introduce the nouns for the first time.

Here in the given sentence, it is used to introduce the “native people” for the first time in the paragraph.

Hence, **option C** is the correct answer.

22. A

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“You” is a pronoun in subjective case. But we need objective case in the filler. Thus, option B is wrong.

“Himself” is a reflexive pronoun. There is no context that necessitates the usage of reflexive pronoun in the filler. Thus, option C is wrong.

“Us” is an objective case pronoun. It is used when we have “We” as a subject. Thus, option D is wrong.

“Them” is a pronoun. It is used to refer the nouns (animals, people) that are plural in nature.

Here in the given sentence, it is used to refer the “native people” mentioned in the previous sentence. “People” is a plural noun.

Hence, **option A** is the correct answer.

23. B

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“Appear” means to start to be seen. Thus, option A is wrong.

“Advance” means to move forward towards someone in order to attack or threaten someone. Thus, option C is wrong.

“Arrange” means to plan or organize something in advance. Thus, option D is wrong.

“Approach” means to speak to someone about something, especially to ask them for something.

In the given sentence, it is used to mention that the “native people” came to “Albert” for seeking advice.

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

24. B

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“Furthermore” is an adverb. It means “in addition to what has just been stated”. Thus, option A is wrong.

“Therefore” is an adverb. It is used to introduce the logical result of something that has just been mentioned. Thus, option C is wrong.

“Moreover” is an adverb. It is used to introduce some new information that adds to what you have said previously. Thus, option D is wrong.

“However” is an adverb. It is used to introduce a statement that contrasts with something that has just been said. Here in the given sentence, it is used to contrast the “some people were too shy to share their concerns” with the previous sentence i.e. “They too began to approach him for advice”.

Here, contrast lies in having two groups of people. One group was coming to him whereas the other one was shy to share their problems with him.

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

25. A

Sol. The given passage is about **“Albert’s interaction with the Natives”**.

“Settled” means to put an end to an argument or a disagreement. Thus, option B is wrong.

“Decided” means to think carefully about the different possibilities that are available and choose one of them. Thus, option C is wrong.

“Confirmed” means “to state that something is definitely true”. Thus, option D is wrong.

“Assured” means guaranteed.

In the given sentence, it is used to mention that “Albert” ultimately managed to convince the native people that he could help them out in resolving their problems.

Hence, **option A** is the correct answer.

26. D

Sol. दी गई वस्तु को दी गई जानकारी के अनुसार अवरोही क्रम में व्यवस्थित करने का क्रम होगा:

H
K
F
J
G
L

इस प्रकार, नीचे से दूसरा 'G' होगा।

इसलिए, विकल्प D सही उत्तर है।

27. A

Sol. पैटर्न इस प्रकार है:

$$7^3 - 7^2 = 343 - 49 \Rightarrow 294$$

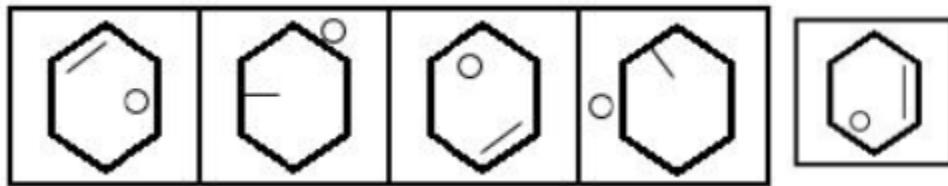
इसी प्रकार,

$$9^3 - 9^2 = 729 - 81 \Rightarrow 648$$

इसलिए, विकल्प A सही उत्तर है।

28. A

Sol. यहां वृत्त वामावर्त दिशा में गतिमान है और अपनी स्थिति को अंदर से बाहर की ओर बदल रहा है। साथ ही रेखा क्षैतिज और ऊर्ध्वाधर स्थिति के पैटर्न का अनुसरण करते हुए आगे बढ़ रही है।



इसलिए, विकल्प A सही उत्तर है।

29. A

Sol. पैटर्न इस प्रकार है:

त्रिक (21, 29, 20) पाइथागोरस त्रिक बनाते हैं।

दो सबसे छोटी संख्याएं 20 और 21 हैं। उनके वर्ग का योग है:

$$20^2 + 21^2 = 400 + 441 \Rightarrow 841; \text{ जो } 29 \text{ का वर्ग है।}$$

इसी प्रकार,

त्रिक (8, 17, 15) पाइथागोरस त्रिक बनाते हैं।

दो सबसे छोटी संख्याएं 8 और 15 हैं। उनके वर्ग का योग है:

$$8^2 + 15^2 = 64 + 225 \Rightarrow 289; \text{ जो } 17 \text{ का वर्ग है।}$$

इसलिए, विकल्प A सही उत्तर है।

30. A

Sol. पैटर्न इस प्रकार है:

W	I	D	O	W	E	R
-1	+2	-3	+0	+1	-2	+3
V	K	A	O	X	C	U

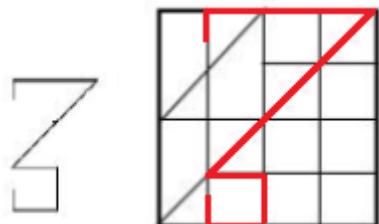
इसी प्रकार,

F	O	R	T	I	F	Y
-1	+2	-3	+0	+1	-2	+3
E	Q	O	T	J	D	B

इसलिए, विकल्प A सही उत्तर है।

31. C

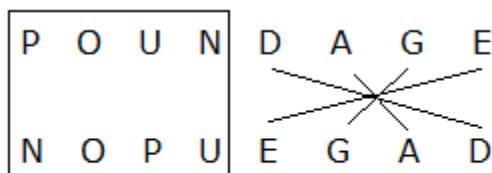
Sol. दी गई आकृति विकल्प आकृति (C) में पूर्णतः अंतर्निहित है जैसा कि नीचे दिखाया गया है:



इसलिए, विकल्प C सही उत्तर है।

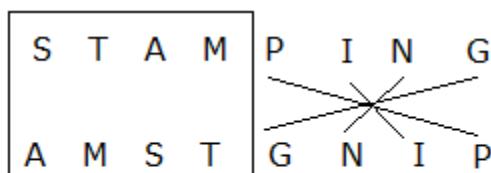
32. A

Sol. तर्कः शब्द के पहले चार अक्षर उनके स्थान के अनुसार वर्णानुक्रम में लिखे गए हैं, और अंतिम चार को नीचे दिखाए गए पैटर्न के अनुसार व्यवस्थित किया गया है:



letters arranged in alphabetical order

इसी प्रकार,

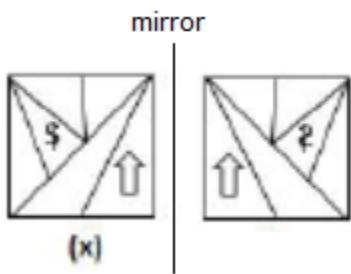


letters arranged in alphabetical order

इसलिए, विकल्प A सही उत्तर है।

33. B

Sol. सही दर्पण प्रतिबिम्ब को नीचे दर्शाया गया है:



इसलिए, विकल्प B सही उत्तर है।

34. D

Sol. यहां निम्नलिखित अक्षरों का कूट इस प्रकार दिया गया है:

G - 15

R - 4

U - 27

D - 18

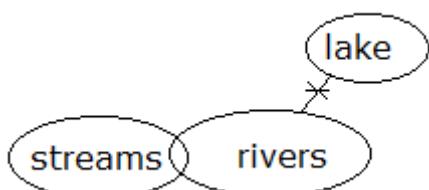
G - 15

E - 11

इसलिए, विकल्प D सही उत्तर है।

35. B

Sol. न्यूनतम संभावित वेन-आरेख होगा:



निष्कर्षः

I. कोई धारा, झील नहीं है – यह एक निश्चित मामला नहीं है, इसलिए गलत है।

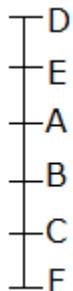
II. कुछ नदियां, धाराएँ हैं – यह एक निश्चित मामला है, इसलिए सही है।

