



SSC MTS 2020 Tier I : 18

Oct S3

Mock Test Questions & Solutions

Mock Test Solutions in English

Questions

1. **Direction:** The given sentence contains a grammatical error. Identify the segment that contains the error.

Gopi's father asked him not stay out late again.

- A. Gopi's father
 - B. not stay out
 - C. late again
 - D. asked him

2. **Direction:** Select the most appropriate synonym of the given word.

CONCLUDE

- A. End
 - B. Include
 - C. Open
 - D. Exclude

3. **Direction:** The given sentence contains a grammatical error. Identify the segment that contains the error.

"You can meet me always you like," our teacher told us.

4. **Direction:** Select the most appropriate word which means the same as the group of words given.

Something that is given to counter the effect of poison

- A. Antidote
 - B. Antibiotic
 - C. Medicine
 - D. Artichoke

- 5. Direction:** Select the most appropriate option to fill in the blank.

Let us go to the museum, _____?

6. **Direction:** Select the most appropriate option to substitute the underlined segment in the given sentence.

Don't forget post these letters.

- C. to posting D. Posted

7. **Direction:** Select the most appropriate ANTONYM of the given word.

AGREE
A. Distance B. Support
C. Question D. Oppose

8. **Direction:** 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'.

If the world was to end tomorrow, why would you spend your day today?
A. when would B. how would
C. what would D. No substitution required

9. **Direction:** The given sentence contains a grammatical error. Identify the segment that contains the error.

The man whose sitting at the corner table is my uncle.
A. whose sitting B. is my uncle
C. at the corner table D. The man

10. Choose the correctly spelt word.

A. Sandwish B. Sandwich
C. Sandwitch D. Standwich

11. **Direction:** Select the most appropriate option to fill in the blank.

I had to go to the ATM _____ some money.
A. by getting B. to get
C. to getting D. for to get

12. **Direction:** 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'.

There is many food for all of us.
A. is enough food B. No substitution required
C. are much food D. are plenty foods

13. **Direction:** Select the most appropriate meaning of the given idiom.

Carry on

- A. Continue doing something
- B. Throw something away
- C. Take someone or something away
- D. Put something into action

14. **Direction:** Select the most appropriate ANTONYM of the given word.

EAGER

- A. Different
- B. Easier
- C. Indifferent
- D. Loveable

15. **Direction:** Select the most appropriate meaning of the given idiom.

Fall for

- A. To be supported by
- B. To be tricked or fooled by
- C. To invite someone
- D. To fall down and injure oneself

16. Choose the correctly spelt word.

- A. Disendant
- B. Decendent
- C. Desendent
- D. Descendant

17. **Direction:** Select the most appropriate word to fill in the blank.

The workers who returned _____ during the lockdown did not go back to work.

- A. hope
- B. house
- C. office
- D. Home

18. **Direction:** Select the most appropriate word which means the same as the group of words given.

Breathe hard and with difficulty

- A. Pant
- B. Cough
- C. Strangle
- D. Choke

19. **Direction:** Select the most appropriate synonym of the given word.

OBSTRUCTION

- A. Guesswork
- B. Construction
- C. Destruction
- D. Hindrance

20. **Direction:** Select the most appropriate word to fill in the blank.

Until recently, the village women _____ water from common wells or hand pumps, but now they have water taps.

- | | |
|-----------|------------|
| A. sold | B. fetched |
| C. bought | D. Threw |

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.

According to a news report, a former captain of the Indian wheelchair cricket team has now been forced to (1) _____ as a labourer to support his family. In the context of the Covid-19 pandemic and lockdown, the children he used to (2) _____ earlier have stopped coming to him for a few months. Their parents said there was no money to pay for their (3) _____. Before the lockdown, he was giving coaching to wheelchair-bound children who were (4) _____ in playing cricket. The coach has now returned to his village where his old parents live. He said to the reporter who interviewed him, "These are difficult times, but I know I will be able to (5) _____ them," with a smile on his face.

Select the most appropriate option to fill in blank no. 1

- | | |
|--------------|----------|
| A. supervise | B. work |
| C. employ | D. Serve |

22. Select the most appropriate option to fill in blank no. 2

- | | |
|----------|----------|
| A. coach | B. learn |
| C. teach | D. study |

23. Select the most appropriate option to fill in blank no. 3

- | | |
|---------------|-------------|
| A. employment | B. training |
| C. schooling | D. studies |

24. Select the most appropriate option to fill in blank no. 4

25. Select the most appropriate option to fill in blank no. 5

- A. lose
 - B. overcome
 - C. excel
 - D. Win

Fuel : Diesel :: Utensils : ?

- | | |
|------------|----------|
| A. Spoon | B. Iron |
| C. Kitchen | D. Steel |

28. Which of the following letter-clusters will replace the question mark (?) in the given series?

LOK, JMI, HKG, FIE, ?

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

$$9 : 90 :: 15 : ?$$

30. Among seven friends A, B, C, D, E, F and G, B is taller than only four other friends. C is taller than D . A is taller than F. E is taller than one person only that is G, who is the shortest in height among all friends. B is taller than A. Who is the tallest among all the friends?

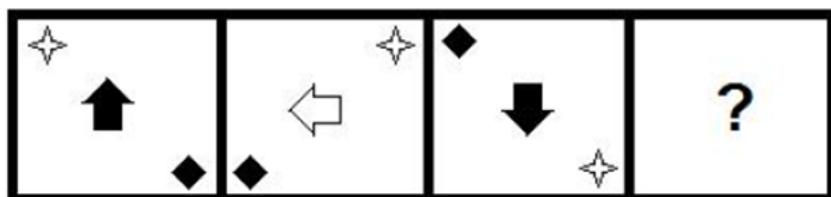
31. Study the given pattern carefully and select the number that can replace the question mark (?) in it.

15	14	220
20	18	290
11	40	?

32. 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.

TEMPO : TPOME :: DOLPHIN : ?

33. Select the option that will replace the question mark(?) in the following figure series.



- The figure consists of four panels labeled A, B, C, and D. Each panel features a black square frame containing a white diamond-shaped target. Inside the diamond, there is a small black starburst symbol. In each panel, a thick black arrow points from the center of the starburst towards the top-right corner of the diamond.

 - A. The arrow points right.
 - B. The arrow points right.
 - C. The arrow points left.
 - D. The arrow points right.

34. Select the option in which the given figure (X) is embedded as its part (rotation is not allowed).



A



C.



B



D.



35. If A denotes ‘addition’, B denotes ‘multiplication’, C denotes ‘subtraction’, and D denotes ‘division’, then what will be the value of the following expression?

14 B (18 D 3) A 5 B 7 C 12 B (24 D 4)

A. 47

B. 77

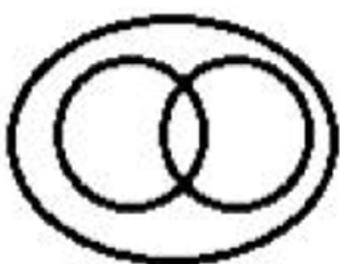
C. 41

D. 53

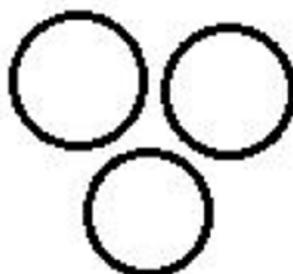
36. Select the Venn diagram that best illustrates the relationship between the following classes.

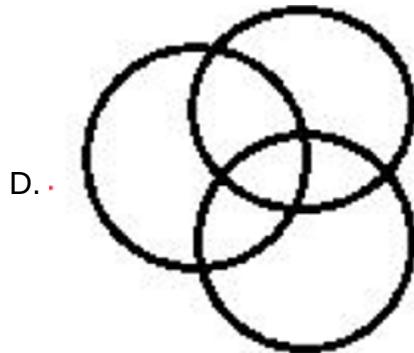
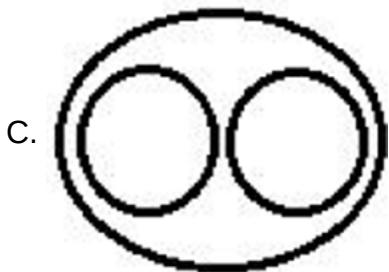
Animals, Lizards, Octopuses

A.



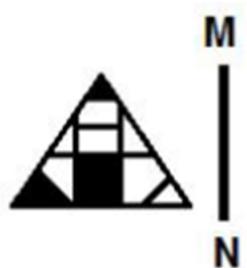
B.





15, 15, 17, 51, 55, ?

39. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.





42, 41, 45, 36, 52, 27, ?

42. In a certain code language, 'FUTILE' is written as 'UFITEL'. How will 'OCTAVE' be written in that language?

43. Two statements are given followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

Some diaries are books.

Some books are registers.

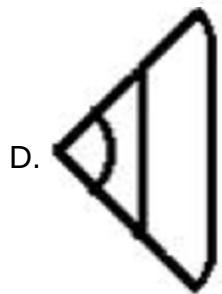
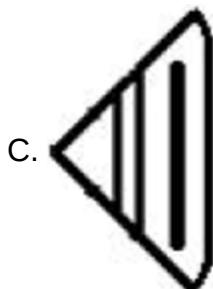
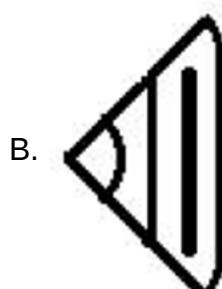
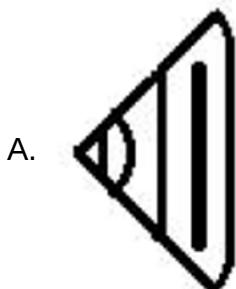
Conclusions:

- I. Some registers are diaries.
 - II. All registers are diaries.

- A. Only conclusion I follows
- C. Neither conclusion I nor II follows

- B. Both conclusions I and II follow
- D. Only conclusion II follows

44. Select the option figure that will replace the question mark (?) in the figure below to complete the pattern.



45. Which two numbers should be interchanged to make the given equation correct?

$$14 + 32 - 56 \div 28 \times 5 = 40$$

- A. 28 and 32
 - C. 14 and 32
- B. 5 and 14
 - D. 28 and 14

46. Two statements are given followed by three conclusions numbered I, II and III. Assuming the

statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

All shops are parks.

Some shops are schools.

Conclusions:

I. Some parks are schools.

II. No school is a park.

III. Some parks are shops.

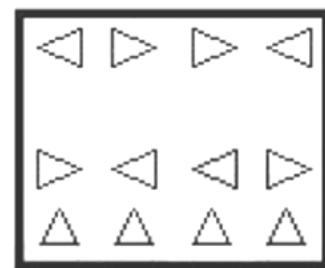
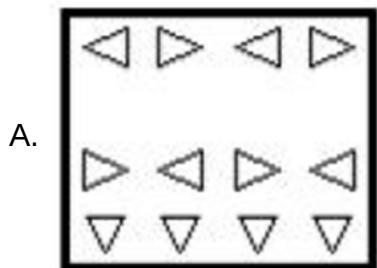
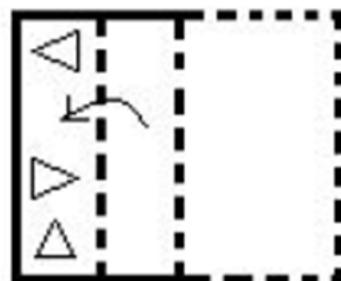
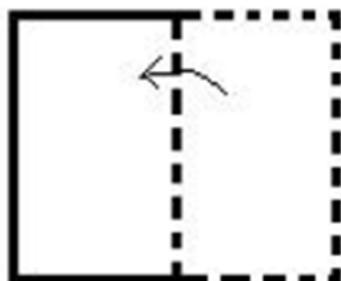
A. Only conclusions I and III follow

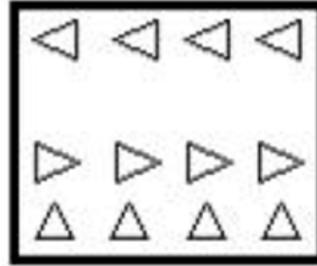
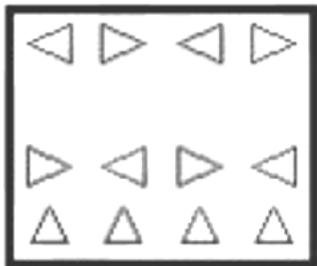
B. Only conclusions II and III follow

C. Only conclusions I and II follow

D. All of the conclusions follow

47. A paper is folded and cut as shown below. How will it appear when unfolded?





48. Select the option that is related to the third word in the same way as the second word is related to the first word.

Cataract : Eyes :: Eczema : ?

- | | |
|------------|-----------|
| A. Allergy | B. Joints |
| C. Itching | D. Skin |

49. In a certain code language, 'FORCE' is written as '641832' and 'MIST' is written as '1331920'. How will 'URANUS' be written in that language?

A. 618114618 B. 518113519
C. 518114519 D. 218132119

50. Six friends K, L, M, N, O and P are sitting in two rows; both the rows are facing north. Four friends are in the first row, whereas two friends are in the second row. L is sitting between O and P. M is just behind O. N is just behind L. There is nobody sitting behind K and P, who are sitting at the corners. Who among them are sitting in the first row?

A. P, L, N and K B. K, L, O and P
C. K, L, P and M D. M, N, L and P

51. What is the mean proportional between the fourth proportional of (1, 2, 7) and (14, 16, 2401)?

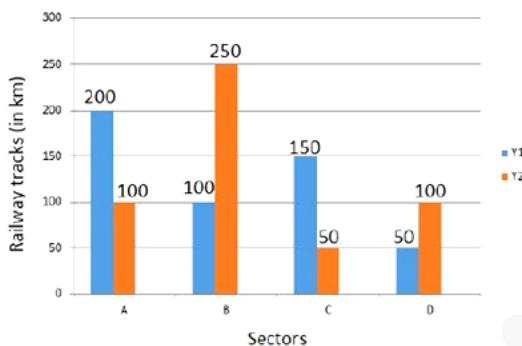
A. 224 B. 196
C. 14 D. 392

52. X can do half and Y can do one-third of a certain work in 5 and 10 days, respectively. Working together, in how many days will they be able to complete double of the work?

A. $16\frac{1}{2}$ B. $7\frac{1}{2}$
C. 15 D. 16

53. **Direction:** Study the bar graph and answer the question that follows.

The extent of construction of new railway tracks (in km) in four railway sectors A, B, C, D during two consecutive financial years Y1 and Y2 is presented through the given bar graph.



How much is the percentage increase in the railway track length from Y1 to Y2 greater for B than for D from Y1 and Y2?