इस प्रकार, केवल II अनुसरण करता है।

इसलिए, विकल्प B सही उत्तर है।

36. D

Sol. दी गई जानकारी के अनुसार व्यवस्था दर्शाई जाएगी:



स्पष्ट रूप से, A और B ठीक मध्य स्थिति में हैं।

इसलिए, विकल्प D सही उत्तर है।

37. D

Sol. दिए गए सभी विकल्पों की जांच करने के बाद हम पाते हैं कि विकल्प (D) में दिया गया समीकरण सही होगा जब प्रतीकों का आपस में बदल दिया जाता है:

$$18 + 3 \div 12 \times 8 = 20$$

बाईं ओर से हल करने पर, हमें प्राप्त होता है;

$$\rightarrow 18 + 2 = 20$$

इस प्रकार, बाईं ओर से = दाईं ओर से

इसलिए, विकल्प D सही उत्तर है।

38. C

Sol. पैटर्न इस प्रकार है:

12	15	20	20	5	18	25
L	O	T	T	E	R	Y
+1	+2	+3		+1	+2	+3
W	Q	M	T	B	T	F
23	17	13	20	28	20	6

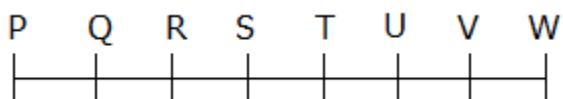
इसी प्रकार,

19	5	3	21	12	1	18
S	E	C	U	L	A	R
+1	+2	+3		+1	+2	+3
F	G	T	U	U	C	M
6	7	20	21	21	3	13

इसलिए, विकल्प C सही उत्तर है।

39. A

Sol. दी गई जानकारी के अनुसार व्यवस्था इस प्रकार होगी:



इस प्रकार, यह स्पष्ट है कि R और S, Q और T के मध्य में बैठते हैं।

इसलिए, विकल्प A सही उत्तर है।

40. B

Sol. कविता एक प्रकार का साहित्य है जिस प्रकार चित्र एक चित्रकारी है जिसमें किसी वस्तु या व्यक्ति का वर्णन होता है।

इसलिए, विकल्प B सही उत्तर है।

41. A

Sol. सभी विकल्पों की जांच करके हम उन सही प्रतीकों की जांच कर सकते हैं जो समीकरण को सही बनाते हैं:

$$10 + 5 - 4 \times 3 \div 6 = 13$$

बाईं ओर से हल करने पर,

$$15 - 2 = 13$$

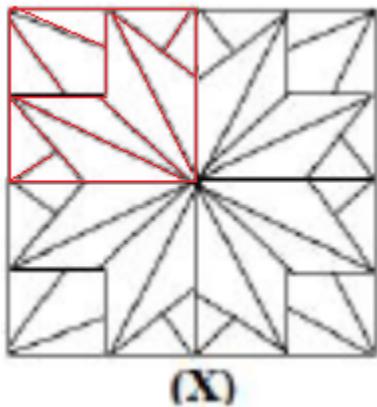
तो, बाईं ओर से = दाईं ओर से

चूंकि हमें सही उत्तर प्राप्त हो गया है इसलिए आगे के विकल्पों की जांच करने की कोई आवश्यकता नहीं है।

इसलिए, विकल्प A सही उत्तर है।

42. C

Sol. विकल्प आकृति (C) नीचे दर्शाए अनुसार दिए गए पैटर्न को पूरा करेगी:



इसलिए, विकल्प C सही उत्तर है।

43. C

Sol. पैटर्न इस प्रकार है: (शब्द में अक्षरों का योग) – (शब्द में अक्षरों की संख्या)

$$\text{CROWN} - > 3+18+15+23+14 = 73 - 5 = 68$$

$$\text{DEPEND} - > 4+5+16+5+14+4 = 48 - 6 = 42$$

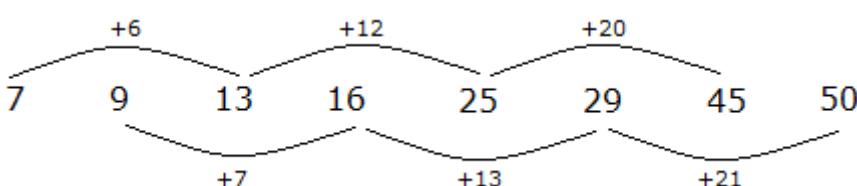
इसी प्रकार,

$$\text{IMAGERY} - > 9+13+1+7+5+18+25 = 78 - 7 = 71$$

इसलिए, विकल्प C सही उत्तर है।

44. D

Sol. पैटर्न इस प्रकार है:



इसलिए, विकल्प D सही उत्तर है।

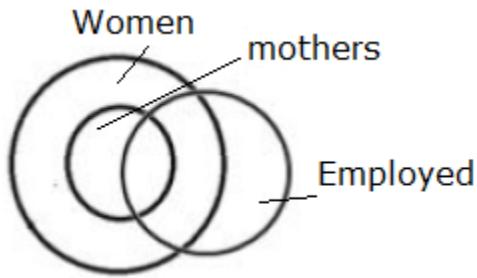
45. C

Sol. एक नाटक में एक अभिनेता को उसी तरह पेश किया जाता है जिस प्रकार एक संगीतकार संगीत कार्यक्रमों में करता है।

इसलिए, विकल्प C सही उत्तर है।

46. C

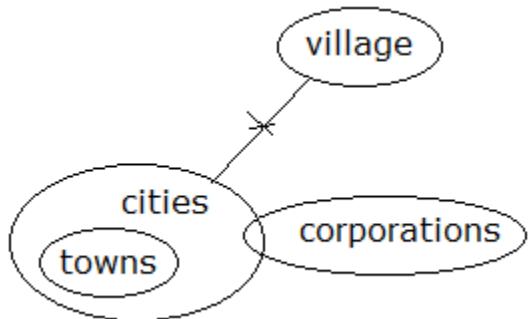
Sol. दिए गए वर्गों को विकल्प (C) में दिए गए वेन-आरेख द्वारा सर्वोत्तम रूप से दर्शाया गया है;



इसलिए, विकल्प C सही उत्तर है।

47. C

Sol. न्यूनतम संभावित वेन-आरेख होगा:



निष्कर्षः

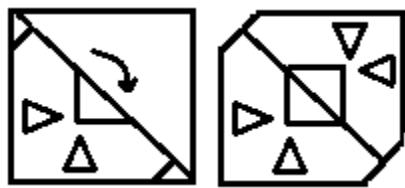
- I. कुछ कॉर्पोरेशन, विलेज हैं – यह एक निश्चित मामला नहीं है, इसलिए गलत है।
- II. कुछ टाउन, कॉर्पोरेशन हैं - यह एक निश्चित मामला नहीं है, इसलिए गलत है।
- III. कोई कॉर्पोरेशन, विलेज नहीं है - यह एक निश्चित मामला नहीं है, इसलिए गलत है।

यहां निष्कर्ष I और III दोनों का एक पूरक युग्म है, अतः या तो I या II सही है।

इसलिए, विकल्प C सही उत्तर है।

48. B

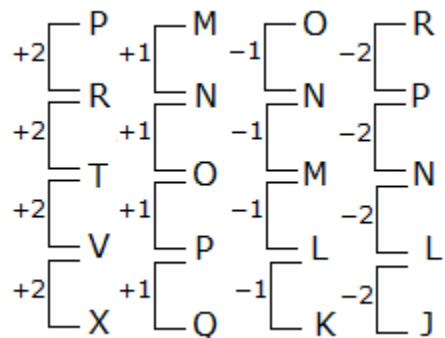
Sol. जब कागज की दी गई शीट को खोल दिया जाता है तो यह नीचे दिखाए अनुसार दिखाई देगा:



इसलिए, विकल्प B सही उत्तर है।

49. B

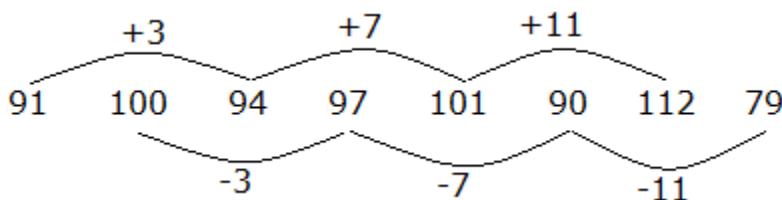
Sol. पैटर्न इस प्रकार है:



इसलिए, विकल्प B सही उत्तर है।

50. D

Sol. पैटर्न इस प्रकार है:



इसलिए, विकल्प D सही उत्तर है।

51. A

Sol. दिया है:

मूलधन = 22500 रुपये, ब्याज की दर = 16% प्रति वर्ष या 8% प्रति अवधि (16/2) और समय = 1 वर्ष या 2 अवधि (1×2)

$$\text{अब, चक्रवृद्धि ब्याज} = \text{मूलधन} \times \left(1 + \frac{r}{100}\right)^t - \text{मूलधन}$$

$$= 22500 \times \left(1 + \frac{8}{100}\right)^2 - 22500$$

$$= 22500 \times (1.08)^2 - 22500$$

$$= 22500 \times 1.1664 - 22500$$

$$= 26244 - 22500 = 3744 \text{ रु.}$$

अतः, विकल्प A सही उत्तर है।

52. B

Sol. माना कुल पैटिंग का काम $192x$ इकाई है।

$$\text{तब पुरुष की दक्षता} = \frac{\text{कुल कार्य}}{\text{लिया गया समय}} = \frac{192x}{12 \times 8} = 2x \text{ इकाई/दिन}$$

$$\text{तथा महिलाओं की दक्षता} = \frac{\text{कुल कार्य}}{\text{लिया गया समय}} = \frac{192x}{16 \times 12} = x \text{ इकाई/दिन}$$

$$\text{तथा, } 8 \text{ पुरुषों द्वारा } 6 \text{ दिनों में किया गया कार्य} = 8 \times (2x) \times 6 = 96x \text{ इकाई}$$

$$\text{शेष कार्य} = 192x - 96x = 96x \text{ इकाई}$$

$$\text{अब, } 2 \text{ पुरुषों को } 4 \text{ महिलाओं द्वारा प्रतिस्थापित करने के बाद } 6 \text{ पुरुषों और } 4 \text{ महिलाओं की दक्षता} = 6 \times (2x) + 4 \times (x) = 12x + 4x \\ = 16x \text{ इकाई/दिन}$$

$$\text{शेष कार्य को पूरा करने में उनके द्वारा लिया गया समय} = \frac{\text{शेष कार्य}}{\text{कार्यक्षमता}} = 96x/16x = 6 \text{ दिन}$$

अतः, विकल्प B सही उत्तर है।

53. A

Sol. माना अलमारी का क्रय मूल्य x रुपये है।

तब, 15% के लाभ की स्थिति में विक्रय मूल्य

$$= \text{क्रय मूल्य} + \text{लाभ} = (x) + (x) \times 15\% = x + 0.15x = 1.15x \text{ रु.}$$

अब, नई स्थिति में,

नया क्रय मूल्य = $(x) - (x) \times 5\% = x - 0.05x = 0.95x$ रु.

और विक्रय मूल्य = $1.15x$ रु. – 1470 रु.

$$\text{A क्रय + लाभ} = 1.15x - 1470$$

$$\text{A } 0.95x + (0.95x) \times 10\% = 1.15x - 1470$$

$$\text{A } 0.95x + 0.095x = 1.15x - 1470$$

$$\text{A } 1.15x - 1.045x = 1470$$

$$\text{A } 0.105x = 1470$$

$$\text{A } x = 1470/0.105 = 14000$$

अतः अलमारी का क्रय मूल्य 14000 रुपये है।

अतः विकल्प A सही उत्तर है।

54. A

Sol. 2015 में दो विद्यालयों में नामांकन का अंतर = $532 - 515 = 17$

2016 में दो विद्यालयों में नामांकन का अंतर = $540 - 465 = 75$

2017 में दो विद्यालयों में नामांकन का अंतर = $550 - 490 = 60$

2018 में दो विद्यालयों में नामांकन का अंतर = $570 - 540 = 30$

इसलिए दोनों विद्यालयों में नामांकन का अंतर 2015 में सबसे कम है।

अतः विकल्प A सही उत्तर है।

55. A

$$\frac{119 - [48 \div 6 - 7\{5 \times 12 \div 3 - (15 - \overline{3-8})\}]}{24 \div 3 - 9 \text{ का } 3 + (52 - \overline{8-4}) \div 6}$$

$$= \frac{119 - [48 \div 6 - 7\{5 \times 12 \div 3 - (15 - (-5))\}]}{24 \div 3 - 9 \text{ का } 3 + (52 - 4) \div 6}$$

$$= \frac{119 - [48 \div 6 - 7\{5 \times 12 \div 3 - (15 + 5)\}]}{24 \div 3 - 9 \text{ का } 3 + 48 \div 6}$$

$$= \frac{119 - [48 \div 6 - 7\{5 \times 4 - 20\}]}{8 - 27 + 8}$$

$$= \frac{119 - [48 \div 6 - 7\{20 - 20\}]}{16 - 27}$$

$$= \frac{119 - [48 \div 6 - 7 \times 0]}{16 - 27}$$

$$= \frac{119 - [8 - 0]}{-11}$$

$$= \frac{119 - 8}{-11} = -\frac{111}{11}$$

अतः, विकल्प A सही उत्तर है।

56. A

Sol. दिया है:

एक तार 33 सेमी भुजा वाले वर्ग के आकार का है।

अतः तार की लंबाई (अर्थात् वर्ग का परिमाप)

$$= 4 \times \text{भुजा} = 4 \times 33 = 132 \text{ सेमी}$$

यह वृत्त की परिधि भी है।

इसलिए, $2pr = 132$ सेमी

$$\tilde{A} r = \frac{132}{2\pi}$$

$$\tilde{A} r = \frac{132 \times 7}{2 \times 22}$$

$$\tilde{A} r = 21 \text{ सेमी}$$

अतः, विकल्प A सही उत्तर है

57. B

Sol. दिया है:

10 सेमी भुजा वाले लकड़ी के घनाकृतिक ब्लॉक से 4.2 सेमी त्रिरेखा का एक गोला बनाया गया है।

अब, घनाकार गुटके का आयतन = भुजा³ = 10³ = 1000 सेमी³

$$\text{तथा गोले का आयतन} = \frac{4}{3} \pi r^3 = \frac{4}{3} \times \frac{22}{7} \times (4.2)^3$$

$$= 310.464 \text{ सेमी}^3$$

प्रक्रिया में बेकार लकड़ी = घनाकृतिक ब्लॉक का आयतन - गोले का आयतन

$$= 1000 - 310.464 = 689.536 \text{ सेमी}^3$$

अतः, विकल्प B सही उत्तर है

58. B

Sol. माना कि छोटी संख्या 7x है।

$$\text{तब, बड़ी संख्या} = (7x) \times \frac{12}{7} = 12x$$

अब दिया है:

संख्याओं का गुणनफल = 1344

$$\therefore (7x) \times (12x) = 1344$$

$$\therefore 84x^2 = 1344$$

$$\therefore x^2 = 1344/84 = 16$$

$$\therefore x = \sqrt{16} = 4$$

इसलिए, छोटी संख्या = 7 × 4 = 28

अतः, विकल्प B सही उत्तर है

59. A

Sol. दिया है:

अंकित मूल्य = 3000 रुपये

पहले डीलर का विक्रय मूल्य (10% और 15% की क्रमिक छूट प्रदान करने पर):