- A. 25
- B. 100
- C. 40
- D. 50

54. How much is the average and track length (in km) of A, B, D during Y2 more or less than that of C in Y1?
- A. 100 less
 - B. 33.33 more
 - C. Neither more nor less
 - D. 50 less
55. Simplify the following expression.

$$4 - 3 \text{ of } \left(1 \frac{1}{2} + \frac{1}{3} \div \frac{1}{2} \text{ of } 4 - \frac{1}{4} \right)$$

- A. - 8
- B. $\frac{17}{12}$
- C. $-\frac{1}{4}$
- D. $\frac{19}{4}$

56. A retailer purchased 50 kg of a vegetable from a wholesale market. He sold half of it at a profit of Rs. 450, and the rest at a loss of Rs. 275. What was the difference (in Rs.) between the two selling prices per kg of the vegetable?
- A. 29
 - B. 18
 - C. 7
 - D. 12
57. The value of

$$5 \frac{6}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{3}{2} - \frac{1}{5} - \frac{1}{3} \right) \right\} \right] \text{ is:}$$

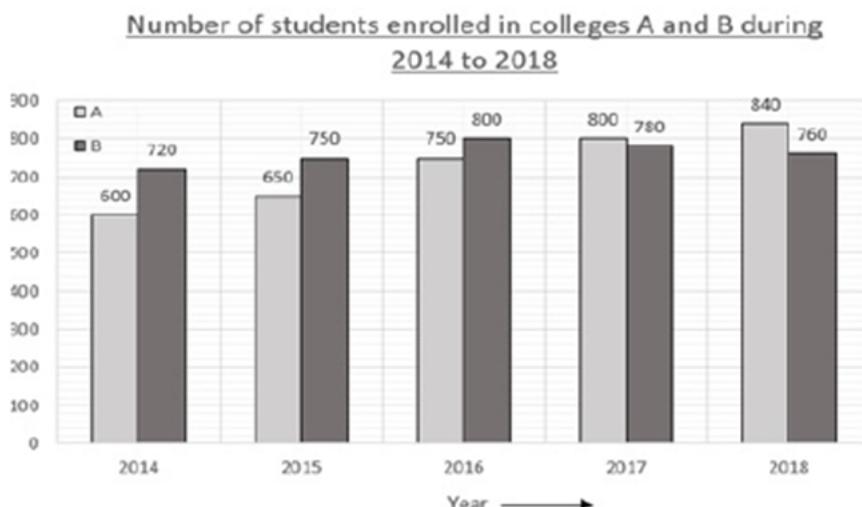
A. $\frac{2}{29}$
C. $\frac{3}{29}$

B. $\frac{4}{29}$
D. $\frac{1}{29}$

58. Three jugs of equal capacity are filled with mixture of milk and water in the proportions 3:1, 7:1 and 11:5, the three jugs are emptied into a single container. What will be the ratio of water to milk in the said container?
- A. 14 : 45 B. 11 : 37
C. 12 : 41 D. 15 : 49
59. While listing N consecutive even numbers for determining their average, the last number, by mistake, got replaced by the next odd number and thereby the average turned out to be more than the desired value by 0.0125. What is the value of N?
- A. 80 B. 40
C. 50 D. 100
60. A sum of Rs. 16,000 invested at compound interest, amount to Rs. 21,160 in two years. What is the rate per cent per annum?
- A. 16.5 B. 17.5
C. 15 D. 10
61. The lengths of one side and a diagonal of a rectangle are 63 cm and 65 cm, respectively. What is the perimeter (in cm) of a square whose area is one-seventh of that of the rectangle?
- A. 36 B. 64
C. 24 D. 48
62. Which number lying between 800 and 900 is such that when it is divided by either of 34 and 51, the remainder left is 19?
- A. 887 B. 821
C. 835 D. 869
63. A shopkeeper sells an article at 14% discount on its marked price and still gains 20%. If the cost price of the article is Rs. 184,90, then what is its marked price?
- A. Rs.264 B. Rs.272
C. Rs.278 D. Rs.258
64. The total surface area of a solid right circular cone is equal to that of a sphere of the same radius. The height of the cone is how many times the diameter of the sphere?
- A. $\sqrt{2}$ B. $\sqrt[3]{2}$

C. $2\sqrt{2}$ D. $\frac{\sqrt{2}}{2}$

65. x and y are two numbers having opposite signs such that, $x^2:y^2 = 49:64$. What is the value of $(5x - 6y):(6x - 7y)$?
- A. 44 : 65 B. 13 : 14
C. 94 : 117 D. 83 : 98
66. Study the given graph and answer the question that follows.



What is the ratio of the average number of students enrolled in college B in 2014, 2015 and 2017 to the number of students enrolled in college A in 2014?

- A. 5 : 4 B. 15 : 16
C. 3 : 2 D. 5 : 3

67. At a recruitment test, the candidates were tested for General Awareness (GA) and Quantitative techniques (QT). 54% and 45% failed in GA and QT, respectively, while 16% failed in both. If 136 candidates passed in both, what was the total number of candidates?
- A. 800 B. 640
C. 600 D. 850
68. During rainy season, huge inflow of water takes place into a reservoir. Measures are taken to clear the reservoir while water keeps flowing into it at a constant rate. It has been observed that seven and five men can clear the reservoir in 20 and 50 days, respectively, with the initial quantity of water in the reservoir

being 24 and 36 kiloliters, respectively. What is the rate of inflow of water into the reservoir in litres per day?

with accrued simple interest at the rate 6.25%, as and when the interest touches Rs. 75, On which date does the loan period expire?

- A. 14th February 2019 B. 15th January 2020
C. 20th October 2019 D. 15th March 2019

A steamer and a motor boat cover the stretch between a seaport and a dock in 7 hours 20 minutes and 10 hours 40 minutes, respectively. What is the ratio of their speed?

A. 15:11 B. 3:2
C. 16:11 D. 8:5

Which country launched the first artificial satellite Sputnik 1?

A. USSR B. France
C. USA D. Germany

Which part of the plant allows for the uptake of carbon dioxide and limits the loss of water due to evaporation?

A. Lamina B. Stipule
C. Stomata D. Petiole

'Rang Ghar', one of Asia's oldest amphitheatre, was built by the king of the _____ dynasty.

A. Sen B. Ahom
C. Mughal D. Gupta

For which of the following productions is the Ramagundam power plant famous?

A. hydroelectricity B. nuclear energy
C. thermal energy D. Bio-gas

In which year was the Communist Party of India - Marxist (CPI-M) formed?

A. 1951 B. 1964
C. 1962 D. 1972

Who among the following is the author of the book 'Dollar Bahu'?

A. Tasleema Nasreen B. Jhumpa Lahiri
C. Sudha Murty D. Arundhati Roy

Who among the following has been the first sportsperson to receive the Padma Shri award from the Government of India?

A. Balbir Singh Dosanjh B. Milkha Singh

- C. Manpreet Singh D. Dhanraj Pillay

83. Which Indian actor has won the 'Russian Audience Heart' Award for 2020?
A. Prabhas B. Ranveer Singh
C. Salman Khan D. Mahesh Babu

84. Which of the following is NOT a synovial joint in the human body?
A. Condyloid joint B. Sutures joint
C. Ball-and-socket joint D. Hinge joint

85. As of July 2020, employees whose monthly wages are _____ or below are covered under the ESI Act.
A. Rs. 21,000 B. Rs. 17,000
C. Rs. 25,000 D. Rs. 15,000

86. In which Indian state is the 'Pookode Lake' located?
A. Punjab B. Gujarat
C. Kerala D. Tamil Nadu

87. The first English factory was set up on the banks of the river _____ in 1651.
A. Mandovi B. Narmada
C. Godavari D. Hugli

88. In which state of India does the 'Weinia Falls' lie?
A. Sikkim B. Himachal Pradesh
C. Meghalaya D. Goa

89. The ancient city of Hampi was the capital of the _____ empire.
A. Rashtrakuta B. Nayaka
C. Maratha D. Vijayanagar

90. What is the intermediate level in the Panchayati Raj Institutions called?
A. Gram Panchayat B. Kshettra Panchayat
C. Panchayat Samiti D. Zila Panchayat

91. Which one of the following is the primary component of natural gas?
A. Helium B. Carbon Dioxide
C. Nitrogen D. Methane

92. Which Article of the Constitution of India provides that there will be Governors of States?
A. 136 B. 148
C. 124 D. 153

93. _____ became the first Indian to win the under-18 title in the Orange Bowl tournament in 2008.
- A. Rohan Bopanna B. Manas Dhamne
C. Leander Paes D. Yuki Bhambri
94. In which year was the Foreign Exchange Management Act (FEMA) enacted to replace the Foreign Exchange Regulation Act (FERA)?
- A. 1999 B. 1988
C. 2014 D. 1992
95. Kinetic and potential energies of a body are the components of its _____ energy.
- A. Chemical B. Electrical
C. Mechanical D. Heat
96. What is the full form of SIDBI?
- A. Service Industries Development Bank of India B. Service Investment Development Bank of India
C. Small Investment Development Bank of India D. Small Industries Development Bank of India
97. Churahi, Mandeali and Keonthali are dialects spoken in the state of:
- A. Madhya Pradesh B. Arunachal Pradesh
C. Uttar Pradesh D. Himachal Pradesh
98. To which state does the 'Gheriya Nritya' belong?
- A. Gujarat B. Maharashtra
C. Punjab D. Haryana
99. 'Chad Sukra', a popular traditional dance festival of Meghalaya, is celebrated as a _____.
- A. community marriage festival B. thanksgiving festival
C. birth festival D. sowing festival
100. Who among the following is the author of the book 'Amnesty'?
- A. Vikram Seth B. Amish Tripathi
C. Shashi Tharoor D. Aravind Adiga

Solutions

1. B

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

- We use “to + infinitive” after the verbs like ask, attempt, beg.

For example: Anyone with information is **asked to contact** the police.

- In the given sentence, we have erroneously used the bare infinitive form after the verb “asked”. We have to use the infinitive structure after the verb “asked” so that it can be used as an object of verb. Thus, “to” should be added after verb “asked”.
- Hence, “**not to stay out**” is the correct substitution.

Thus, the correct sentence will be: **Gopi's father asked him not to stay out late again.**

2. A

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

Conclude= to decide or believe something as a result of what you have heard or seen.

E.g.: It is too early for us to **conclude** anything.

End = to finish

E.g.: The problems did not **end** there.

Include = to make someone/something part of something.

Open = to spread out or unfold.

Exclude = to deliberately not include something in what you are doing or considering.

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

3. B

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

- The adverb “always” means every time or all the time. It is an adverb of frequency. We put the adverb of frequency near the verb is qualifies. And there is no such verb near it. Thus, it is grammatically incorrect here.
- “Whenever” as a conjunction is used to show “at any time that” or “on any occasion that”.

For example:

You can ask for help **whenever** you need it.

- In the given sentence, we have two clauses identified by the usage of two verbs: “meet” and “like”. But we haven’t connected these clauses using any proper conjunction that refers to “any time”. Thus, conjunction “whenever” should be used.
- Hence, “**whenever you like**” is the correct substitution.

Thus, the correct sentence will be:

“You can meet me whenever you like,” our teacher told us.

4. A

- Sol. Antidote: a substance that controls the effects of a poison or disease.
Antibiotic: a substance that can control or prevent the growth of bacteria and cure infections.
Medicine: the study and treatment of diseases and injuries.
Artichoke: a round vegetable with a lot of thick green leaves.
Hence, **option A** is the correct answer.

5. B

- Sol. • Tag questions (or question tags) turn a statement into a question. They are often used for checking information that we think we know is true.
• Tag questions are made using an auxiliary verb and a subject pronoun.
• Usually, if the main clause is positive, the question tag is negative, and if the main clause is negative, its question tag is positive.
• With 'let us', we use the tag 'shall we'.
Thus, the correct sentence will be:

Let us go to the museum, shall we?

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

6. B

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

- The underlined part needs correction in the structure of the verb.
- After the verb "forget", we use either "infinitive" or "gerund". But they convey different meanings.
- When the verb "forget" is followed by an infinitive, the infinitive refers to an action happening at the same time of the main verb, or later.

For example:

You **forgot to sign** the cheque.

- When the verb “forget” is followed by a gerund, the gerund refers to an action that happened earlier than the main verb.

For example: I remember locking the door.

- In the given sentence, we don’t need the sense of “memories of past”. The sentence reflects the necessary action that will be done in the near future i.e. “to post” the letters. Thus, the infinitive structure “to post” should be used in place of the bare infinitive “post”.

- Hence, “**to post**” is the correct substitution.

Thus, the correct sentence will be: **Don’t forget to post these letters.**

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

7. D

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

Agree= to have the same opinion as someone

E.g.: You can't expect them to **agree** on everything.

Distance = to become less involved or connected with someone/something.

Support = to help or encourage someone/something by saying or showing that you agree with them/it.

Question = to ask someone questions about something.

Oppose = to disagree strongly with someone's plan, policy etc. and try to change it or prevent it from succeeding.

E.g.: Our party will bitterly **oppose** the re-introduction of the death penalty.

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

8. B

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

- “How” as an adverb is used to show “in what way or manner”.

For example:

He did not know **how** he ought to behave.

I will show you **how** to load the software.

- “Why” as an adverb is used in questions to ask the reason for or purpose of something.

For example:

Tell me **why** you did it.

Why were you late?

- In the given sentence, we don't need the reason for the action verb “spend”. We need a manner in which you will spend your day today if there is a condition that world is going to be end tomorrow. The sense of “manner” is implicit from the structure of conditional sentences that put forward the probable result i.e. “action” in the main clause based on condition mentioned in conditional clause. Thus, adverb of manner “how” should be used in place of adverb “why”.

- Hence, “**how would**” is the correct substitution.

Thus, the correct sentence will be:

If the world was to end tomorrow, how would you spend your day today?

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

9. A

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

- “Who” as a relative pronoun is used for persons.

For example:

Only those **children who** are below fifteen can take part in this competition.

- “Whose” as a relative pronoun is used in questions to ask who something belongs to. It is also used to say which person or thing you mean.

For example:

He is a man **whose** opinion I respect.

- In the given sentence, it is erroneous to use “whose” because here we don’t need a possessive form. Thus, relative pronoun “who” should be used to refer the antecedent “man”, followed by the verb “is”.
- Hence, “**who is sitting**” is the correct substitution.

Thus, the correct sentence will be:

The man who is sitting at the corner table is my uncle.

10. B

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

“Sandwich” is the correct spelling. It means two slices of bread, often spread with butter, with a layer of meat, cheese etc. between them.

11. B

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

- *By getting* = is “preposition + Gerund structure”.
- *To get* = is a part of infinitive clause.
- *To getting* = is a “preposition + Gerund structure”.
- *For to get* = is a “preposition + infinitive structure”.

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

- “*By getting*” is “preposition + Gerund structure”. The preposition “by” is used to show how or in what way something is done. Thus, option A is incorrect.
- “*To getting*” is a “preposition + Gerund structure”. The preposition “to” is used to show “in the direction of something”. Thus, option C is incorrect.
- “*For to get*” is an incorrect structure. Thus, option D is incorrect.
- “*To get*” is a part of infinitive clause (“to go to...money”). It used as complement after verb “be” (“Had”). Here in the given sentence, infinitive clause is used as complement to show “where” subject “I” is going and the “purpose” of “going”.

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

Thus, the correct sentence will be:

I had to go to the ATM to get some money.

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

12. A

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

- The underlined part needs correction in the structure of adjective (determiner).
- “Many” as a determiner is used with plural nouns and verbs to mean “large number of” in negative sentences.

For example:

Many people felt that the law should be changed.

- “Enough” as a determiner is used before plural or uncountable nouns to mean “as many or as much as someone needs or wants”

For example:

Have you made **enough** copies?

- In the underlined part of the sentence, “food” is an uncountable noun but we have used “many” as a determiner which is used for countable nouns.
- Also, in case of sentences that start with empty subjects (like “There”, “It”), the verb is used in accordance with the complement i.e. “food” here. “Food” being an uncountable noun will take the singular verb “is”.

Thus, the usage of “is” is correct in the underlined part.

- Hence, “**is enough food**” is the correct substitution.

Thus, the correct sentence will be:

There is enough food for all of us.

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

13. A

Sol. The idiom “**Carry on**” means to continue doing something.

Example: **Carry on** with your work while I am away.

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

14. C

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

Eager= very interested and excited by something that is going to happen or about something that you want to do.

E.g.: Everyone in the class seemed **eager** to learn.

Different = not the same as someone/something.

Easier = comparatively not difficult.

Indifferent = having or showing no interest on someone/something.

E.g.: The government cannot afford to be **indifferent** to public opinion.

Loveable = having qualities that people find attractive and easy to love, often despite any faults.

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

15. B

Sol. The idiom “**Fall for**” means to be tricked into believing something that is not true.

Example: I am surprised you **fell for** that trick.

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

16. B

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

“Descendant” is the correct spelling. A person’s descendants are their children, their children’s children, and all the people who live after them who are related to them.

17. D

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

- *Hope* = a feeling of wanting and expecting a particular thing to happen.
- *House* = a building for people to live in.
- *Office* = a room, set of rooms or building where people work usually sitting at desks.
- *Home* = the house or flat that you live in, especially with your family.

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

- “*Hope*” as a noun is used in context of “expecting a particular thing to happen”. Thus, option A is incorrect.
- “*House*” as a noun is used in context of “physical structure where people live in”. But here, we don't need the context of physical architecture. Thus, option B is incorrect.
- “*Office*” as a noun is used in context of “place where people work”. Thus, option C is incorrect.
- “*Home*” as a noun is used in context of “place where someone lives with his/her family”. Here in the given sentence, it is used to mention the sense of belongingness of workers to a place i.e. “Home”. Note: We use “House” only when sentence is referring to some “architectural aspect”. Otherwise, we use “Home” to show the “attachment” where someone lives in.

Thus, “*Home*” becomes the correct word to fill in the blank.

Thus, the correct sentence will be:

The workers who returned home during the lockdown did not go back to work.

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

18. A

Sol. Pant: to breathe quickly with short breaths.

Cough: to force out air suddenly and noisily through your throat.

Strangle: to kill someone by pressing their throat and neck hard.

Choke: to be unable to breathe because the passage to your lungs is blocked or you cannot get enough air.

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

19. D

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

Obstruction= the fact of trying to prevent something/someone from making progress

E.g.: He was arrested for **obstruction** of a police officer in the execution of his duty.

Guesswork= the process of trying to find an answer by guessing when you don't have enough information to be sure.

Construction = the process or method of building or making something especially roads, buildings etc.

Destruction = the act of destroying something.

Hindrance= a person or thing that makes it more difficult for someone to do something.

E.g.: The high price is a major **hindrance** to potential buyers.

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

20. B

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

- *Sold* = to give something to someone in exchange for money.
- *Fetched* = to go to where someone/something is and bring them/it back.
- *Bought* = to obtain something by paying money for it.

- *Threw* = to send something from your hand through the air by moving your hand or arm quickly.

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

- “*Sold*” as a verb is used in context of “giving something in exchange for money”. Thus, option A is incorrect.
- “*Bought*” as a verb is used in context of “to obtain by paying money”. Thus, option C is incorrect.
- “*Threw*” as a verb is used in context of “send something from your hand”. Thus, option D is incorrect.
- “*Fetched*” as a verb is used in context of “going somewhere to get something”. Here in the given sentence, it is used to mention that village women used to visit common wells or hand pumps for water.

Thus, “*Fetched*” becomes the correct word to fill in the blank.

Thus, the correct sentence will be:

Until recently, the village women fetched water from common wells or hand pumps, but now they have water taps.

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

21. B

Sol. The given passage is about “**Struggle of former captain of the Indian wheelchair cricket team**”.

“Supervise” means to be in charge of someone/something and make sure that everything is done correctly. Thus, option A is wrong.

“Employ” means to give someone a job to do for payment. Thus, option C is wrong.

“Serve” means to give someone food or drink, for example at a restaurant or during a meal. Thus, option D is wrong.

“Work” means to have a job. In the given sentence, it is used to mention that former captain of the Indian wheelchair cricket team was forced by circumstances to have a job of “labourer”. This will help him support his family.

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

22. A

Sol. The given passage is about **“Struggle of former captain of the Indian wheelchair cricket team”**.

“Learn” means to gain knowledge or skill by studying, from experience, from being taught. Thus, option B is wrong.

“Teach” means to give lessons to students in a school, college, university etc. Thus, option C is wrong.

“Study” means to spend time learning about a subject by reading, going to college etc. Thus, option D is wrong.

“Coach” means to train someone to play a sport, to do a job better, or to improve a skill. In the given sentence, it is used to mention that former captain of the Indian wheelchair cricket team used to train children for cricket.

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

23. B

Sol. The given passage is about **“Struggle of former captain of the Indian wheelchair cricket team”**.

“Employment” means work, especially when it is done to earn money; the state of being employed. Thus, option A is wrong.

“Schooling” means the education you receive at school. Thus, option C is wrong.

“Studies” means the activity of learning or gaining knowledge, either from books or by examining things in the world. Thus, option D is wrong.

“Training” means the process of learning the skills that you need to do a job. In the given sentence, it is used to mention that during Covid-19 pandemic and lockdown, parents did not have money to pay for learning sessions of cricket.

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

24. A

Sol. The given passage is about “**Struggle of former captain of the Indian wheelchair cricket team**”.

“Encouraged” means to give someone support, courage or hope. Thus, option B is wrong.

“Forced” means to make someone do something that they do not want to do. Thus, option C is wrong.

“Asked” means to say or write something in the form of a question. Thus, option D is wrong.

“Interested” means giving your attention to something because you enjoy finding out about it or doing it. In the given sentence, it is used to mention that former captain of the Indian wheelchair cricket team was conducting training sessions for children who were keen in playing cricket.

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

25. B

Sol. The given passage is about “**Struggle of former captain of the Indian wheelchair cricket team**”.

“Lose” means to be unable to find something/someone. Thus, option A is wrong.

“Excel” means to be very good at doing something. Thus, option C is wrong.

“Win” means to be the most successful in a competition, race, battle etc. Thus, option D is wrong.

“Overcome” means to succeed in dealing with or controlling a problem that has been preventing you from achieving something. In the given sentence, the former captain of the Indian wheelchair cricket team said to an interviewer that he will succeed in dealing with difficult times of Covid-19.

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

26. D

Sol. The pattern is as follows:

FRY -> 6+18+25 = 49, now 49 multiply by the number of letters in the word that is;

$$49 \times 3 = 147$$

Similarly,

SEIZE -> 19+5+9+26+5 = 64, now 64 multiply by the number of letters in the word that is;

$$64 \times 5 = 320$$

Hence, option D is the correct answer.

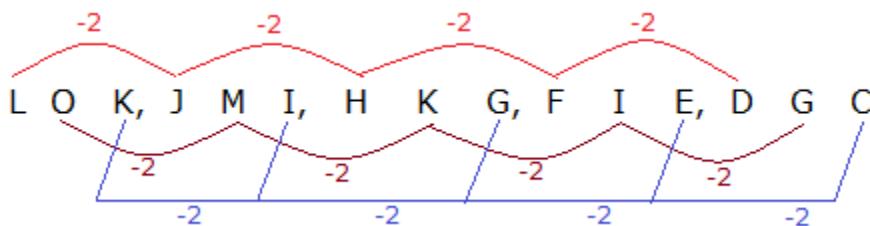
27. A

Sol. Diesel is a liquid fuel in similar way, a spoon is a utensil.

Hence, option A is the correct answer.

28. D

Sol. The pattern is as follows:



Hence, option D is the correct answer.

29. C

Sol. The pattern is as follows:

$$9 \times 10 = 90$$

Similarly,

$$15 \times 16 = 240$$

Hence, option C is the correct answer.

30. C

Sol. As per the given information;

1) B is taller than only four other friends.

$$\dots B > _ > _ > _ > _$$

2) C is taller than D. A is taller than F.

$$C > D$$

$$A > F$$

3) E is taller than one person only that is G, who is the shortest. B is taller than A

$$\dots \dots \dots E > G$$

$$B > A$$

Thus on combining all we get;

$$C > D > B > A > F > E > G$$

Clearly, C is the tallest.

Hence, option C is the correct answer.

31. D

Sol. The pattern is as follows:

$$15 \times 10 = 150; 14 \times 5 = 70$$

$$\text{Now } 150 + 70 = 220$$

Similarly,

$$20 \times 10 = 200; 18 \times 5 = 90$$

$$\text{Now } 200 + 90 = 290$$

Therefore;

$$11 \times 10 = 110; 40 \times 5 = 200$$

$$\text{Now } 110 + 200 = 310$$

Hence, option D is the correct answer.

32. C

Sol. The pattern is as follows: the letters are arranged as per the descending order of their position in Alphabetical series from left to right.

Thus, TEMPO is written as TPOME

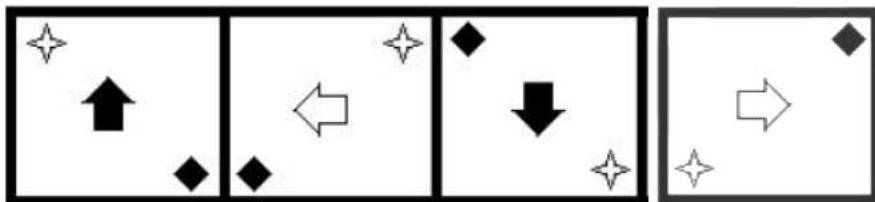
Similarly,

DOLPHIN is written as PONLIHD

Hence, option C is the correct answer.

33. D

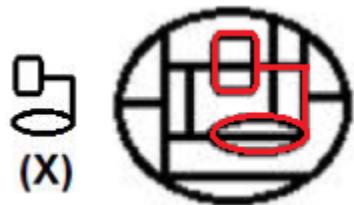
Sol. Logic: Here the arrow is rotating in 90 degrees anticlockwise and becomes shaded and non-shaded simultaneously in each step. The start shape element is moving 2 steps in clockwise direction and the diamond shape element is moving 2 steps in clockwise direction. Thus, the figure given in option (D) will complete the series as shown below:



Hence, option D is the correct answer.

34. C

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



Hence, option C is the correct answer.

35. A

Sol. Refer to the table below:

letter	A	B	C	D
denotes	+	\times	-	\div

After the letters are replaced with signs the equation becomes:

$$\Rightarrow 14 \times (18 \div 3) + 5 \times 7 - 12 \times (24 \div 4)$$

$$\Rightarrow 14 \times 6 + 5 \times 7 - 12 \times 6$$

$$\Rightarrow 84 + 5 \times 7 - 72$$

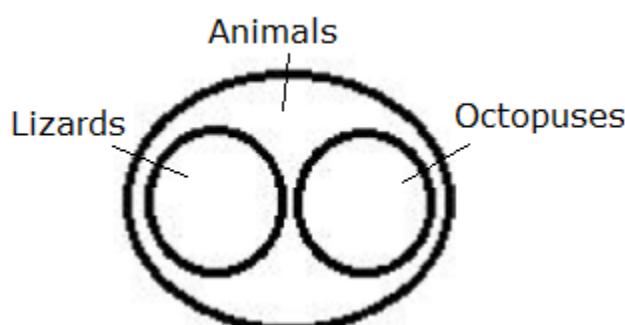
$$\Rightarrow 119 - 72$$

= 47

Hence, option A is the correct answer.

36. C

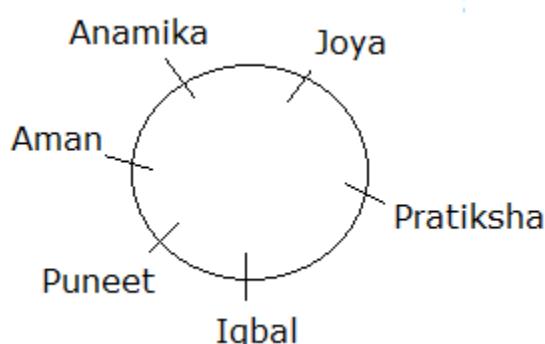
Sol. Both lizards and octopuses fall under the category of animals. Thus the given classes are best represented by the Venn-diagram given in option (C).



Hence, option C is the correct answer.

37. D

Sol. As per the given information:



Clearly, Aman is sitting between Anamika and Puneet.

Hence, option D is the correct answer.

38. A

Sol. The pattern is as follows:

$$15 \times 1 = 15$$

$$15 + 2 = 17$$

$$17 \times 3 = 51$$

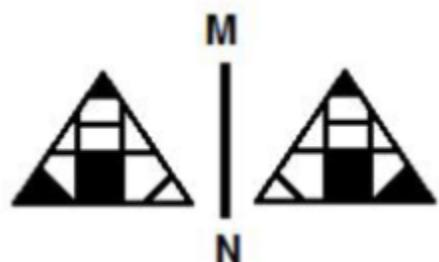
$$51 + 4 = 55$$

$$55 \times 5 = 275$$

Hence, option A is the correct answer.

39. C

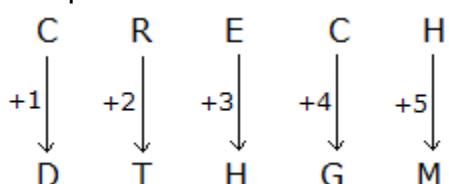
Sol. The correct mirror image is as shown below:



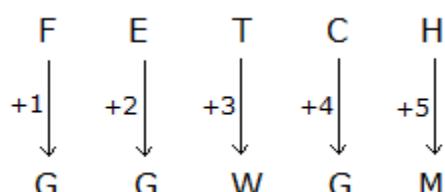
Hence, option C is the correct answer.

40. C

Sol. The pattern is as follows:



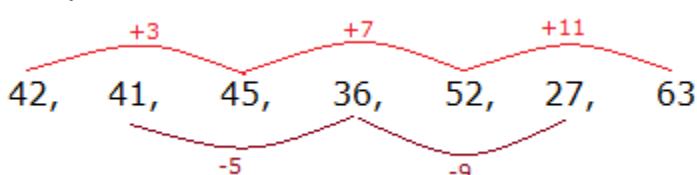
Similarly,



Hence, option C is the correct answer.

41. A

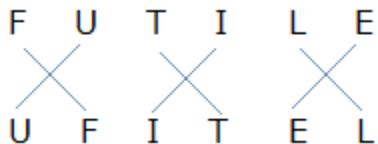
Sol. The pattern is as follows:



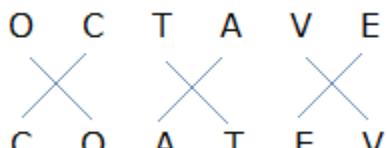
Hence, option A is the correct answer.

42. A

Sol. The pattern is as follows:



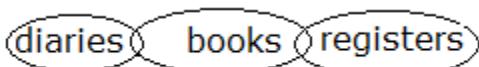
Similarly,



Hence, option A is the correct answer.

43. C

Sol. The least possible Venn-diagram will be:



Conclusions:

I. Some registers are diaries – It is not a definite case, hence false.

II. All registers are diaries - It is not a definite case, hence false.

Thus, neither conclusion I nor II follows.

Hence, option C is the correct answer.

44. B

Sol. Clearly, the figure given in option (B) will complete the pattern;



Hence, option B is the correct answer.

45. D

Sol. After checking all the options we find that the numbers in option (D) when interchanged will make the equation correct:

$$28 + 32 - 56 \div 14 \times 5 = 40$$

On solving L.H.S;

$$\rightarrow 28 + 32 - 56 \div 14 \times 5$$

$$\rightarrow 28 + 32 - 4 \times 5$$

$$\rightarrow 28 + 32 - 20$$

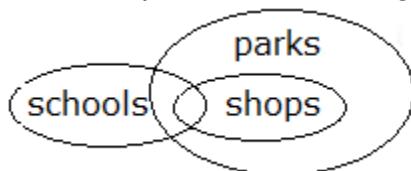
$$\rightarrow 60 - 20 = 40$$

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

Hence, option D is the correct answer.

46. A

Sol. The least possible Venn-diagram will be:



Conclusions:

I. Some parks are schools – It is a definite case, hence true.

II. No school is a park – It is not a definite case, hence false.

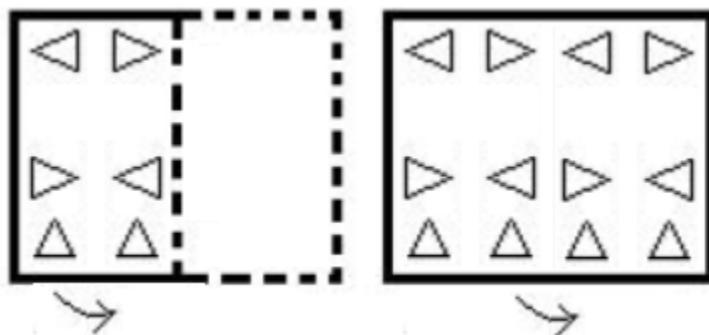
III. Some parks are shops - It is a definite case, hence true.

So, only conclusions I and III follow.

Hence, option A is the correct answer.

47. C

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



Hence, option C is the correct answer.

48. D

Sol. Cataract is the medical condition of the eye in which the lens of the eye becomes cloudy in similar way

Eczema is the itchy inflammation of the skin.