10% की पहली छूट के बाद कीमत = $3000 - 3000 \times 10\% = 3000 - 300 = 2700$ रुपये

15% की छूट के बाद अंतिम मूल्य = $2700 - 2700 \times 15\% = 2700 - 405 = 2295$ रुपये

दूसरे डीलर का विक्रय मूल्य (20% और 5% की क्रमिक छूट प्रदान करने पर)

20% की पहली छूट के बाद का मूल्य = $3000 - 3000 \times 20\% = 3000 - 600 = 2400$ रुपये

5% की छूट के बाद अंतिम मूल्य = $2400 - 2400 \times 5\% = 2400 - 120 = 2280$ रुपये

दोनों के विक्रय मूल्य में अंतर = $2295 - 2280 = 15$ रुपये

अतः, विकल्प A सही उत्तर है

60. C

Sol. दिया है:

एक बस स्टेशन A से स्टेशन B की ओर चलती है, तब दूरी = 189 किमी

माना कि बस की गति $2x$ किमी/घंटा है और बस द्वारा लिया गया समय 't' घंटे है

तब, कार की गति = $(2x) \times \frac{3}{2} = 3x$ किमी/घंटा

तथा लिया गया समय = $t - 1 - 0.5 = (t - 1.5)$ घंटे

चूंकि दोनों ही स्थितियों में दूरी समान है (गति × समय)

$(2x) \times t = (3x) \times (t - 1.5)$

$\therefore 2t = 3t - 4.5$

$$\tilde{A} \cdot 3t - 2t = 4.5$$

$$\tilde{A} t = 4.5$$

अतः, बस की गति = दूरी/समय = $189/4.5 = 42$ किमी/घंटा

अतः, विकल्प C सही उत्तर है

61. B

Sol. दिया है:

कविता द्वारा खरीदे गए कपड़े का मूल्य = 800 रु.

कढ़ाई और सिलाई की लागत = 350 रु.

इसलिए, कुल लागत = $800 + 350 = 1150$ रु.

विक्रय मूल्य (20% लाभ होने पर) = लागत + लाभ = $1150 + 1150 \times 20\%$

= $1150 + 230 = 1380$ रुपये

अतः, विकल्प B सही उत्तर है

62. A

Sol. दिया है:

सबसे बड़े और सबसे छोटे सदस्य की आयु का अंतर = 82 वर्ष

पूरे परिवार की औसत आयु = 30 वर्ष

सबसे बड़े और सबसे छोटे सदस्यों को छोड़कर 14 व्यक्तियों की औसत आयु = 28 वर्ष

अब, पूरे परिवार की कुल आयु = $16 \times 30 = 480$ वर्ष

तथा सबसे बड़े और सबसे कम उम्र के सदस्यों को छोड़कर 14 व्यक्तियों की कुल आयु = 14×28

= 392 वर्ष

सबसे बड़े और सबसे कम उम्र के सदस्य की कुल आयु = $480 - 392 = 88$ वर्ष

$$\text{सबसे बड़े व्यक्ति की उम्र} = \frac{88+82}{2} = 170/2 = 85 \text{ वर्ष}$$

अतः सबसे बड़े व्यक्ति की आयु 85 वर्ष है।

अतः विकल्प A सही उत्तर है।

63. B

Sol. दिया है:

$$\text{आंकड़ा} - 11, 8, 9, (2k - 1), 11, 12, 12, 18, 14, 16$$

तथा आंकड़ों का बहुलक 11 है।

उपरोक्त आंकड़ों में, चूंकि 11 और 12 को 2 बार दोहराया जाता है, इसलिए '11' के बहुलक बनाने के लिए हमें एक और 11 की आवश्यकता होती है।

इसलिए, $(2k - 1)$ 11 के बराबर है

$$2k - 1 = 11$$

$$\therefore 2k = 11 + 1 = 12$$

$$\therefore k = 12/2 = 6$$

इसलिए k का मान 6 है।

अतः, विकल्प B सही उत्तर है।

64. D

Sol. दिया है:

$$9 \text{ संख्याओं का औसत} = 19$$

$$\text{पहली चार संख्याओं का औसत} = 14$$

$$\text{सभी } 9 \text{ संख्याओं का योग} = 9 \times 19 = 171$$

$$\text{पहली चार संख्याओं का योग} = 4 \times 14 = 56$$

$$\text{अंतिम } 5 \text{ संख्याओं का योग} = \text{सभी } 9 \text{ संख्याओं का योग} - \text{पहली चार संख्याओं का योग} = 171 - 56 = 115$$

इसलिए अंतिम 5 संख्याओं का औसत = $115/5 = 23$

अतः, विकल्प D सही उत्तर है

65. C

Sol. माना संख्याओं में से एक x है।

तब, दूसरी संख्या = $x - 10$

अब, हम जानते हैं कि

$\text{LCM} \times \text{HCF} = \text{संख्याओं का गुणन}$

$$\therefore 120 \times 10 = (x) \times (x - 10)$$

$$\therefore 1200 = x^2 - 10x$$

$$\therefore x^2 - 40x + 30x - 1200 = 0$$

$$\therefore x(x - 40) + 30(x - 40) = 0$$

$$\therefore (x - 40)(x + 30) = 0$$

$$\therefore x - 40 = 0 \text{ or } x + 30 = 0$$

$$\therefore x = 40 \text{ or } x = -30 \text{ (संभव नहीं)}$$

इसलिए, $x = 40$

तथा दूसरी संख्या = $40 - 10 = 30$

संख्याओं का योग = $40 + 30 = 70$

अतः, विकल्प C सही उत्तर है

66. C

Sol. $\left(16\frac{2}{3} \div 10\right) - \left[\left(\frac{8}{3} \times \frac{5}{4}\right) \text{का } \frac{2}{5} + \frac{16}{3} \times \frac{11}{8} - \left(\frac{1}{4} \div \frac{1}{28}\right)\right]$

$$\begin{aligned}&= \left(\frac{50}{3} \div 10\right) - \left[\left(\frac{10}{3}\right) \text{का } \frac{2}{5} + \frac{16}{3} \times \frac{11}{8} - \left(\frac{1}{4} \times 28\right)\right] \\&= \left(\frac{5}{3}\right) - \left[\frac{4}{3} + \frac{16}{3} \times \frac{11}{8} - 7\right] \\&= \left(\frac{5}{3}\right) - \left[\frac{4}{3} + \frac{22}{3} - 7\right] \\&= \left(\frac{5}{3}\right) - \left[\frac{4 + 22 - 21}{3}\right] \\&= \left(\frac{5}{3}\right) - \left[\frac{5}{3}\right] \\&= 0\end{aligned}$$

अतः, विकल्प C सही उत्तर है

67. B

Sol. 1996 में कंपनी A और कंपनी B का संयुक्त उत्पादन = $24 + 22 = 46$

1998 में कंपनी A और कंपनी B का संयुक्त उत्पादन = $34 + 38 = 72$

1999 में कंपनी A और कंपनी B का संयुक्त उत्पादन = $57 + 49 = 106$

2000 में कंपनी A और कंपनी B का संयुक्त उत्पादन = $45 + 55 = 100$

कंपनी C के उत्पादन का 1996 में कंपनी A और कंपनी B के संयुक्त उत्पादन से अनुपात = $\frac{40}{46} \times 100 = 86.96\%$

कंपनी C के उत्पादन का 1998 में कंपनी A और कंपनी B के संयुक्त उत्पादन से अनुपात = $\frac{59}{72} \times 100 = 81.94\%$

कंपनी C के उत्पादन का 1999 में कंपनी A और कंपनी B के संयुक्त उत्पादन से अनुपात = $\frac{51}{106} \times 100 = 48.11\%$

कंपनी C के उत्पादन का 2000 में कंपनी A और कंपनी B के संयुक्त उत्पादन से अनुपात = $\frac{52}{100} \times 100 = 52\%$