Hence, option D is the correct answer.

49. C

Sol. Here the vowels (A,E,I,O,U) will be coded as (1,2,3,4,5) respectively while the code of the consonants is the place value of the letter as per its position in Alphabetical series.

F	O	R	C	E
6	4	18	3	2

Likewise,

M	I	S	T
13	3	19	20

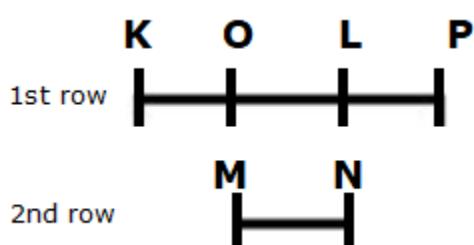
Therefore,

U	R	A	N	U	S
5	18	1	14	5	19

Hence, option C is the correct answer.

50. B

Sol. As per the given information:



K, L, O and P are sitting in the first row.

Hence, option B is the correct answer.

51. B

Sol. Let fourth proportional of (1, 2, 7) is x

$\Rightarrow 1, 2, 7$ and x are in proportion.

$$\Rightarrow x = 2 \times 7 = 14$$

Let fourth proportional of (14, 16, 2401) is y.

$\Rightarrow 14, 16, 2401$ and y are in proportion.

$$\Rightarrow 14y = 16 \times 2401$$

$$\Rightarrow y = 2744$$

Mean proportional between the fourth proportional of (1, 2, 7) and (14, 16, 2401) =
 $\sqrt{14 \times 2744} = \sqrt{38416} = 196$

52. C

Sol. Number of days taken by X to complete half of work = 5 days

Number of days taken by X to complete the whole work = $5 \times 2 = 10$ days

Number of days taken by Y to complete $\left(\frac{1}{3}\right)^{rd}$ of work = 10 days

Number of days taken by Y to complete the whole work = $10 \times 3 = 30$ days

Let total work = LCM (10,30) = 30 unit

$$\text{Efficiency of X} = \frac{30}{10} = 3 \text{ unit/day}$$

$$\text{Efficiency of Y} = \frac{30}{30} = 1 \text{ unit/day}$$

Efficiency of X and Y together = $3 + 1 = 4$ unit/day

Number of days in which they be able to complete double of the work =

$$\frac{2 \times 30}{4} = \frac{60}{4} = 15 \text{ days}$$

53. D

Sol. Percentage increase in the railway track length from Y1 to Y2 for B =

$$\frac{250 - 100}{100} \times 100 = 150\%$$

Percentage increase in the railway track length from Y1 to Y2 for D =

$$\frac{100 - 50}{50} \times 100 = 100\%$$

Required difference = $150\% - 100\% = 50\%$

54. C

Sol. Average track length (in km) of A, B, D during Y2 =

$$\frac{100 + 250 + 100}{3} = \frac{450}{3} = 150 \text{ km}$$

Track length of C in Y1 = 150 km

So, Average track length (in km) of A, B, D during Y2 is equal to track length of C in Y1.

55. C

Sol. $4 - 3 \text{ of } \left(1 \frac{1}{2} + \frac{1}{3} \div \frac{1}{2} \text{ of } 4 - \frac{1}{4} \right)$

$$\Rightarrow 4 - 3 \text{ of } \left(\frac{3}{2} + \frac{1}{3} \div \frac{1}{2} \text{ of } 4 - \frac{1}{4} \right)$$

USING BODMAS :

$$\Rightarrow 4 - 3 \text{ of } \left(\frac{3}{2} + \frac{1}{3} \div 2 - \frac{1}{4} \right)$$

$$\Rightarrow 4 - 3 \text{ of } \left(\frac{3}{2} + \frac{1}{6} - \frac{1}{4} \right)$$

$$\Rightarrow 4 - 3 \text{ of } \left(\frac{18+2-3}{12} \right)$$

$$\Rightarrow 4 - 3 \text{ of } \left(\frac{17}{12} \right)$$

$$\Rightarrow 4 - \frac{17}{4}$$

$$\Rightarrow -\frac{1}{4}$$

56. A

Sol. A retailer purchased 50 kg of a vegetable from a wholesale market.

Let cost price of vegetable per kg = Rs. x

Cost price of 50 kg vegetable = Rs. $50x$

Selling price of 25 kg vegetable which is sold at a profit of ₹450 = $25x + 450$

Seiling price of 25 kg vegetable which has sold at a loss of ₹275 = $25x - 275$

Difference between these two selling price = $25x + 450 - 25x + 275 = \text{Rs. } 725$

Difference (in Rs.) between the two selling prices per kg of the vegetable =

$$\frac{725}{25} = \text{Rs. } 29$$

57. D

Sol. $\frac{6}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{3}{2} - \frac{1}{5} - \frac{1}{3} \right) \right\} \right]$

USING BODMAS:

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{45-6-10}{30} \right) \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{29}{30} \right) \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{29}{40} \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{29}{40} \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \times \frac{40}{29} \right] = \frac{151}{29} - \frac{150}{29} = \frac{1}{29}$$

58. B

Sol. Three jugs of equal capacity are filled with mixture of milk and water in the proportions 3:1, 7:1 and 11:5, the three jugs are emptied into a single container.

	MILK	WATER
1 st jug	3	1
2 nd jug	7	1
3 rd jug	11	5

Now, we will equate the capacity of all three jugs.

$$\text{LCM } [(3+1), (7+1), (11+5)] = \text{LCM } [4, 8, 16] = 16$$

	MILK	WATER
1 st jug	3×4	1×4
2 nd jug	7×2	1×2
3 rd jug	11×1	5×1

	MILK	WATER
1 st jug	12	4
2 nd jug	14	2
3 rd jug	11	5

Ratio of water to milk in the said container = (4+2+5) : (12+14+11) = 11 : 37

59. A

Sol. While listing N consecutive even numbers for determining their average, the last number, by mistake, got replaced by the next odd number and thereby the average turned out to be more than the desired value by 0.0125.

Increase in the sum of N consecutive even numbers after replacement with next odd number = 1

Increase in the average of N consecutive even numbers after replacement with next odd

$$\text{number} = \frac{1}{N}$$

According TO QUESTION:

$$\Rightarrow \frac{1}{N} = 0.0125$$

$$\Rightarrow N = \frac{1}{0.0125} = \frac{10000}{125} = 80$$

60. C

Sol. A sum of Rs. 16,000 invested at compound interest, amount to Rs. 21,160 in two years.

$$\text{Amount} = P \left(1 + \frac{\text{Rate}}{100} \right)^{\text{time}}$$

$$\Rightarrow 21160 = 16000 \left(1 + \frac{R}{100}\right)^2$$

$$\Rightarrow \frac{21160}{16000} = \left(1 + \frac{R}{100}\right)^2$$

$$\Rightarrow \frac{2116}{1600} = \left(1 + \frac{R}{100}\right)^2$$

$$\Rightarrow \left(1 + \frac{R}{100}\right) = \sqrt{\frac{2116}{1600}} = \frac{46}{40}$$

$$\Rightarrow \left(\frac{R}{100}\right) = \frac{6}{40}$$

$$\Rightarrow R = \frac{60}{4} = 15\%$$

Rate per cent per annum = 15%

61. D

Sol. The lengths of one side and a diagonal of a rectangle are 63 cm and 65 cm, respectively.

Let length of other side of a rectangle = x

$$\text{Now, } x^2 + (63)^2 = (65)^2$$

$$\Rightarrow x^2 = 4225 - 3969 = 256$$

$$\Rightarrow x = 16 \text{ cm}$$

$$\text{Area of the rectangle} = (63 \times 16) \text{ cm}^2$$

Area of square is one-seventh of that of the rectangle.

$$\text{Area of the square} = \frac{1}{7} \times (63 \times 16) \text{ cm}^2 = 144 \text{ cm}^2$$

$$\text{Side of the square} = \sqrt{144} = 12 \text{ cm}$$

$$\text{Perimeter (in cm) of a square} = 4 \times 12 \text{ cm} = 48 \text{ cm}$$

62. C

Sol. Number lying between 800 and 900 such that when it is divided by either of 34 and 51, the remainder left is 19 = LCM (34,51) K + 19 = 102k + 19

Now, Choose the value of k such that value of [102k+19] lies between 800 and 900.

By inspection, k = 8

$$\text{Hence, Required number} = 102(8) + 19 = 816 + 19 = 835$$

63. D

Sol. Cost price of the article = Rs. 184,90

A shopkeeper sells an article at 14% discount on its marked price and still gains 20%.

Let marked price of the article = Rs. x

According to question :

$$\Rightarrow x \times \frac{(100 - 14)}{100} \times \frac{(100)}{120} = 184.90$$

$$\Rightarrow x = \frac{184.90 \times 120}{86} = \text{Rs. } 258$$

Marked price of the article = Rs. 258

64. A

Sol. Total surface area of a solid right circular cone is equal to that of a sphere of the same radius.

$$\Rightarrow \pi r l + \pi r^2 = 4\pi r^2$$

$$\Rightarrow l + r = 4r$$

$$\Rightarrow l = 3r$$

Now, Height of the cone = $\sqrt{l^2 - r^2} = \sqrt{9r^2 - r^2} = 2\sqrt{2}r = \sqrt{2} \times \text{diameter of the sphere}$

65. D

Sol. x and y are two numbers having opposite signs such that, $x^2:y^2 = 49:64$.

$$\Rightarrow \frac{x^2}{y^2} = \frac{49}{64}$$

$$\Rightarrow \frac{x}{y} = \frac{7}{8}$$

Let $x = 7k$

$$y = -8k$$

$$\text{Now, } \frac{5x - 6y}{6x - 7y} = \frac{5(7k) - 6(-8k)}{6(7k) - 7(-8k)} = \frac{35 + 48}{42 + 56} = \frac{83}{98}$$

66. A

Sol. Average number of students enrolled in college B in 2014, 2015 and 2017 =

$$\frac{720 + 750 + 780}{3} = \frac{2250}{3} = 750$$

Number of students enrolled in college A in 2014 = 600

Required ratio = $750 : 600 = 5 : 4$

67. A

Sol. At a recruitment test, the candidates were tested for General Awareness (GA) and Quantitative techniques (QT).

54% and 45% failed in GA and QT, respectively, while 16% failed in both.

Total failed candidate in atleast one subject = Candidates failed in GA + Candidates failed in QT - Candidates failed in GA and QT both = $54\% + 45\% - 16\% = 83\%$

Total passed candidate in both subjects = 100% - 83% = 17%

According to question:

$$\Rightarrow 17\% = 136$$

$$\Rightarrow 1\% = 8$$

$$\Rightarrow 100\% = 800$$

Total number of candidates = 800

68. A

Sol. During rainy season, huge inflow of water takes place into a reservoir. Measures are taken to clear the reservoir while water keeps flowing into it at a constant rate.

It has been observed that seven and five men can clear the reservoir in 20 and 50 days, respectively, with the initial quantity of water in the reservoir being 24 and 36 kiloliters, respectively.

Let flow of water per day = x kilolitres

According to question:

$$7M \times 20 = 24 + 20x \quad \dots \dots \dots (1)$$

$$5M \times 50 = 36 + 50x \dots\dots\dots(2)$$

Divide (1) by (2)

$$\Rightarrow \frac{7M \times 20}{5M \times 50} = \frac{24 + 20x}{36 + 50x}$$

$$\Rightarrow \frac{7}{25} = \frac{6 + 5x}{18 + 25x}$$

$$\Rightarrow 126 + 175x = 150 + 125x$$

$$\Rightarrow 50x = 24$$

$$\Rightarrow x = \frac{24}{50} \text{ kilolitres} = \frac{24}{50} \times 1000 \text{ litres} = 480 \text{ litres}$$

Rate of inflow of water into the reservoir in litres per day = 480 LITRES

69. B

Sol. The average of a number and its reciprocal is 1.

Let number = x

According to question:

$$\Rightarrow \frac{x + \frac{1}{x}}{2} = 1$$

$$\Rightarrow x + \frac{1}{x} = 2$$

$$\Rightarrow \frac{x^2 + 1}{x} = 2$$

$$\Rightarrow x^2 + 1 = 2x$$

$$\Rightarrow x^2 - 2x + 1 = 0$$

$$\Rightarrow (x-1)^2 = 0$$

$$\Rightarrow x = 1$$

$$\frac{x^2 + x^3 + x^4}{3} = \frac{1+1+1}{3} = 1$$

Now, average of its square, cube and fourth power =

70. B

Sol. The mean of a set of 120 observations is 80.

10 is subtracted from each observation and each of the corresponding result is divided by 7.

We know that if we subtract a constant value from each observation of a data set then mean value of that dataset also reduced by that constant value.

Also, if we divide each observation of data set by a constant term then mean of that data set also divided by the constant term.

$$\text{Mean of the new set} = \frac{80-10}{7} = 10$$

71. C

Sol. In case of a particular transaction, the profit earned is $14\frac{2}{7}\%$.

$$\text{Now, } 14\frac{2}{7}\% = \frac{1}{7}$$

Let cost price = Rs. x

$$\text{Selling price} = x + \frac{x}{7} = \frac{8x}{7}$$

$$\text{Now, } \frac{\text{cost price}}{\text{selling price}} = \frac{7x}{8x} = \frac{7}{8}$$

72. B

Sol. A man had to travel 49 km, which he divided into six stretches which were multiples of either 4 km or 5 km.

First four stretches were 4 km, 5 km, 8 km and 10 km.

Sum of 5th and 6th stretches = 49 - 4-5-8-10 = 22 km

As 5th and 6th stretches were multiples of either 4 km or 5 km.

So, by inspection:

Length of 5th stretch = 12 km

Length of 6th stretch = 10 km

Multiples of 4 km and 5 km were travelled at the rates of 40 and 60 km/h, respectively, and between two consecutive stretches, he rested for six minutes.

Time taken in travelling these 6 stretches =

$$\frac{4}{40} + \frac{5}{60} + \frac{8}{40} + \frac{10}{60} + \frac{12}{40} + \frac{10}{60} = \frac{12+10+24+20+36+20}{120} = \frac{122}{120} = \frac{61}{60} \text{ hours}$$

$$\text{Time taken for rest} = \frac{6 \times 5}{60} \text{ hours} = \frac{30}{60} \text{ hours}$$

$$\text{Total time taken for journey} = \frac{61}{60} \text{ hours} + \frac{30}{60} \text{ hours} = \frac{91}{60} \text{ hours}$$

$$\text{Average speed (in km/h) for the whole journey} = \frac{49 \times 60}{91} = \frac{420}{13} = 32\frac{4}{13} \text{ hours}$$

73. B

Sol. Three circles, each having radius equal to 4 cm, are drawn with the vertices of an equilateral triangle as the centres.

Length of each side of the triangle is equal to 8 cm.

Formula used : Area of equilateral triangle = $\frac{\sqrt{3}}{4}(\text{side})^2$

$$\text{Area of sector} = \frac{\pi r^2 \theta}{360^\circ}$$

As angle at each vertex of equilateral triangle is 60° therefore $\theta = 60^\circ$

Area (in cm^2) of the portion of the triangle that is not covered by the sectors by the sectors of the circles = Area of triangle – Area of 3 sectors =

$$\frac{\sqrt{3}}{4}(\text{side})^2 - 3 \times \frac{\pi r^2 \theta}{360^\circ} = \frac{\sqrt{3}}{4}(8)^2 - 3 \times \frac{\pi(4)^2(60^\circ)}{360^\circ} = 16\sqrt{3} - 8\pi = 8(2\sqrt{3} - \pi)$$

74. D

Sol. A man takes a loan of Rs. 6,000 from his friend on 1st January 2019 with the condition that he will repay with accrued simple interest at the rate 6.25%, as and when the interest touches Rs. 75.

$$\text{Simple Interest} = \frac{\text{Principal} \times \text{Rate} \times \text{time}}{100}$$

$$\Rightarrow 75 = \frac{6000 \times 6.25 \times \text{time}}{100}$$

$$\Rightarrow \text{Time} = \frac{1200}{6000} = \frac{1}{5} \text{ years} = \frac{12}{5} \text{ months} = 2 \text{ months } \left(\frac{2}{5} \times 31 \right) \text{ days} = 2 \text{ months 13 days}$$

Date on which loan period expire = 1st January 2019 + 2 month 13 days = 15th March 2019

75. C

Sol. A steamer and a motor boat cover the stretch between a seaport and a dock in 7 hours 20 minutes and 10 hours 40 minutes, respectively.