इसलिए, 1998 में कंपनी C का उत्पादन कंपनी A और कंपनी B के संयुक्त उत्पादन का 81.94% है।

अतः विकल्प B सही उत्तर है।

68. D

Sol. कंटेनर में रस की प्रारंभिक मात्रा = $50 \times \frac{3}{5} = 30$ लीटर

कंटेनर में पानी की प्रारंभिक मात्रा = $50 - 30 = 20$ लीटर

अब, दूसरे मिश्रण में रस की मात्रा (कंटेनर में मिलाई गई)

$$= 60 \times \frac{2}{3} = 40 \text{ लीटर}$$

और दूसरे मिश्रण में पानी की मात्रा (कंटेनर में मिलाई गई)

$$= 60 - 40 = 20 \text{ लीटर}$$

कंटेनर में रस की मात्रा (दूसरा मिश्रण मिलाने के बाद)

$$= 40 + 30 = 70 \text{ लीटर}$$

बर्तन में पानी की मात्रा (दूसरा मिश्रण मिलाने के बाद)

$$= 20 + 20 = 40 \text{ लीटर}$$

रस और पानी का नया अनुपात = $70 : 40 = 7 : 4$

अब, 11 लीटर घोल को रस से बदल दिया जाता है, इसलिए रस की मात्रा में वृद्धि = कुल प्रतिस्थापित मात्रा - बदले गए घोल में रस की मात्रा

$$= 11 - 11 \times \frac{7}{11} = 11 - 7 = 4 \text{ लीटर}$$

अंतिम मिश्रण में रस की कुल मात्रा = $70 + 4 = 74$ लीटर

और अंतिम मिश्रण में पानी की मात्रा = $110 - 74 = 36$ लीटर

इसलिए, अभीष्ट अनुपात = $36 : 74 = 18 : 37$

अतः, विकल्प D सही उत्तर है

69. B

Sol. दिया है:

एक वर्गाकार खेत को 52 रुपये प्रति वर्ग मीटर की दर से समतल करने की लागत = 1,30,000 रु.

इसलिए, उसका क्षेत्रफल = $130000/52 = 2500 \text{ मी}^2$

$$\tilde{A} \text{ भुजा}^2 = 2500$$

$$\tilde{A} \text{ भुजा} = \sqrt{2500} = 50 \text{ मी}$$

अब, वर्गाकार मैदान का परिमाप = $4 \times 50 = 200 \text{ मी}$

इसलिए, इसकी सीमा पर बाड़ लगाने की लागत = $200 \times 35 = 7000 \text{ रु.}$

अतः, विकल्प B सही उत्तर है

70. B

Sol. दिया है:

भौतिकी, रसायन विज्ञान और जीव विज्ञान के बीएससी पाठ्यक्रम के लिए एक कॉलेज में सीटों का अनुपात = 7 : 5 : 8

माना कॉलेज में सीटों की कुल संख्या $40x$ है।

$$\text{तब, भौतिकी के लिए सीटें} = (40x) \times \frac{7}{20} = 14x$$

$$\text{और रसायन विज्ञान के लिए सीटें} = (40x) \times \frac{5}{20} = 10x$$

$$\text{और जीव विज्ञान के लिए सीटें} = (40x) \times \frac{8}{20} = 16x$$

$$\text{अब भौतिकी के लिए बढ़ी सीटें} = 14x + (14x) \times 50\% = 14x + 7x = 21x,$$

$$\text{रसायन विज्ञान के लिए बढ़ी सीटें} = 10x + (10x) \times 40\% = 10x + 4x = 14x$$

$$\text{और जीव विज्ञान की बढ़ी सीटें} = 16x + (16x) \times 25\% = 16x + 4x = 20x$$

$$\text{इसलिए, नया अनुपात} = 21x : 14x : 20x = 21 : 14 : 20$$

अतः, विकल्प B सही उत्तर है

71. C

Sol. उन परिवारों की संख्या जिन्होंने जयपुर आने में रुचि दिखाई = $80 \times 15\% = 12$

जयपुर आने में रुचि दिखाने वाले परिवारों के लिए केंद्रीय कोण = $360^\circ \times \frac{12}{80} = 54^\circ$

अतः, विकल्प C सही उत्तर है

72. B

Sol. माना प्रत्येक मामले में निवेश की गई राशि x रुपये है।

तब, पहली स्थिति में ब्याज = मूलधन × दर × समय = (x) × 9% × 2 = 0.18x

तथा दूसरी स्थिति में ब्याज = मूलधन × दर × समय = (x) × 10% × 4 = 0.40x

कुल ब्याज = 1740 रुपये (दिया है)

$$0.18x + 0.40x = 1740$$

$$0.58x = 1740$$

$$x = 1740/0.58 = 3000$$

इसलिए, प्रत्येक मामले में निवेश की गई राशि 3000 रुपये है

अतः विकल्प B सही उत्तर है।

73. C

Sol. माना B की दक्षता x इकाई/दिन है।

तब, कुल कार्य = दक्षता × समय = (x) × 13 = 13x इकाई

तथा A की दक्षता = (x) + (x) × 30% = x + 0.3x = 1.3x इकाई/दिन

A द्वारा कार्य समाप्त करने में लिया गया समय

$$= \text{कुल कार्य}/\text{दक्षता} = 13x/1.3x = 10 \text{ दिन}$$

अतः, विकल्प C सही उत्तर है

74. A

Sol. चूंकि टाइपिस्ट दोनों तरफ से प्रत्येक में 2 सेमी का अंतर छोड़ता है,

$$\text{कुल टाइपिंग क्षेत्र} = (32 - 2 \times 2) \times (20 - 2 \times 2) = 28 \times 16 = 448 \text{ cm}^2$$

अब, यदि वह चारों ओर से प्रत्येक में 1 सेमी का अंतर छोड़ता है,

$$\text{तब, कुल टाइपिंग क्षेत्र} = (32 - 1 \times 2) \times (20 - 1 \times 2) = 30 \times 18 = 540 \text{ cm}^2$$

$$\text{टाइपिंग के लिए उपलब्ध क्षेत्र में वृद्धि} = \frac{540 - 448}{448} \times 100 = \frac{92}{448} \times 100 = 20.54\%$$

अतः, विकल्प A सही उत्तर है

75. B

Sol. दिया है:

अमित 15 मिनट में 40 किमी/घंटा की गति से अपनी बाइक पर एक निश्चित दूरी तय करता है।

$$\text{अतः कुल दूरी} = \text{चाल} \times \text{समय} = 40 \times \frac{15}{60} = 10 \text{ किमी}$$

12 मिनट में उपरोक्त दूरी तय करने के लिए आवश्यक गति

$$= \frac{\text{दूरी}}{\text{समय}} = \frac{10}{\frac{12}{60}} = 10 \times \frac{60}{12} = 50 \text{ किमी/घंटा}$$

अतः, विकल्प B सही उत्तर है

76. D

Sol. • पुर्तगालियों ने भारत में पहला यूरोपीय किला सन् 1503 में बनवाया।

• पुर्तगाली वायसराय अफोंसो डी अल्बुकर्क (Afonso de Albuquerque) ने भारत में पहला यूरोपीय किला बनाया।

• पुर्तगाली सबसे पहले मसालों की तलाश में भारत आए और भारत आने वाले पहले पुर्तगाली वास्को डी गामा थे।

• पहला पुर्तगाली कारखाना भारत के कालीकट में 1500 ई. में स्थापित किया गया था।

• पुर्तगाल इवेरियन प्रायद्वीप पर सबसे पुराना लगातार मौजूदा राष्ट्र-राज्य है और यूरोप में सबसे पुराना है।

77. B

Sol. • सिक्किम 2016 में भारत का पहला पूर्ण जैविक खेती करने वाला राज्य बना।

• लगभग 75,000 हेक्टेयर कृषि भूमि को स्थायी खेती में परिवर्तित करके यह पूरी तरह से जैविक खेती वाला राज्य बन गया।

• इसने जैविक खेती को अपनाया और 2003 में रासायनिक उर्वरकों के आयात पर प्रतिबंध लगा दिया।

- यह भारतीय राज्यों में सबसे कम आबादी वाला और दूसरा सबसे छोटा है।
- यह भारत में इलायची उत्पादन का सबसे बड़ा हिस्सा है और मसाले का दूसरा सबसे बड़ा उत्पादक है।
- गोवा क्षेत्रफल के हिसाब से भारत का सबसे छोटा और जनसंख्या के हिसाब से चौथा सबसे छोटा राज्य है व सभी भारतीय राज्यों में इसकी प्रतिव्यक्ति जीडीपी सबसे अधिक है।

78. D

Sol. • विश्व के दक्षिण मध्य एशिया के हिस्से में सितंबर 2020 तक जनसंख्या का घनत्व सबसे अधिक है।

- दक्षिण मध्य एशिया के देश अफगानिस्तान, बांग्लादेश, भूटान, भारत, किर्गिस्तान, कजाकिस्तान, मालदीव, नेपाल, पाकिस्तान, श्रीलंका, ताजिकिस्तान, तुर्कमेनिस्तान और उजबेकिस्तान हैं।
- 1,252 लोग, प्रतिवर्ग किलोमीटर के साथ बड़े देशों में बांग्लादेश सबसे घनी आबादी वाला है।
- पूर्वी अफ्रीका, अफ्रीकी महाद्वीप का पूर्वी उपक्षेत्र है।
- उत्तरी अमेरिका उत्तरी गोलार्ध में एक महाद्वीप है और लगभग पूरी तरह से पश्चिमी गोलार्ध के भीतर है।

79. A

Sol. • आँख का पारदर्शी अग्र भाग कॉर्निया (Cornea) है।

- यह आँख के सामने की स्पष्ट वाह्य परत है और यह प्रकाश को फोकस करने में मदद करती है ताकि आप स्पष्ट रूप से देख सकें।
- रेटिना आपकी आँख के पिछले हिस्से में ऊतक की एक परत होती है जो प्रकाश को महसूस करती है और आपके मस्तिष्क को छवि भेजती है।
- यह अधिकांश कशेरुकियों और कुछ मोलस्क की आँख के ऊतक की अंतर्रतम, प्रकाश-संवेदनशील परत है।
- पुतली एक ब्लैक होल है जो आँख के परितारिका के केंद्र में स्थित होता है और प्रकाश को रेटिना से टकराने देता है।
- आइरिस पुतली को खोलकर और बंद करके आँख में प्रवेश करने वाले प्रकाश की मात्रा को नियंत्रित करता है।

80. D

Sol. • नवंबर 2017 में संगीत में योगदान के लिए चेन्नई को यूनेस्को किरणेटिव सिटीज नेटवर्क में शामिल किया गया।

- यह यूनेस्को किरणेटिव सिटीज की सूची में तीसरा भारतीय शहर है।
- यूनेस्को किरणेटिव सिटीज नेटवर्क 2004 में बनाया गया था।

● यह उन शहरों के साथ और उनके बीच सहयोग को बढ़ावा देने के लिए बनाया गया था, जिन्होंने सतत शहरी विकास के लिए एक रणनीतिक कारक के रूप में रचनात्मकता की पहचान की ।

● नेटवर्क में सात रचनात्मक क्षेत्र शामिल हैं:

a) फ़िल्म

b) संगीत

c) डिजाइन

d) पाक शैली (गैस्ट्रोनॉमी)

e) साहित्य

f) शिल्प और लोक कला

g) मीडिया कला

● यूनेस्को का पूर्णरूप यूनाइटेड नेशंस एजुकेशनल साइंटिफिक एंड कल्चरल आर्गेनाइजेशन है ।

81. D

Sol. ● नाइट्रोजन एक आवश्यक तत्व है जिसका उपयोग पौधों में प्रोटीन के संश्लेषण में किया जाता है ।

● इसे पहली बार 1772 में स्कॉटिश चिकित्सक डैनियल रदरफोर्ड द्वारा खोजा और पृथक किया गया था ।

● यह पृथकी के वायुमंडल में सबसे प्रचुर मात्रा में असंबद्ध तत्व है और मानव शरीर में चौथा सबसे प्रचुर तत्व है ।

● क्लोरीन दूसरा सबसे हल्का और दूसरा सबसे प्रचुर मात्रा में हैलोजन है ।

● यह एक अत्यंत प्रतिक्रियाशील तत्व और मजबूत ऑक्सीकरण एजेंट है ।

● कैल्शियम मानव शरीर में सबसे प्रचुर मात्रा में खनिज है ।

● सोडियम पृथकी की पपड़ी में छठा सबसे प्रचुर तत्व है और इसे पहली बार 1807 में हम्फ्री डेवी (Humphry Davy) द्वारा पृथक किया गया था ।

82. C

Sol. ● चालुक्य राजवंश ने वातापी में शासन किया जो कि आधुनिक भारतीय राज्य कर्नाटक में है ।

- यह एक शास्त्रीय भारतीय राजवंश था जिसने दक्षिणी और मध्य भारत के बड़े हिस्से पर शासन किया ।
- यह दक्षिण भारत के इतिहास में एक महत्वपूर्ण मील का पत्थर और कर्नाटक के इतिहास में एक स्वर्ण युग का प्रतीक है ।
- इसकी स्थापना पुलकेशिन (Pulakeshin) I ने 543 में की थी ।
- कर्नाटक क्षेत्रफल के हिसाब से छठा सबसे बड़ा भारतीय राज्य है और जनसंख्या के हिसाब से आठवां सबसे बड़ा राज्य है ।
- यह अपने मनोहर हिल स्टेशनों, शानदार झारनों और तीर्थ केंद्रों के लिए भी प्रसिद्ध है ।

83. A

Sol. • रामनाथन कृष्णन 1954 में विंबलडन में लड़कों का एकल खिताब जीतने वाले पहले एशियाई खिलाड़ी बने ।

- वह लगभग दो दशकों तक भारत के नंबर 1 बनेंगे और बने रहेंगे ।
- रमेश कृष्णन 2007 में भारत के डेविस कप कप्तान बने ।
- विंबलडन विश्व का सबसे पुराना टेनिस टूर्नामेंट है और इसे व्यापक रूप से सबसे प्रतिष्ठित माना जाता है ।
- यह आउटडोर ग्रास कोर्ट पर खेला जाता है और यह चार ग्रैंड स्लैम टेनिस टूर्नामेंटों में से एक है ।
- विंबलडन चैंपियनशिप 1954, 21 जून से 3 जुलाई 1954 तक आयोजित की गई थी ।

84. A

Sol. • एलिसिन लहसुन और प्याज में मौजूद मुख्य सक्रिय सल्फर युक्त यौगिकों में से एक है ।

- यह सल्फोऑक्साइड और वानस्पतिक एंटी-फंगल एजेंट है और इसकी एक जीवाणुरोधी एजेंट के रूप में भूमिका है ।
- यह सल्फेनिक एसिड का थायोस्टर है और इसे एलिल थायोसलिफनेट के रूप में भी जाना जाता है ।
- इसे पहली बार 1944 में कैवलिटो और बेली द्वारा अलग और वर्णित किया गया था ।
- सेलुलोस हरे पौधों की प्राथमिक कोशिका भित्ति का एक महत्वपूर्ण संरचनात्मक घटक है ।
- यह पृथकी पर सबसे प्रचुर मात्रा में कार्बनिक बहुलक है ।
- फिनोल निर्मित रसायन और प्राकृतिक पदार्थ दोनों हैं ।

85. A

Sol. • पोचमपल्ली इकत (Pochampally Ikat) साड़ी और उनके पारंपरिक ज्यामितीय पैटर्न के लिए प्रसिद्ध पोशाक सामग्री तेलंगाना राज्य से संबंधित है ।