If distance is constant then speed is inversely proportional to the time taken.

Ratio of time taken by steamer to time taken by motor boat = 7 hours 20 minutes : 10 hours 40 minutes = 440 minutes : 640 minutes = 11 : 16

Ratio of their speed = 16 : 11

76. A

Sol. • USSR launched the first artificial satellite Sputnik 1.
• It was launched into an elliptical low Earth orbit on 4 October 1957.
• It travelled at a peak speed of about 8 km/s taking 96.20 minutes to complete each orbit.
• The full form of the USSR is the Union of Soviet Socialist Republics.
• It was nominally a federal union of multiple national republics in practice its government and economy were highly centralized until its final years.
• France has the largest exclusive economic zone in the world.

77. C

Sol. • Stomata of the plant allow for the uptake of carbon dioxide and limit the loss of water due to evaporation.
• They are the tiny openings present on the epidermis of leaves.
• They help in the exchange of carbon dioxide and water between plants and the atmosphere.
• The lamina is the expanded, flat component of the leaf that contains the chloroplasts.
• A stipule is an outgrowth typically borne on both sides of the base of a leafstalk.
• The petiole is a stalk that connects the blade with the leaf base.

78. B

Sol. • 'Rang Ghar', one of Asia's oldest amphitheatre, was built by the king of the Ahom dynasty.

- This magnificent structure is **one of the oldest surviving amphitheatres in Asia.**
- It was later rebuilt with bricks by Swargadeo Pramatta Singha in AD 1744–1750.
- The **Ahom Kingdom** was a late medieval kingdom established in 1228 in the **Brahmaputra Valley in Assam.**
- The **Mughal Empire** was an **early modern Islamic empire in South Asia.**

79. C

- Sol. • **The Ramagundam power plant** is famous for the production of **thermal energy**.
• It is a **2,600 megawatt Power station** situated at Ramagundam in **Telangana**.
• It is the **current largest power station in South India**.
• It is the **first ISO 14001 certified "Super Thermal Power Station" in India**.
• **Thermal energy** is the **energy possessed by an object or system due to the movement of particles within the object or the system**.
• **Nuclear energy** can be **used to create electricity, but it must first be released from the atom**.

80. C

- Sol. • **The Communist Party of India - Marxist** was formed in **1962**.
• It is a **communist political party in India** and one of the **national parties of India**.
• It is the **largest communist party in India** in terms of membership and **electoral seats**.
• It was **emerged from a split in the Communist Party of India on 7 November 1964**.
• The **All-India Party Congress** is the **supreme authority of the Communist Party of India (Marxist)**.

81. C

- Sol. • **Sudha Murty** is the author of the book '**Dollar Bahu**'.
• She is the **Chairperson of the Infosys Foundation** and a member of the public health care initiatives of the Gates Foundation.
• **Dollar Bahu** is the story of how money can wreak havoc in the life of any family if things spin out of control.
• **Tasleema Nasreen** is known for her writing on women's oppression and criticism of religion.
• **Arundhati Roy** is one of the best-known representatives of the contemporary generation of Indian writers who write in English.

82. A

- Sol. • **Balbir Singh Dosanjh** has been the first sportsperson to receive the **Padma Shri award from the Government of India**.

- He is regarded as one of the greatest hockey players of all time.
- He is widely regarded as the sport's greatest ever centre-forward.
- **Manpreet Singh** is one of India's best field hockey players and the captain of the Indian men's hockey team.
- **Milkha Singh** is the only athlete to win gold in 400 metres at the Asian Games as well as the Commonwealth Games.
- **Dhanraj Pillai** is the only Indian to have played in 3 Olympics, 3 World Cups and 4 Asian Games.

83. A

- Sol.
- **Prabhas** has won the 'Russian Audience Heart' Award for 2020.
 - He is the second Indian actor to win Russian Audience, Heart Award.
 - He is one of the highest-paid actors in Indian cinema.
 - **Ranveer Singh** is the unparalleled live wire of Bollywood.
 - **Salman Khan** is cited in the media as one of the most commercially successful actors of Indian cinema.
 - **Mahesh Babu** is considered one of the most popular actors in Telugu cinema.
 - He is widely referred in the media as the Superstar of Tollywood and Prince Mahesh Babu.

84. B

- Sol.
- The sutures joint is not a synovial joint in the human body.
 - It is the narrow fibrous joint found between most bones of the skull.
 - **Synovial joints** are the most common type of joint in the body.
 - These joints can be described as planar, hinge, pivot, condyloid, saddle and ball & socket joints.
 - Ball-and-socket joints are classified functionally as multiaxial joints because they can move bones along several axes.
 - Hinge joints are a type of synovial joint that permits movement in one direction like the hinge on a door.

85. D

- Sol.
- As of July 2020, employees whose monthly wages are Rs. 15,000 or below are covered under the ESI Act.
 - The Employees' State Insurance Act, 1948 by the Parliament was the first major legislation on social Security for workers in independent India.
 - It encompasses certain health related eventualities that the workers are generally exposed to such as sickness, maternity, temporary or permanent disablement.

- The Act also guarantees reasonably good medical care to workers and their immediate dependents.
- It exercises its function through the Employees' State Insurance Corporation.

86. C

- Sol. • The 'Pookode Lake' is located in Kerala.
• It is a scenic freshwater lake and the only one of its kind in Kerala.
• It is a natural freshwater lake nestling amid evergreen forests and mountain slopes at an altitude of 770 meters above sea level.
• It is the smallest and highest altitude fresh water lake in Kerala.
• It is spread across an area of 8.5 hectares and with a maximum depth of 6.5 metres.
• The lake is under the South Wayanad forest division and is run by the District Tourism promotion council.

87. D

- Sol. • The first English factory was set up on the banks of the Hugli river in 1651.
• Hooghly River is one of the significant rivers in West Bengal.
• The Godavari is India's second-longest river and the third largest in India.
• Narmada is the 5th longest river and overall longest west-flowing river in India.
• It is also known as Life Line of Madhya Pradesh and Gujarat.
• The Mandovi River is one of the main West Flowing Rivers of Goa State.

88. C

- Sol. • The 'Weinia Falls' lies in Meghalaya.
• It provides a distinctive picture because of a double-arched bridge in the background and the spray from its pool fills up the entire valley.
• The roar of the falls can be heard from a distance and the flow is incredibly powerful.
• Meghalaya is a very beautiful and hilly state.
• It is mostly famous for its sandstone caves, clean villages, mesmerizing waterfalls, breathtaking hill stations, culture, society, festivals etc.
• Goa is India's smallest state by area and its fourth-smallest by population.
• Sikkim is the least populous and second smallest state in India.

89. D

- Sol. • The ancient city of Hampi was the capital of the Vijayanagar empire.
• Hampi is a fortified city and is situated on the banks of the Tungabhadra River.
• The Vijayanagara Empire was based in the Deccan Plateau region in South India.
• The empire reached its peak during the rule of Krishna Deva Raya.

- The Maratha Empire dominated a large part of the Indian subcontinent in the 17th century.
- Rashtrakuta was a royal Indian dynasty ruling large parts of the Indian subcontinent between the sixth and 10th centuries.

90. C

- Sol.
- Panchayat Samiti is the intermediate level in the Panchayati Raj Institutions.
 - It works for the villages of the tehsil that together are called a development block.
 - It is the link between the gram panchayat and the Zila Parishad.
 - It is elected for five years and is headed by a chairman & deputy chairman.
 - Gram Panchayat is a basic village-governing institute in Indian villages and It is a democratic structure at the grass-roots level in India.
 - Zila Panchayat is the third tier of the Panchayati Raj system and functions at the district levels in all states.

91. D

- Sol.
- Methane is the primary component of natural gas.
 - It is also a greenhouse gas and its presence in the atmosphere affects the earth's temperature and climate system.
 - Nitrogen was first discovered and isolated by Scottish physician Daniel Rutherford in 1772.
 - It is an essential element for life and is the fourth most abundant element in the living biomass.
 - Carbon dioxide is a colourless and non-flammable gas at normal temperature and pressure.
 - Helium is the second lightest and second most abundant element in the observable universe.

92. D

- Sol.
- Article 153 of the Constitution of India provides that there will be Governors of States.
 - Article 124 deals with the Establishment and constitution of the Supreme Court.
 - Article 136 of the Indian Constitution deals with a special jurisdiction that has been granted to the Supreme Court, the Apex court in India.
 - Article 148 says that there shall be a Comptroller and Auditor-General of India.
 - The governor of a state is appointed by the president of India.
 - The primary function of the governor is to preserve, protect and defend the constitution.

93. D

- Sol.
- Yuki Bhambri became the first Indian to win the under-18 title in the Orange Bowl tournament in 2008.
 - He is the first Indian to win the junior Australian Open title and the fourth Indian in history to capture a junior singles title at a Grand Slam championship.
 - Leander Paes is regarded as one of the greatest tennis players in doubles.
 - Manas Dhamne has been the shining light of Indian Junior Tennis over the past couple of years.
 - The Orange Bowl tournament was founded in 1947 by Eddie Herr of Miami Beach.

94. A

- Sol.
- The Foreign Exchange Management Act (FEMA) was enacted to replace the Foreign Exchange Regulation Act (FERA) in 1999.
 - FEMA is an Act of the Parliament of India "to consolidate and amend the law relating to foreign exchange.
 - The main objective is to facilitate external trade and payments and for promoting the orderly development and maintenance of the foreign exchange market in India.
 - FERA is an act of the Parliament of India to consolidate and amend the law relating to foreign exchange.
 - It was passed to regulate the financial transactions concerning foreign exchange and securities.

95. C

- Sol.
- The kinetic and potential energies of a body are the components of its mechanical energy.
 - Mechanical energy is the energy that is possessed by an object due to its motion or due to its position.
 - Electrical energy is the energy derived from the electric potential energy or kinetic energy of the charged particles.
 - Heat energy is a form of energy that is transferred from a substance having a higher temperature to a substance having a lower temperature.
 - Chemical energy is the energy of chemical substances that are released when they undergo a chemical reaction and transform into other substances.

96. D

- Sol.
- Small Industries Development Bank of India is the full form of SIDBI.
 - It is the apex regulatory body for the overall licensing and regulation of micro, small and medium enterprise finance companies in India.

- It is under the jurisdiction of the Ministry of Finance, Government of India.
- It also coordinates the functions of institutions engaged in similar activities.
- It was established on 2 April 1990, through an Act of Parliament.
- It is the Primary Financial Institution for promoting, developing and financing the MSME sector.

97. B

- Sol. • Churahi, Mandeali and Keonthali are dialects spoken in the state of Himachal Pradesh.
• Himachal Pradesh is the northernmost state of India and It is also known as Dev Bhoomi.
• Uttar Pradesh is the most populated state in India and the most populous country subdivision in the world.
• Madhya Pradesh is the second-largest Indian state by area and the fifth largest state by population.
• Arunachal Pradesh is the largest of the Seven Sister States of Northeast India by area.

98. A

- Sol. • Gheriya Nritya belongs to Gujarat.
• It is performed by all the males wrapping saree as dhoti and dupatta.
• Gujarat is the fifth-largest Indian state by area and the ninth-largest state by population.
• It is renowned for its beaches, temple towns and historic capitals, wildlife sanctuaries, hill resorts and natural grandeur.
• Maharashtra is the second-most populous state in India and the second-most populous country subdivision globally.
• It is one of the most industrialised in India and It is among the most developed Indian states.

99. D

- Sol. • 'Chad Sukra', a popular traditional dance festival of Meghalaya, is celebrated as a sowing festival.
• It is a spring festival and in many cultures, spring has been celebrated in accordance with the rites and rituals revolving around its importance in food production.
• It is a community festival celebrated every year by the Pnar people of Jaintia Hills in Meghalaya.
• It is a festival of joy and it is celebrated before sowing of seeds.
• It is the festival observed by the Pnar people in the middle of April or the first week of May.

- Meghalaya is famous for its wide variety of orchids, medicinal plants, exotic fruits and vegetables.

100. D

- Sol.
- Aravind Adiga is the author of the book 'Amnesty'.
 - Shashi Tharoor was a pioneer in using social media as an instrument of political interaction.
 - Amish Tripathi is known for his book series Shiva Trilogy and Ram Chandra Series.
 - He is a recognized Indian author and he is known for his best writing books.
 - Vikram Seth is among the most celebrated Indian novelists and poets.
 - He has published eight books of poetry and three novels.

Mock Test Solutions in Hindi

Questions

1. **Direction:** The given sentence contains a grammatical error. Identify the segment that contains the error.

Gopi's father asked him not stay out late again.

2. **Direction:** Select the most appropriate synonym of the given word.

CONCLUDE

- A. End
 - B. Include
 - C. Open
 - D. Exclude

3. **Direction:** The given sentence contains a grammatical error. Identify the segment that contains the error.

"You can meet me always you like," our teacher told us.

- 4. Direction:** Select the most appropriate word which means the same as the group of words given.

Something that is given to counter the effect of poison

- | | |
|-------------|---------------|
| A. Antidote | B. Antibiotic |
| C. Medicine | D. Artichoke |

- 5. Direction:** Select the most appropriate option to fill in the blank.

Let us go to the museum, _____?

6. **Direction:** Select the most appropriate option to substitute the underlined segment in the given sentence.

Don't forget post these letters.

- C. to posting D. Posted

7. **Direction:** Select the most appropriate ANTONYM of the given word.

AGREE
A. Distance B. Support
C. Question D. Oppose

8. **Direction:** 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'.

If the world was to end tomorrow, why would you spend your day today?
A. when would B. how would
C. what would D. No substitution required

9. **Direction:** The given sentence contains a grammatical error. Identify the segment that contains the error.

The man whose sitting at the corner table is my uncle.
A. whose sitting B. is my uncle
C. at the corner table D. The man

10. Choose the correctly spelt word.

A. Sandwish B. Sandwich
C. Sandwitch D. Standwich

11. **Direction:** Select the most appropriate option to fill in the blank.

I had to go to the ATM _____ some money.
A. by getting B. to get
C. to getting D. for to get

12. **Direction:** 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'.

There is many food for all of us.
A. is enough food B. No substitution required
C. are much food D. are plenty foods

13. **Direction:** Select the most appropriate meaning of the given idiom.

Carry on

- A. Continue doing something
- B. Throw something away
- C. Take someone or something away
- D. Put something into action

14. **Direction:** Select the most appropriate ANTONYM of the given word.

EAGER

- A. Different
- B. Easier
- C. Indifferent
- D. Loveable

15. **Direction:** Select the most appropriate meaning of the given idiom.

Fall for

- A. To be supported by
- B. To be tricked or fooled by
- C. To invite someone
- D. To fall down and injure oneself

16. Choose the correctly spelt word.

- A. Disendant
- B. Decendent
- C. Desendent
- D. Descendant

17. **Direction:** Select the most appropriate word to fill in the blank.

The workers who returned _____ during the lockdown did not go back to work.

- A. hope
- B. house
- C. office
- D. Home

18. **Direction:** Select the most appropriate word which means the same as the group of words given.

Breathe hard and with difficulty

- A. Pant
- B. Cough
- C. Strangle
- D. Choke

19. **Direction:** Select the most appropriate synonym of the given word.

OBSTRUCTION

- A. Guesswork
- B. Construction
- C. Destruction
- D. Hindrance

20. **Direction:** Select the most appropriate word to fill in the blank.

Until recently, the village women _____ water from common wells or hand pumps, but now they have water taps.

- A. sold
 - B. fetched
 - C. bought
 - D. Threw

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.

According to a news report, a former captain of the Indian wheelchair cricket team has now been forced to (1) _____ as a labourer to support his family. In the context of the Covid-19 pandemic and lockdown, the children he used to (2) _____ earlier have stopped coming to him for a few months. Their parents said there was no money to pay for their (3) _____. Before the lockdown, he was giving coaching to wheelchair-bound children who were (4) _____ in playing cricket. The coach has now returned to his village where his old parents live. He said to the reporter who interviewed him, "These are difficult times, but I know I will be able to (5) _____ them," with a smile on his face.

Select the most appropriate option to fill in blank no. 1

- | | |
|--------------|----------|
| A. supervise | B. work |
| C. employ | D. Serve |

22. Select the most appropriate option to fill in blank no. 2

- A. coach
 - B. learn
 - C. teach
 - D. study

23. Select the most appropriate option to fill in blank no. 3

- A. employment
 - B. training
 - C. schooling
 - D. studies

24. Select the most appropriate option to fill in blank no. 4

25. Select the most appropriate option to fill in blank no. 5

- A. lose
 - B. overcome
 - C. excel
 - D. Win

ਈਧਨ : ਡੀਜਲ : : ਬਰ्टਨ : ?

- A. चम्मच B. लोहा
C. रसोईधर D. इस्पाल

28. निम्नलिखित में से कौन सा अक्षर-समूह दी गई शब्दखला में प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगा?

LOK, JMI, HKG, FIE, ?

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

$$9 : 90 :: 15 : ?$$

30. सात मित्रों अर्थात् A, B, C, D, E, F और G में से, B केवल चार अन्य मित्रों से लम्बा है। C, D से लम्बा है। A, F से लम्बा है। E केवल एक व्यक्ति से लम्बा है जो G है, जो सभी मित्रों में सबसे छोटा है। B, A से लम्बा है। सभी मित्रों में सबसे लम्बा कौन है?

31. दिए गए पैटर्न का ध्यानपूर्वक अध्ययन करें और उस संख्या का चयन करें जो उसमें प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित कर सकती है।

15	14	220
20	18	290
11	40	?

C. 340

D. 310

32. 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।

TEMPO : TPOME :: DOLPHIN : ?

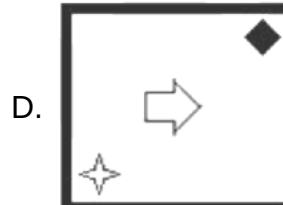
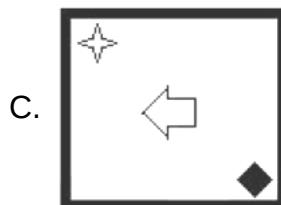
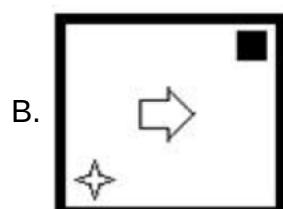
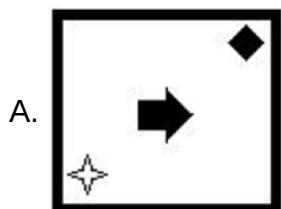
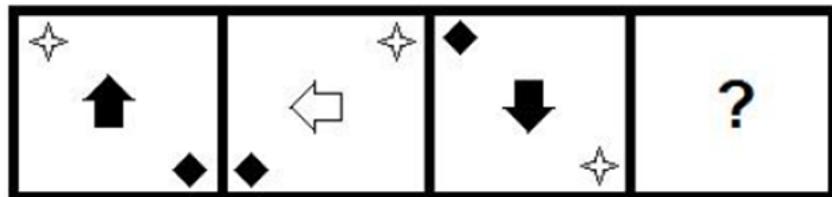
A. PNOILHD

B. EPMQIJO

C. PONLIHD

D. ROMLIKD

33. उस विकल्प का चयन करें जो निम्नलिखित आकृति शरूंखला में प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगा।



34. उस विकल्प का चयन करें जिसमें दी गई आकृति (X) उसके भाग के रूप में अंतर्निहित है (रोटेशन की अनुमति नहीं है)।





35. यदि A 'जोड़' को दर्शाता है, B 'गुणा' को दर्शाता है, C 'घटा' को दर्शाता है, और D 'भाग' को दर्शाता है, तो निम्नलिखित अभिव्यक्ति का मान क्या होगा?

14 B (18 D 3) A 5 B 7 C 12 B (24 D 4)

A. 47

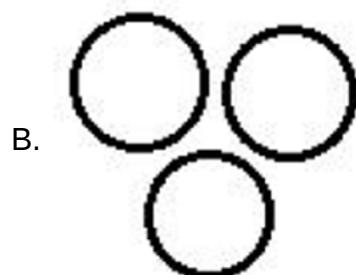
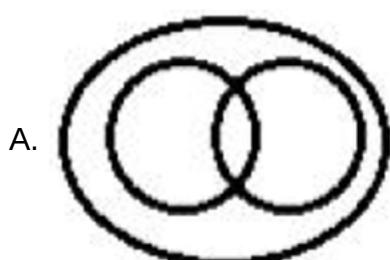
B. 77

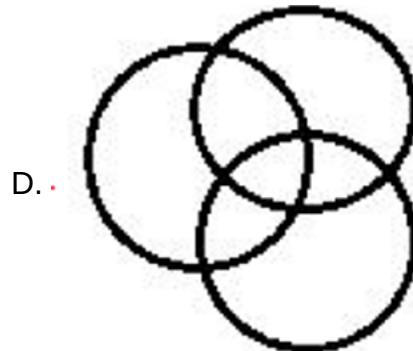
C. 41

D. 53

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

पश्च, छिपकली, ऑक्टोपस









कथनः

कुछ डायरीज़, बुक्स हैं।

कुछ बक्स, रजिस्टर हैं।

निष्कर्ष-

- I. कुछ रजिस्टर, डायरीज हैं।
 - II. सभी रजिस्टर, डायरीज हैं।

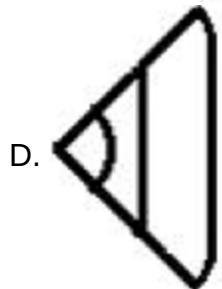
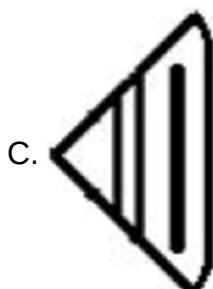
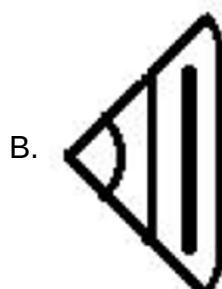
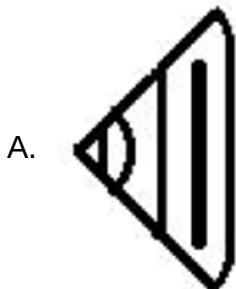
A. केवल निष्कर्ष I। अनुसरण करता है

C. न तो निष्कर्ष I। न ही II। अनुसरण करता है

B. दोनों निष्कर्ष I। और II। अनुसरण करते हैं

D. केवल निष्कर्ष II। अनुसरण करता है

44. उस विकल्प का चयन करें जो पैटर्न को पूरा करने के लिए नीचे दी गई आकृति में प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगा।



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

$$14 + 32 - 56 \div 28 \times 5 = 40$$

A. 28 और 32

B. 5 और 14

C. 14 और 32

D. 28 और 14

46. दो कथनों के बाद तीन निष्कर्ष संख्या I, II और III दिए गए हैं। कथनों को सत्य मानते हुए, भले ही वे सामान्यतः ज्ञात तथ्यों से भिन्न प्रतीत होते हों, निर्णय लें कि कौन सा/से निष्कर्ष दिए गए कथनों का तार्किक रूप से अनुसरण करता है/हैं।

कथन:

सभी शॉप, पार्क हैं।

कुछ शॉप, स्कूल हैं।

निष्कर्ष:

I. कुछ पार्क, स्कूल हैं।

II. कोई स्कूल, पार्क नहीं है।

III. कुछ पार्क, शॉप हैं।

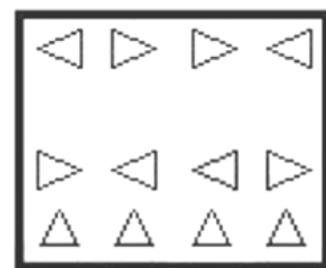
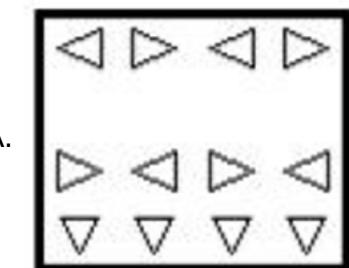
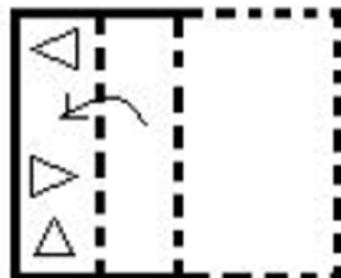
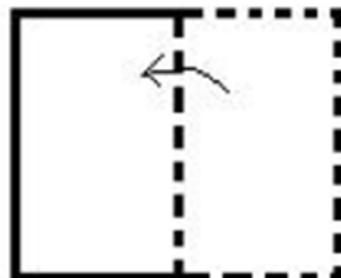
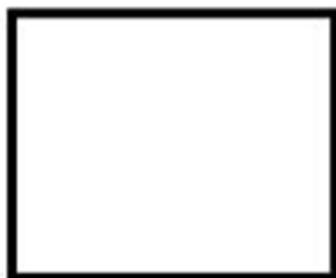
A. केवल निष्कर्ष I और III अनुसरण करते हैं

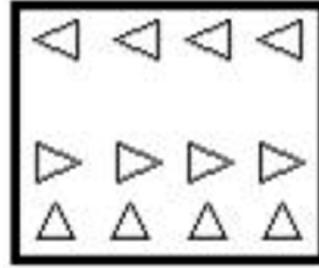
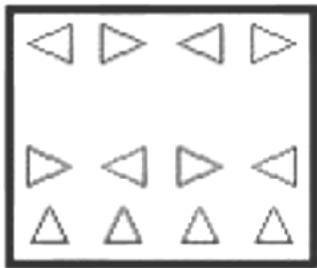
C. केवल निष्कर्ष I और II अनुसरण करते हैं

B. केवल निष्कर्ष II और III अनुसरण करते हैं

D. सभी निष्कर्ष अनुसरण करते हैं

47. नीचे दर्शाए अनुसार एक कागज को मोड़ा और काटा जाता है। कागज को खोले जाने पर यह कैसा दिखाई देगा?





C.

D.

48. उस विकल्प का चयन करें जो तीसरे शब्द से उसी प्रकार संबंधित है जिस प्रकार दूसरा शब्द पहले शब्द से संबंधित है।

मोतियाबिंद : आंखें :: एकिजमा : ?

A. एलर्जी

B. जोड़

C. खुजली

D. त्वचा

49. एक निश्चित कूट भाषा में, 'FORCE' को '641832' के रूप में तथा 'MIST' को '1331920' के रूप में लिखा जाता है। उसी भाषा में 'URANUS' को किस प्रकार लिखा जाएगा?

A. 618114618

B. 518113519

C. 518114519

D. 218132119

50. छह मित्र अर्थात् K, L, M, N, O और P दो पंक्तियों में बैठे हैं; दोनों पंक्तियों के मुख उत्तर की ओर हैं। पहली पंक्ति में चार मित्र हैं, जबकि दूसरी पंक्ति में दो मित्र हैं। L, O और P के मध्य में बैठा है। M, O के ठीक पीछे है। N, L के ठीक पीछे है। K और P के पीछे कोई नहीं बैठा है, जो कोनों पर बैठे हैं। इनमें से कौन पहली पंक्ति में बैठा है?

A. P, L, N और K

B. K, L, O और P

C. K, L, P और M

D. M, N, L और P

51. (1, 2, 7) और (14, 16, 2401) के चतुर्थानुपाती के बीच मध्यानुपात ज्ञात करें?

A. 224

B. 196

C. 14

D. 392

52. X एक निश्चित कार्य का आधा और Y इसका एक-तिहाई कार्य क्रमशः 5 और 10 दिनों में कर सकते हैं। एक साथ कार्य करते हुए, वे कितने दिनों में इस कार्य का दोगुना पूरा कर सकते हैं?

A. $16\frac{1}{2}$

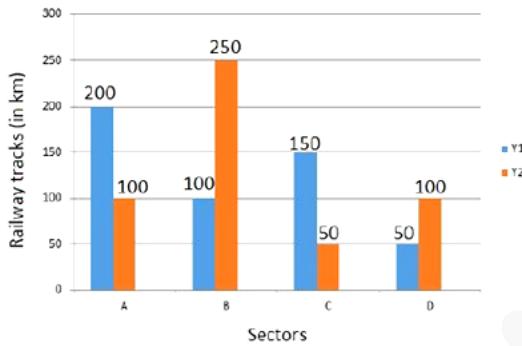
B. $7\frac{1}{2}$

C. 15

D. 16

53. **निर्देश:** दिए गये बार ग्राफ का अध्ययन करें और नीचे दिए गए प्रश्न का उत्तर दें।

लगातार दो वित्तीय वर्षों Y1 और Y2 के दौरान चार रेलवे सेक्टर A, B, C, D में नए रेलवे ट्रैक (किमी में) के निर्माण की सीमा दिए गए बार ग्राफ के माध्यम से प्रस्तुत की गई है।



Y1 और Y2 से D की तुलना में B के लिए Y1 से Y2 तक रेलवे ट्रैक की लंबाई में प्रतिशत वृद्धि कितनी अधिक है?

- | | |
|--|--------------------|
| A. 25 | B. 100 |
| C. 40 | D. 50 |
| Y2 के दौरान A, B, D की औसत ट्रैक लंबाई (किमी में) Y1 में C की तुलना में कितनी अधिक या कम है? | |
| A. 100 कम | B. 33.33 अधिक |
| C. न तो अधिक न तो कम | D. 50 कम |
| निम्नलिखित व्यंजक को सरल करें: | |
| $4 - \left(1 \frac{1}{2} + \frac{1}{3} \div 4 \text{ का } \frac{1}{2} - \frac{1}{4} \right) \text{ का } 3$ | |
| A. - 8 | B. $\frac{17}{12}$ |
| C. $-\frac{1}{4}$ | D. $\frac{19}{4}$ |
| एक फुटकर विक्रेता ने थोक बाजार से 50 किग्रा सब्जी खरीदी। उसने इसका आधा हिस्सा 450 रुपये के लाभ पर और शेष को 275 रुपये की हानि पर बेच दिया। तो सब्जी के प्रति किग्रा दोनों विक्रय मूल्यों के बीच अंतर (रुपये में) कितना था? | |
| A. 29 | B. 18 |
| C. 7 | D. 12 |
| $5 \frac{6}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{3}{2} - \frac{1}{5} - \frac{1}{3} \right) \right\} \right] \text{ का मान ज्ञात करें।}$ | |
| A. $\frac{2}{29}$ | B. $\frac{4}{29}$ |
| C. $\frac{3}{29}$ | D. $\frac{1}{29}$ |
| समान क्षमता के तीन जग दूध और पानी के मिश्रण से 3:1, 7:1 और 11:5 के अनुपात में भरे जाते हैं, यदि इन तीनों जग को एक कंटेनर में खाली कर दिया जाता है। तो इस कंटेनर में पानी और दूध का अनुपात क्या होगा? | |
| A. 14 : 45 | B. 11 : 37 |

- C. 12 : 41 D. 15 : 49

59. औसत निर्धारित करने के लिए N क्रमागत सम संख्याओं को सूचीबद्ध करते समय, अंतिम संख्या, गलती से, अगली विषम संख्या से बदल गई और इस तरह औसत वांछित मान से 0.0125 अधिक हो गया। तो N का मान ज्ञात करें?

A. 80 B. 40
C. 50 D. 100

60. यदि 16,000 रुपये की राशि चक्रवृद्धि ब्याज पर निवेश की गई और दो वर्षों में यह राशि 21,160 रुपये हो जाती है। तो प्रति वर्ष ब्याज की दर प्रतिशत ज्ञात करें?