- यह राज्य के सबसे पुराने रंगे हुए पिरंटों में से एक है और यह दक्षिण भारत की सबसे प्रसिद्ध साड़ियों में से एक है।
- इसे 2005 में बौद्धिक संपदा अधिकार संरक्षण या भौगोलिक संकेत का दर्जा प्राप्त हुआ।
- तेलंगाना अपनी अद्भुत कांस्य कास्टिंग के लिए विश्वभर में प्रसिद्ध है जिसमें अविश्वसनीय मूर्तियों को बनाने के लिए उत्कृष्ट कौशल की आवश्यकता होती है।
- तमिलनाडु अपने मंदिरों, त्योहारों और कला के उत्सव के लिए प्रसिद्ध है।
- केरल अपने मंत्रमुग्ध कर देने वाले बैकवाटर, इकोटूरिज्म पहल, प्राकृतिक सुंदरता, अद्भुत समुद्र तटों और मुंह में पानी लाने वाले व्यंजनों के लिए जाना जाता है।

86. C

Sol. • वल्लम काली (Vallam Kali) एक तरह की पारंपरिक नौका दौड़ है।

- यह मुख्य रूप से वसंत ऋतु में फसल उत्सव ओणम के मौसम के दौरान आयोजित किया जाता है।
- यह दक्षिण भारत में सबसे सुरम्य और पारंपरिक त्योहारों में से एक है।
- यह डोंगी रेसिंग का एक रूप है और पैडल वाले युद्ध के डिब्बे का उपयोग करता है।
- इसे स्नेक बोट रेस (snake boat race) के नाम से भी जाना जाता है और यह एक प्रमुख पर्यटक आकर्षण है।
- यह अपने उत्साह, पोस्टकार्ड-परफेक्ट क्षणों और भव्यता के लिए विश्व प्रसिद्ध है।

87. A

Sol. • 'रतवाई' भारत की मेवाती जनजातियों से संबंधित एक नृत्य रूप है।

- मेवाती उत्तर-पश्चिमी भारत की एक प्रमुख मुस्लिम राजपूत जनजाति है।
- खासी सबसे शुरुआती अप्रवासी जनजातियाँ थीं जो म्यांमार से आई थीं और वे बेंत की चटाई, तिपाई और टोकरियाँ बुनने के लिए प्रसिद्ध हैं।
- 2001 की जनगणना के अनुसार जटापु ओडिशा की एक छोटी जनजाति है, जिसकी संख्या मुश्किल से 14 हजार है।
- उन्हें जटापु डोरा (Jatapu Dora) और सामंथुलु (Samanthulu) के नाम से भी जाना जाता है।
- भीलों को भारत की सबसे पुरानी जनजातियों में से एक और सबसे बड़े जनजातीय समूहों में से एक माना जाता है।

88. D

Sol. • मुया अवंडरू ('Muya Awandru') तिरपुरा का पारंपरिक भोजन है।

- यह एक बांस की गोली है जिसे उबाला जाता है, चावल के आटे पर आधारित ग्रेवी को किण्वित मछली, हरी मिर्च काली मिर्च और अजवायन के (parsley) साथ पकाया जाता है।
- तिरपुरा तीसरा सबसे छोटा राज्य है और भारत में सबसे अधिक साक्षर राज्यों में से एक है।
- इसमें किसी भी भारतीय राज्य में पाई जाने वाली प्राइमेट प्रजातियों की संख्या सबसे अधिक है।
- यह अपने हस्तशिल्प, विशेष रूप से हाथ से बुने हुए सूती कपड़े, लकड़ी की नक्काशी और बांस उत्पादों के लिए जाना जाता है।
- यह अपनी खेती, चाय के बागानों, सुंदर उद्यान, टॉय टरेन और फलों के बगीचों के लिए प्रसिद्ध है।

89. B

Sol. • किसी व्यक्ति के खाते से किसी अन्य व्यक्ति को जिसके नाम से यह जारी किया गया है, एक विशिष्ट राशि का भुगतान करने के लिए बैंक को निर्देश देने वाले कागज को चेक के रूप में जाना जाता है।

- चेक एक प्रकार का विनिमय बिल है जिसे बड़ी मात्रा में धन ले जाने की आवश्यकता के बिना भुगतान करने के तरीके के रूप में विकसित किया गया था।
- नकद मुद्रा के भौतिक रूप में धन जैसे बैंकनोट और सिक्के होते हैं।
- पासबुक एक कागजी किताब है जिसका उपयोग जमा खाते पर बैंक या बिलिंग सोसायटी लेनदेन को रिकॉर्ड करने के लिए किया जाता है।
- मुद्रा वस्तुओं और सेवाओं के विनिमय का एक माध्यम है।
- यह भुगतान करने का एक लिखित आदेश है जिस पर आप हस्ताक्षर करते हैं और भुगतान के रूप में किसी अन्य पार्टी को देते हैं।

90. A

Sol. • राधा कृष्ण माथुर को अक्टूबर 2019 में लद्दाख के पहले उपराज्यपाल के रूप में नियुक्त किया गया था।

- उन्हें भारत के मुख्य सूचना आयुक्त के रूप में भी नियुक्त किया गया था।
- गिरीश चंद्र मुर्मू जम्मू-कश्मीर के पहले लेफिटनेंट गवर्नर थे।
- वह भारत के 14वें नियंत्रक और महालेखा परीक्षक और अंतर-संसदीय संघ के वाह्य लेखा परीक्षक हैं।

- अनिल बैजल दिल्ली के 21 वें लेफिटनेंट उपराज्यपाल हैं और अटल बिहारी वाजपेयी सरकार के तहत केंद्रीय गृह सचिव के रूप में कार्य किया।
- दिनेश्वर शर्मा एक भारतीय पुलिस अधिकारी थे और वे भारतीय खुफिया ब्यूरो के प्रमुख थे।

91. D

Sol. ● यदि दो बल किसी वस्तु पर विपरीत दिशाओं से कार्य करते हैं तो उस पर लगने वाले कुल बल का परिमाण दोनों बलों के परिमाण का अंतर होता है।

- यदि किसी वस्तु पर दो बल एक ही दिशा में कार्य करते हैं तो उस पर लगने वाला कुल बल दोनों बलों का योग होता है।
- बल एक प्रभाव है जो किसी वस्तु की गति को बदल सकता है और इसकी SI इकाई न्यूटन है।
- यह एक वाह्य एजेंट होता है जो किसी विशेष निकाय के अवशेष या गति की स्थिति को बदलने में सक्षम है।
- बल दो प्रकार के होते हैं:

a) गैर संपर्क बल

b) संपर्क बल

92. A

Sol. ● प्रधानमंत्री वय वंदना योजना (Pradhan Mantri Vaya Vandana Yojana) के तहत प्रति वरिष्ठ नागरिक निवेश की अधिकतम राशि 10 लाख रुपये है।

- प्रधानमंत्री वय वंदना योजना (Pradhan Mantri Vaya Vandana Yojana) एक सेवानिवृत्ति और पेंशन योजना है।
- यह भारतीय जीवन बीमा निगम द्वारा संचालित और प्रबंधित किया जाता है।
- इसे सरकार द्वारा सब्सिडी दी जाती है और इसे मई 2017 में लॉन्च किया गया था।
- यह नियमित पेंशन का भुगतान करता है और आवृत्ति मासिक, त्रैमासिक या वार्षिक हो सकती है।
- यह पारंपरिक बैंक जमाओं का एक उत्कृष्ट विकल्प है और 10 वर्षों के लिए ब्याज दर 8% से 8.3% तय की गई है।

93. B

Sol. ● भारत और पाकिस्तान ने शिमला समझौते पर हस्ताक्षर किए, जिसके तहत दोनों देश मतभेदों और विवादों को द्विपक्षीय रूप से सुलझाने पर सहमत हुए थे।

- यह भारत और पाकिस्तान के बीच 2 जुलाई 1972 को शिमला में हस्ताक्षरित एक शांति संधि थी।