A. 16.5 B. 17.5
C. 15 D. 10

61. यदि एक आयत की एक भुजा और एक विकर्ण की लंबाई क्रमशः 63 सेमी और 65 सेमी है। तो उस वर्ग का परिमाप (सेमी में) क्या होगा जिसका क्षेत्रफल आयत के क्षेत्रफल का सातवां हिस्सा है?

A. 36 B. 64
C. 24 D. 48

62. 800 और 900 के बीच कौन सी संख्या ऐसी है कि जब इसे 34 और 51 में से किसी एक से विभाजित किया जाता है, तो शेष 19 बचता है?

A. 887 B. 821
C. 835 D. 869

63. एक दुकानदार एक वस्तु को उसके अंकित मूल्य पर 14% की छूट देकर बेचता है और फिर भी वह 20% का लाभ प्राप्त करता है। यदि वस्तु का क्रय मूल्य 184,90 रुपये है, तो उसका अंकित मूल्य ज्ञात करें?

A. 264 रुपये B. 272 रुपये
C. 278 रुपये D. 258 रुपये

64. यदि एक ठोस लम्ब वृत्तीय शंकु का कुल पृष्ठीय क्षेत्रफल समान त्रिज्या के एक गोले के बराबर है। तो शंकु की ऊंचाई गोले के व्यास की कितनी गुना है?

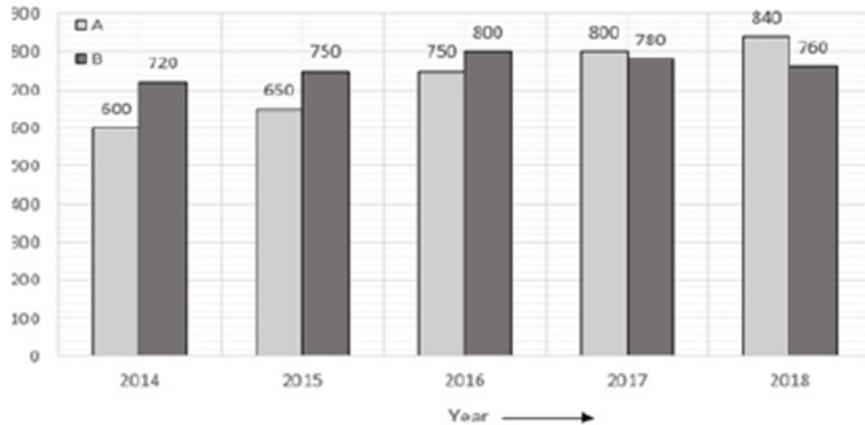
A. $\sqrt{2}$ B. $\sqrt[3]{2}$
C. $2\sqrt{2}$ D. $\frac{\sqrt{2}}{2}$

65. x और y दो संख्याएँ हैं जिनमें विपरीत चिह्न इस प्रकार हैं कि $x_2:y_2 = 49:64$ है। तो $(5x - 6y):(6x - 7y)$ का मान ज्ञात करें?

A. 44 : 65 B. 13 : 14
C. 94 : 117 D. 83 : 98

66. दिए गए ग्राफ का अध्ययन करें और नीचे दिए गए प्रश्न का उत्तर दें।

Number of students enrolled in colleges A and B during
2014 to 2018



2014, 2015 और 2017 में कॉलेज B में नामांकित छात्रों की औसत संख्या और 2014 में कॉलेज A में नामांकित छात्रों की संख्या का अनुपात ज्ञात करें?

C. 11

D. 12

71. यदि किसी विशेष लेनदेन के मामले में, अर्जित लाभ $14\frac{2}{7}\%$ है। तो विक्रय मूल्य का लागत मूल्य निम्न में से कितना भिन्न है?

A. $\frac{1}{7}$ B. $\frac{8}{7}$ C. $\frac{7}{8}$ D. $\frac{1}{8}$

72. एक आदमी को 49 किमी की यात्रा करनी थी, जिसे उसने इस यात्रा को छह हिस्सों में विभाजित किया जो कि 4 किमी या 5 किमी की गुणज में थी। पहले चार हिस्से 4 किमी, 5 किमी, 8 किमी और 10 किमी थे। 4 किमी और 5 किमी के गुणजों को क्रमशः 40 और 60 किमी/घंटा की दर से तय किया गया था और लगातार दो हिस्सों के बीच, उसने छह मिनट के लिए आराम किया था। तो इस पूरी यात्रा में उसकी औसत गति (किमी/घंटा में) कितनी थी?

A. $31\frac{7}{11}$ B. $32\frac{4}{13}$ C. $33\frac{3}{8}$ D. $34\frac{4}{15}$

73. तीन वृत्त, जिनमें से प्रत्येक की त्रिज्या 4 सेमी के बराबर है, केंद्र के रूप में एक समबाहु त्रिभुज के शीर्षों के साथ खींचे गए हैं। यदि त्रिभुज की प्रत्येक भुजा की लंबाई 8 सेमी के बराबर है, तो त्रिभुज के उस भाग का क्षेत्रफल (सेमी^2 में) क्या होगा जो वृत्तों के त्रिज्यखंडों द्वारा घिरा हुआ नहीं है?

A. $16(2\sqrt{3} - \pi)$ B. $8(2\sqrt{3} - \pi)$ C. $8\left(2\sqrt{3} - \frac{\pi}{2}\right)$ D. $16\left(2\sqrt{3} - \frac{\pi}{2}\right)$

74. एक आदमी 1 जनवरी 2019 को अपने दोस्त से 6,000 रुपये का ऋण इस शर्त के साथ लेता है कि वह इस ऋण को 6.25% की दर से अर्जित साधारण ब्याज के साथ चुकाएगा, तो जब यह ब्याज 75 रुपये तक पहुंच जाएगा, तो ऋण की अवधि किस तिथि को समाप्त होगी?

A. 14 फरवरी 2019

B. 15 जनवरी 2020

C. 20 अक्टूबर 2019

D. 15 मार्च 2019

75. यदि एक स्टीमर और एक मोटर बोट क्रमशः 7 घंटे 20 मिनट और 10 घंटे 40 मिनट में एक बंदरगाह और एक डॉक के हिस्से को तय करते हैं। तो उनकी गति का अनुपात निम्न में से क्या होगा?

A. 15:11

B. 3:2

C. 16:11

D. 8:5

76. किस देश ने पहला कृतिरम उपग्रह स्पुतनिक 1 लॉन्च किया?

A. यूएसएसआर

B. फ्रांस

C. यूएसए

D. जर्मनी

77. पौधे का कौन सा भाग कार्बन डाइऑक्साइड को ग्रहण करने की अनुमति देता है और वाष्णीकरण के कारण पानी की हानि को सीमित करता है?

A. लैमिना

B. स्टाइप्पल

C. स्टोमेटा

D. पेटिओल

78. एशिया के सबसे पुराने अखाड़े में से एक 'रंग घर', , _____ वंश के राजा द्वारा बनाया गया था।

A. सेन

B. अहोम

C. मुगल

D. गुप्ता

79. रामागुंडम विद्युत संयंत्र निम्नलिखित में से किसके उत्पादन के लिए प्रसिद्ध है?

A. जलविद्युत

B. परमाणु ऊर्जा

C. तापीय ऊर्जा

D. बायो-गैस

80. भारतीय कम्युनिस्ट पार्टी - मार्क्सवादी (CPI-M) का गठन किस वर्ष हुआ था?

A. 1951

B. 1964

C. 1962

D. 1972

81. निम्नलिखित में से कौन 'डॉलर बहू' पुस्तक के लेखक हैं?

A. तस्लीमा नसरीन

B. झुंपा लाहिड़ी

C. सुधा मूर्ति

D. अरुंधति रॉय

82. निम्नलिखित में से कौन भारत सरकार से पद्म शशी पुरस्कार प्राप्त करने वाले पहले खिलाड़ी रहे हैं?

A. बलबीर सिंह दोसांझ

B. मिल्खा सिंह

C. मनप्रीत सिंह

D. धनराज पिल्ले

83. किस भारतीय अभिनेता ने 2020 का 'रशियन ऑडियंस हार्ट' पुरस्कार जीता है?

A. प्रभास

B. रणवीर सिंह

C. सलमान खान

D. महेश बाबू

84. निम्नलिखित में से कौन मानव शरीर में इलेष जोड़ नहीं है?

A. कॉन्डिलॉइड जोड़

B. टांके का जोड़

C. उलखूल जोड़

D. काज जोड़

85. जुलाई 2020 तक, जिन कर्मचारियों का मासिक वेतन _____ या उससे कम है, वे ईएसआई अधिनियम के तहत आते हैं।

A. 21,000 रुपये

B. 17,000 रुपये

C. 25,000 रुपये

D. 15,000 रुपये

86. 'पुकोड़ झील' भारत के किस राज्य में स्थित है?

A. पंजाब

B. गुजरात

C. केरल

D. तमिलनाडु

87. पहला ब्रिटिश कारखाना 1651 में _____ नदी के तट पर स्थापित किया गया था।

A. मंडोवी

B. नर्मदा

C. गोदावरी

D. हुगली

88. 'वीनिया जलप्रपात' भारत के किस राज्य में स्थित है?
- A. सिविकम
C. मेघालय
- B. हिमाचल प्रदेश
D. गोवा
89. हम्पी का प्राचीन शहर _____ साम्राज्य की राजधानी था।
- A. राष्ट्रकूट
C. मराठा
- B. नायक
D. विजयनगर
90. पंचायती राज संस्थाओं में मध्यवर्ती स्तर को क्या कहते हैं?
- A. ग्राम पंचायत
C. पंचायत समिति
- B. क्षेत्र पंचायत
D. जिला पंचायत
91. निम्नलिखित में से कौन प्राकृतिक गैस का प्राथमिक घटक है?
- A. हीलियम
C. नाइट्रोजन
- B. कार्बन डाइऑक्साइड
D. मीथेन
92. भारत के संविधान के किस अनुच्छेद में राज्यों के राज्यपाल होने का प्रावधान है?
- A. 136
C. 124
- B. 148
D. 153
93. _____ 2008 में ऑरेंज बाउल टूर्नामेंट में अंडर-18 खिताब जीतने वाले पहले भारतीय बने।
- A. रोहन बोपन्ना
C. लिएंडर पेस
- B. मानस धामने
D. युकी भांबरी
94. विदेशी मुद्रा विनियमन अधिनियम (FERA) को बदलने हेतु किस वर्ष विदेशी मुद्रा प्रबंधन अधिनियम (FEMA) अधिनियमित किया गया था?
- A. 1999
C. 2014
- B. 1988
D. 1992
95. किसी पिंड की गतिज और स्थितिज ऊर्जा उसकी _____ ऊर्जा के घटक हैं।
- A. रासायनिक
C. यांत्रिक
- B. विद्युत
D. तापीय
96. सिडबी (SIDBI) का पूर्ण रूप क्या है?
- A. सर्विस इंडस्ट्रीज डेवलपमेंट बैंक ऑफ इंडिया (Service Industries Development Bank of India)
- C. स्मॉल इन्वेस्टमेंट डेवलपमेंट बैंक ऑफ इंडिया (Small Investment Development Bank of India)
- B. सर्विस इन्वेस्टमेंट डेवलपमेंट बैंक ऑफ इंडिया (Service Investment Development Bank of India)
- D. स्मॉल इंडस्ट्रीज डेवलपमेंट बैंक ऑफ इंडिया (Small Industries Development Bank of India)
97. चुराही, मंडेली और क्योंथली किस राज्य में बोली जाने वाली बोलियाँ हैं?

A. मध्य प्रदेश

C. उत्तर प्रदेश

B. अरुणाचल प्रदेश

D. हिमाचल प्रदेश

98. 'धेरिया नृत्य' किस राज्य से संबंधित है?

A. गुजरात

C. पंजाब

B. महाराष्ट्र

D. हरियाणा

99. मेघालय का एक लोकप्रिय पारंपरिक नृत्य उत्सव 'चाड सुकरा', , _____ के रूप में मनाया जाता है।

A. सामुदायिक विवाह उत्सव

C. जन्म उत्सव

B. धन्यवाद उत्सव

D. बुवाई उत्सव

100. निम्नलिखित में से कौन 'एमनेस्टी' पुस्तक के लेखक हैं?

A. विक्रम सेठ

C. शशि थरूर

B. अमीश तिरपाठी

D. अरविंद अडिगा

Solutions

1. B

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

- We use “to + infinitive” after the verbs like ask, attempt, beg.

For example: Anyone with information is **asked to contact** the police.

- In the given sentence, we have erroneously used the bare infinitive form after the verb “asked”. We have to use the infinitive structure after the verb “asked” so that it can be used as an object of verb. Thus, “to” should be added after verb “asked”.
- Hence, “**not to stay out**” is the correct substitution.

Thus, the correct sentence will be: **Gopi's father asked him not to stay out late again.**

2. A

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

Conclude= to decide or believe something as a result of what you have heard or seen.

E.g.: It is too early for us to **conclude** anything.

End = to finish

E.g.: The problems did not **end** there.

Include = to make someone/something part of something.

Open = to spread out or unfold.

Exclude = to deliberately not include something in what you are doing or considering.

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

3. B

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

- The adverb “always” means every time or all the time. It is an adverb of frequency. We put the adverb of frequency near the verb is qualifies. And there is no such verb near it. Thus, it is grammatically incorrect here.
- “Whenever” as a conjunction is used to show “at any time that” or “on any occasion that”.

For example:

You can ask for help **whenever** you need it.

- In the given sentence, we have two clauses identified by the usage of two verbs: “meet” and “like”. But we haven’t connected these clauses using any proper conjunction that refers to “any time”. Thus, conjunction “whenever” should be used.
- Hence, “**whenever you like**” is the correct substitution.

Thus, the correct sentence will be:

“You can meet me whenever you like,” our teacher told us.

4. A

Sol. Antidote: a substance that controls the effects of a poison or disease.

Antibiotic: a substance that can control or prevent the growth of bacteria and cure infections.

Medicine: the study and treatment of diseases and injuries.

Artichoke: a round vegetable with a lot of thick green leaves.

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

5. B

Sol. • Tag questions (or question tags) turn a statement into a question. They are often used for checking information that we think we know is true.
• Tag questions are made using an auxiliary verb and a subject pronoun.
• Usually, if the main clause is positive, the question tag is negative, and if the main clause is negative, its question tag is positive.
• With 'let us', we use the tag 'shall we'.

Thus, the correct sentence will be:

Let us go to the museum, shall we?

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

6. B

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

- The underlined part needs correction in the structure of the verb.
- After the verb "forget", we use either "infinitive" or "gerund". But they convey different meanings.
- When the verb "forget" is followed by an infinitive, the infinitive refers to an action happening at the same time of the main verb, or later.

For example:

You **forgot to sign** the cheque.

- When the verb “forget” is followed by a gerund, the gerund refers to an action that happened earlier than the main verb.

For example: I remember locking the door.

- In the given sentence, we don’t need the sense of “memories of past”. The sentence reflects the necessary action that will be done in the near future i.e. “to post” the letters. Thus, the infinitive structure “to post” should be used in place of the bare infinitive “post”.

- Hence, “**to post**” is the correct substitution.

Thus, the correct sentence will be: **Don’t forget to post these letters.**

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

7. D

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

Agree= to have the same opinion as someone

E.g.: You can't expect them to **agree** on everything.

Distance = to become less involved or connected with someone/something.

Support = to help or encourage someone/something by saying or showing that you agree with them/it.

Question = to ask someone questions about something.

Oppose = to disagree strongly with someone's plan, policy etc. and try to change it or prevent it from succeeding.

E.g.: Our party will bitterly **oppose** the re-introduction of the death penalty.

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

8. B

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

- “How” as an adverb is used to show “in what way or manner”.

For example:

He did not know **how** he ought to behave.

I will show you **how** to load the software.

- “Why” as an adverb is used in questions to ask the reason for or purpose of something.

For example:

Tell me **why** you did it.

Why were you late?