● इस पर पाकिस्तान के राष्ट्रपति जुलिफकार अली भुट्टो (Zulfiqar Ali Bhutto) और भारत की प्रधानमंत्री इंदिरा गांधी (Indira Gandhi) ने हस्ताक्षर किए थे।

● लखनऊ समझौता भारतीय राष्ट्रीय कांग्रेस और मुस्लिम लीग के बीच दोनों पक्षों के संयुक्त सत्र में हुआ एक समझौता था।

● इसे हिंदू-मुस्लिम एकता के लिए आशा की किरण के रूप में देखा गया।

● आगरा शिखर सम्मेलन भारत और पाकिस्तान के बीच एक ऐतिहासिक दो दिवसीय शिखर बैठक थी जो 14-16 जुलाई 2001 तक चली।

94. B

Sol. ● रानी रुद्रमा देवी (Rani Rudrama Devi) काकतीय वंश की एक प्रसिद्ध शासक थीं।

● वह भारत में सम्राट के रूप में शासन करने वाली बहुत कम महिलाओं में से एक थीं और उन्होंने ऐसा करने के लिए पुरुषवादीछवि को बढ़ावा दिया।

● काकतीय वंश एक दक्षिण भारतीय राजवंश था जिसने पूर्वी दक्षकन क्षेत्र के अधिकांश भाग पर शासन किया।

● चोल राजवंश विश्व इतिहास में सबसे लंबे समय तक शासन करने वाले राजवंशों में से एक है।

● चेर राजवंश प्रारंभिक इतिहास में दक्षिणी भारत पर शासन करने वाले प्रमुख वंशों में से एक था।

● इस काल में पांड्य वंश दक्षिण भारत का दूसरा महत्वपूर्ण राजवंश था।

95. D

Sol. ● भारत ने 1959 में तिब्बती आध्यात्मिक नेता दलाई लामा (Dalai Lama) को आश्रय दिया।

● दलाई लामा का भारत में पलायन न केवल तिब्बती इतिहास में बल्कि भारत-चीनी संबंधों के विकास में भी एक महत्वपूर्ण क्षण था।

● 14वें दलाई लामा वर्तमान दलाई लामा हैं, जो सर्वोच्च आध्यात्मिक नेता और तिब्बत राज्य के पूर्व प्रमुख हैं।

● वह गेलुग स्कूल (Gelug school) के नेता भी हैं, जो तिब्बती बौद्ध धर्म का सबसे नया स्कूल है।

● वह भारत की महाबोधि सोसाइटी (Maha Bodhi Society) के मुख्य संरक्षक हैं।

● उन्हें 1989 में नोबेल शांति पुरस्कार और 2006 में यूएस कांग्रेसनल गोल्ड मेडल (US Congressional Gold Medal) से सम्मानित किया गया था।

96. C

Sol. ● पीट (Peat) निम्न श्रेणी का भूरा कोयला है जो उच्च नमी सामग्री के साथ नरम होता है।

- यह मोटा, मैला होता है और जब इसे काटा जाता है, तो यह अंधेरे, मिट्टी की ईंटों जैसा दिखता है व यह विस्मृत जीवाशम ईंधन है।
- एन्थ्रेसाइट (Anthracite) कोयले की एक कठोर, सघन किस्म है जिसमें सबमेटेलिक चमक होती है।
- यह कोयले का सबसे रूपांतरित प्रकार है और इसमें कार्बन की मात्रा सबसे अधिक होती है।
- बिटुमेनी (Bituminous) कोयला कोयले की सबसे प्रचुर शरेणी है और यह एक प्रकार का कोयला है जिसमें टार (tar) जैसा पदार्थ होता है। ...
- लिग्नाइट (Lignite) एक नरम, भूरी, ज्वलनशील, तलछटी चट्टान है जो प्राकृतिक रूप से संकुचित पीट से बनती है।

97. D

- Sol. • धरुवमत्स्य तारामंडल (उर्स मेजर) सबसे प्रसिद्ध नक्षत्रों में से एक है जिसे हम गर्भियों के दौरान रात के शुरुआती भाग में देख सकते हैं।
- यह 88 आधुनिक नक्षत्रों में से तीसरा सबसे बड़ा है।
 - कालपुरुष तारामंडल (ओरियन) आकाशीय भूमध्य रेखा पर स्थित एक प्रमुख नक्षत्र है और यह पूरे विश्व में दिखाई देता है।
 - यह रात के आकाश में सबसे विशिष्ट और पहचानने योग्य नक्षत्रों में से एक है।

- धरुवमत्स्य तारामंडल (उर्स माइनर) उत्तरी आकाश में एक नक्षत्र है और इसे नन्हा भालू (Little Bear) भी कहा जाता है।
- शर्मिष्ठा तारामंडल (कैसिओपिया) अपने विशिष्ट 'W' आकार के कारण आसानी से पहचाना जा सकता है, जो पांच चमकीले सितारों द्वारा निर्मित होता है।

98. B

- Sol. • भारत, अप्रैल 2020 तक कोयले के भंडार के मामले में विश्व में पांचवें स्थान पर है।

- यह कोयले का दूसरा सबसे बड़ा उत्पादक और उपभोक्ता है।
- कोयला एक ज्वलनशील काला या भूरा-काला अवसादी चट्टान है और इसका मुख्य रूप से ईंधन के रूप में उपयोग किया जाता है।
- यह जलवायु परिवर्तन में योगदान देने वाले कार्बन डाइऑक्साइड का सबसे बड़ा मानवजनित स्रोत है।
- चीन 2020 में कोयले का सबसे बड़ा उपभोक्ता और आयातक देश है।
- संयुक्त राज्य अमेरिका 2020 तक विश्व का सबसे बड़ा सिद्ध कोयला भंडार है।

99. A

- Sol. • वर्गेज कुरियन (Verghese Kurien) ने केरा डिस्ट्रिक्ट को-ऑपरेटिव मिल्क प्रोड्यूसर्स यूनियन लिमिटेड को श्वेत क्रांति की

शुरुआत करते हुए अपने काम का विस्तार करने में मदद की ।

- उन्हें भारत में श्वेत क्रांति के जनक के रूप में भी जाना जाता है ।
- वह 1965 से 1998 तक राष्ट्रीय डेयरी विकास बोर्ड के संस्थापक अध्यक्ष रहे ।
- अजहर इकबाल (Azhar Iqbal) एक ऐसा नाम है जो उर्दू शायरी और साहित्य की विश्व में व्यापक रूप से पहचाना जाता है और उसका अनुसरण किया जाता है ।
- बाबा आमटे (Baba Amte) को भारत के आधुनिक गांधी के रूप में भी जाना जाता है ।
- सुंदरलाल बहुगुणा (Sunderlal Bahuguna) भारत के शुरुआती पर्यावरणविदों में से एक थे ।

100. B

Sol. • 'एस अगेंस्ट ऑड्स' (**Ace against Odds**) सानिया मिर्जा की आत्मकथा है ।

- यह उनकी आधिकारिक जीवनी है जो भारत और विश्व की शीर्ष महिला टेनिस खिलाड़ियों में से एक बनने की उनकी यात्रा का वर्णन करती है ।
- इसे जुलाई 2016 में हैदराबाद में एक समारोह में शाहरुख खान के हाथों रिलीज़ किया गया था ।
- हिमा दास (Hima Das) IAAF वर्ल्ड U20 चैंपियनशिप में ट्रैक इवेंट में गोल्ड मेडल जीतने वाली पहली भारतीय एथलीट हैं ।
- दुती चंद (Dutee Chand) एक वैश्विक प्रतियोगिता में 100 मीटर दौड़ में स्वर्ण पदक जीतने वाली पहली भारतीय हैं ।
- मैरी कॉम (Mary Kom) छह बार वर्ल्ड एमेच्योर बॉक्सिंग चैंपियनशिप (World Amateur Boxing Championship) जीतने वाली एकमात्र महिला हैं ।