- In the given sentence, we don't need the reason for the action verb “spend”. We need a manner in which you will spend your day today if there is a condition that world is going to be end tomorrow. The sense of “manner” is implicit from the structure of conditional sentences that put forward the probable result i.e. “action” in the main clause based on condition mentioned in conditional clause. Thus, adverb of manner “how” should be used in place of adverb “why”.

- Hence, “**how would**” is the correct substitution.

Thus, the correct sentence will be:

If the world was to end tomorrow, how would you spend your day today?

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

9. A

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

- “Who” as a relative pronoun is used for persons.

For example:

Only those **children who** are below fifteen can take part in this competition.

- “Whose” as a relative pronoun is used in questions to ask who something belongs to. It is also used to say which person or thing you mean.

For example:

He is a man **whose** opinion I respect.

- In the given sentence, it is erroneous to use “whose” because here we don’t need a possessive form. Thus, relative pronoun “who” should be used to refer the antecedent “man”, followed by the verb “is”.
- Hence, “**who is sitting**” is the correct substitution.

Thus, the correct sentence will be:

The man who is sitting at the corner table is my uncle.

10. B

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

“Sandwich” is the correct spelling. It means two slices of bread, often spread with butter, with a layer of meat, cheese etc. between them.

11. B

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

- *By getting* = is “preposition + Gerund structure”.
- *To get* = is a part of infinitive clause.
- *To getting* = is a “preposition + Gerund structure”.
- *For to get* = is a “preposition + infinitive structure”.

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

- “*By getting*” is “preposition + Gerund structure”. The preposition “by” is used to show how or in what way something is done. Thus, option A is incorrect.
- “*To getting*” is a “preposition + Gerund structure”. The preposition “to” is used to show “in the direction of something”. Thus, option C is incorrect.
- “*For to get*” is an incorrect structure. Thus, option D is incorrect.
- “*To get*” is a part of infinitive clause (“to go to...money”). It used as complement after verb “be” (“Had”). Here in the given sentence, infinitive clause is used as complement to show “where” subject “I” is going and the “purpose” of “going”.

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

Thus, the correct sentence will be:

I had to go to the ATM to get some money.

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

12. A

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

- The underlined part needs correction in the structure of adjective (determiner).
- “Many” as a determiner is used with plural nouns and verbs to mean “large number of” in negative sentences.

For example:

Many people felt that the law should be changed.

- “Enough” as a determiner is used before plural or uncountable nouns to mean “as many or as much as someone needs or wants”

For example:

Have you made **enough** copies?

- In the underlined part of the sentence, “food” is an uncountable noun but we have used “many” as a determiner which is used for countable nouns.
- Also, in case of sentences that start with empty subjects (like “There”, “It”), the verb is used in accordance with the complement i.e. “food” here. “Food” being an uncountable noun will take the singular verb “is”.

Thus, the usage of “is” is correct in the underlined part.

- Hence, “**is enough food**” is the correct substitution.

Thus, the correct sentence will be:

There is enough food for all of us.

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

13. A

Sol. The idiom “**Carry on**” means to continue doing something.

Example: **Carry on** with your work while I am away.

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

14. C

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

Eager= very interested and excited by something that is going to happen or about something that you want to do.

E.g.: Everyone in the class seemed **eager** to learn.

Different = not the same as someone/something.

Easier = comparatively not difficult.

Indifferent = having or showing no interest on someone/something.

E.g.: The government cannot afford to be **indifferent** to public opinion.

Loveable = having qualities that people find attractive and easy to love, often despite any faults.

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

15. B

Sol. The idiom “**Fall for**” means to be tricked into believing something that is not true.

Example: I am surprised you **fell for** that trick.

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

16. B

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

“Descendant” is the correct spelling. A person’s descendants are their children, their children’s children, and all the people who live after them who are related to them.

17. D

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

- *Hope* = a feeling of wanting and expecting a particular thing to happen.
- *House* = a building for people to live in.
- *Office* = a room, set of rooms or building where people work usually sitting at desks.
- *Home* = the house or flat that you live in, especially with your family.

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

- “*Hope*” as a noun is used in context of “expecting a particular thing to happen”. Thus, option A is incorrect.
- “*House*” as a noun is used in context of “physical structure where people live in”. But here, we don't need the context of physical architecture. Thus, option B is incorrect.
- “*Office*” as a noun is used in context of “place where people work”. Thus, option C is incorrect.
- “*Home*” as a noun is used in context of “place where someone lives with his/her family”. Here in the given sentence, it is used to mention the sense of belongingness of workers to a place i.e. “Home”. Note: We use “House” only when sentence is referring to some “architectural aspect”. Otherwise, we use “Home” to show the “attachment” where someone lives in.

Thus, “*Home*” becomes the correct word to fill in the blank.

Thus, the correct sentence will be:

The workers who returned home during the lockdown did not go back to work.

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

18. A

Sol. Pant: to breathe quickly with short breaths.

Cough: to force out air suddenly and noisily through your throat.

Strangle: to kill someone by pressing their throat and neck hard.

Choke: to be unable to breathe because the passage to your lungs is blocked or you cannot get enough air.

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

19. D

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

Obstruction= the fact of trying to prevent something/someone from making progress

E.g.: He was arrested for **obstruction** of a police officer in the execution of his duty.

Guesswork= the process of trying to find an answer by guessing when you don't have enough information to be sure.

Construction = the process or method of building or making something especially roads, buildings etc.

Destruction = the act of destroying something.

Hindrance= a person or thing that makes it more difficult for someone to do something.

E.g.: The high price is a major **hindrance** to potential buyers.

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

20. B

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

- *Sold* = to give something to someone in exchange for money.
- *Fetched* = to go to where someone/something is and bring them/it back.
- *Bought* = to obtain something by paying money for it.

- *Threw* = to send something from your hand through the air by moving your hand or arm quickly.

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

- “*Sold*” as a verb is used in context of “giving something in exchange for money”. Thus, option A is incorrect.
- “*Bought*” as a verb is used in context of “to obtain by paying money”. Thus, option C is incorrect.
- “*Threw*” as a verb is used in context of “send something from your hand”. Thus, option D is incorrect.
- “*Fetched*” as a verb is used in context of “going somewhere to get something”. Here in the given sentence, it is used to mention that village women used to visit common wells or hand pumps for water.

Thus, “*Fetched*” becomes the correct word to fill in the blank.

Thus, the correct sentence will be:

Until recently, the village women fetched water from common wells or hand pumps, but now they have water taps.

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

21. B

Sol. The given passage is about “**Struggle of former captain of the Indian wheelchair cricket team**”.

“Supervise” means to be in charge of someone/something and make sure that everything is done correctly. Thus, option A is wrong.

“Employ” means to give someone a job to do for payment. Thus, option C is wrong.

“Serve” means to give someone food or drink, for example at a restaurant or during a meal. Thus, option D is wrong.

“Work” means to have a job. In the given sentence, it is used to mention that former captain of the Indian wheelchair cricket team was forced by circumstances to have a job of “labourer”. This will help him support his family.

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

22. A

Sol. The given passage is about **“Struggle of former captain of the Indian wheelchair cricket team”**.

“Learn” means to gain knowledge or skill by studying, from experience, from being taught. Thus, option B is wrong.

“Teach” means to give lessons to students in a school, college, university etc. Thus, option C is wrong.

“Study” means to spend time learning about a subject by reading, going to college etc. Thus, option D is wrong.

“Coach” means to train someone to play a sport, to do a job better, or to improve a skill. In the given sentence, it is used to mention that former captain of the Indian wheelchair cricket team used to train children for cricket.

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

23. B

Sol. The given passage is about **“Struggle of former captain of the Indian wheelchair cricket team”**.

“Employment” means work, especially when it is done to earn money; the state of being employed. Thus, option A is wrong.

“Schooling” means the education you receive at school. Thus, option C is wrong.

“Studies” means the activity of learning or gaining knowledge, either from books or by examining things in the world. Thus, option D is wrong.

“Training” means the process of learning the skills that you need to do a job. In the given sentence, it is used to mention that during Covid-19 pandemic and lockdown, parents did not have money to pay for learning sessions of cricket.

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

24. A

Sol. The given passage is about “**Struggle of former captain of the Indian wheelchair cricket team**”.

“Encouraged” means to give someone support, courage or hope. Thus, option B is wrong.

“Forced” means to make someone do something that they do not want to do. Thus, option C is wrong.

“Asked” means to say or write something in the form of a question. Thus, option D is wrong.

“Interested” means giving your attention to something because you enjoy finding out about it or doing it. In the given sentence, it is used to mention that former captain of the Indian wheelchair cricket team was conducting training sessions for children who were keen in playing cricket.

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

25. B

Sol. The given passage is about “**Struggle of former captain of the Indian wheelchair cricket team**”.

“Lose” means to be unable to find something/someone. Thus, option A is wrong.

“Excel” means to be very good at doing something. Thus, option C is wrong.

“Win” means to be the most successful in a competition, race, battle etc. Thus, option D is wrong.

“Overcome” means to succeed in dealing with or controlling a problem that has been preventing you from achieving something. In the given sentence, the former captain of the Indian wheelchair cricket team said to an interviewer that he will succeed in dealing with difficult times of Covid-19.

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

26. D

Sol. पैटर्न इस प्रकार है:

FRY -> 6+18+25 = 49, अब 49 को उस शब्द के अक्षरों की संख्या से गुणा करें, जो है;

$$49 \times 3 = 147$$

इसी प्रकार,

SEIZE -> 19+5+9+26+5 = 64, अब 64 को उस शब्द के अक्षरों की संख्या से गुणा करें जो है;

$$64 \times 5 = 320$$

इसलिए, विकल्प D सही उत्तर है।

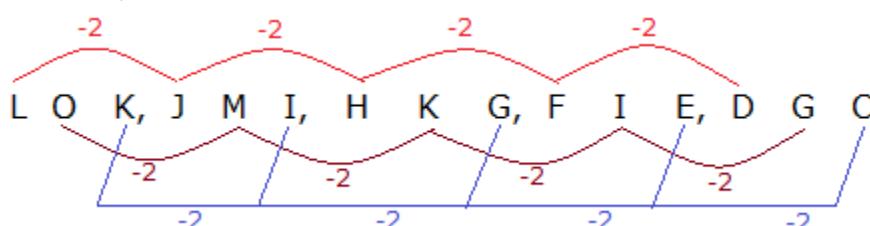
27. A

Sol. जिस प्रकार डीजल एक तरल ईंधन है उसी प्रकार, चम्मच एक बर्तन है।

इसलिए, विकल्प A सही उत्तर है।

28. D

Sol. पैटर्न इस प्रकार है:



इसलिए, विकल्प D सही उत्तर है।

29. C

Sol. पैटर्न इस प्रकार है:

$$9 \times 10 = 90$$

इसी प्रकार,

$$15 \times 16 = 240$$

इसलिए, विकल्प C सही उत्तर है।

30 C

Sol. दी गई जानकारी के अनसार:

1) B केवल चार अन्य मित्रों से लम्बा है।

.....B > _ > _ > _ > _

2) C, D से लम्बा है | A, E से लम्बा है |

$$C > D$$

$$A > E$$

3) E केवल एक व्यक्ति से लम्बा है जो G है, जो सबसे छोटा है। B, A से लम्बा है।

.....E > G

$$B > A$$

इस प्रकार सभी को मिलाने पर हमें प्राप्त होता है:

C > D > B > A > F > E > G

स्पष्ट रूप से, C सबसे लम्बा है।

इसलिए, विकल्प C सही उत्तर है।

31. D

Sol. पैटर्न इस प्रकार हैः

$$15 \times 10 = 150; 14 \times 5 = 70$$

$$\text{अब } 150 + 70 \equiv 220$$

इसी प्रकार-

$$20 \times 10 = 200; 18 \times 5 = 90$$

$$\text{अब } 200 + 90 = 290$$

अतः

$$11 \times 10 = 110; 40 \times 5 = 200$$

अब $110 + 200 = 310$

इसलिए, विकल्प D सही उत्तर है।

32. C

Sol. पैटर्न इस प्रकार है: अक्षरों को उनके स्थान के अवरोही क्रम के अनुसार वर्णानुक्रम में बाएं से दाएं व्यवस्थित किया जाता है।

अतः, TEMPO को TPOME के रूप में लिखा जाता है

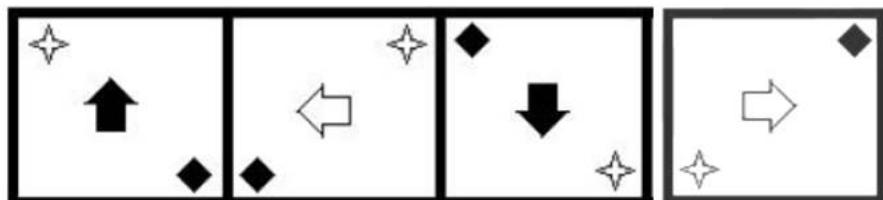
इसी प्रकार,

DOLPHIN को PONLIHD के रूप में लिखा जाता है

इसलिए, विकल्प C सही उत्तर है।

33. D

Sol. तर्क: यहां तीर 90 डिग्री वामावर्त घूमता है और प्रत्येक चरण में एक साथ छायांकित और गैर-छायांकित हो जाता है। प्रारंभ आकार तत्त्व दक्षिणावर्त दिशा में 2 कदम आगे बढ़ता है और हीरे के आकार का तत्त्व दक्षिणावर्त दिशा में 2 कदम आगे बढ़ता है। इस प्रकार, विकल्प (D) में दी गई आकृति नीचे दिखाए अनुसार शरूखला को पूरा करेगी:



इसलिए, विकल्प D सही उत्तर है।

34. C

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



इसलिए, विकल्प C सही उत्तर है।

35. A

Sol. नीचे दी गई तालिका का संदर्भ लें:

letter	A	B	C	D
denotes	+	×	-	÷

अक्षरों को प्रतीकों से बदलने के बाद समीकरण बन जाता है:

$$\Rightarrow 14 \times (18 \div 3) + 5 \times 7 - 12 \times (24 \div 4)$$

$$\Rightarrow 14 \times 6 + 5 \times 7 - 12 \times 6$$

$$\Rightarrow 84 + 5 \times 7 - 72$$

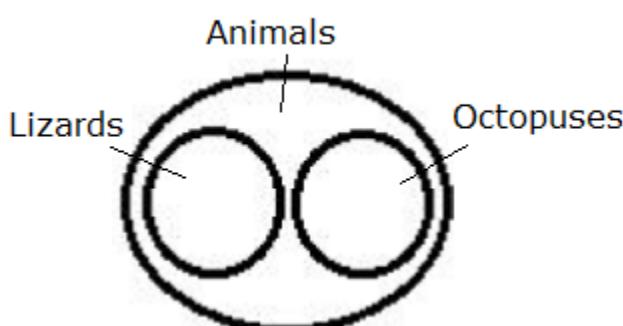
$$\Rightarrow 119 - 72$$

$$= 47$$

इसलिए, विकल्प A सही उत्तर है।

36. C

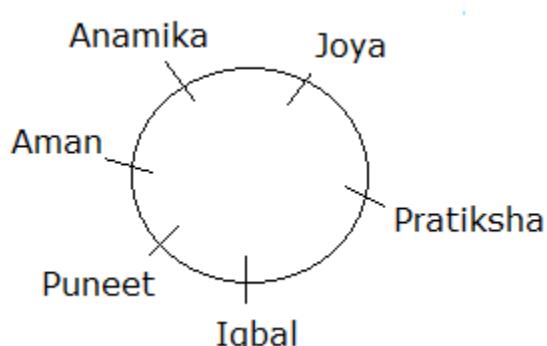
Sol. छिपकली और ऑक्टोपस दोनों ही जानवरों की शरेणी में आते हैं। इस प्रकार दिए गए वर्गों को विकल्प (C) में दिए गए वेन-आरेख द्वारा सर्वोत्तम रूप से दर्शाया गया है।



इसलिए, विकल्प C सही उत्तर है।

37. D

Sol. दी गई जानकारी के अनुसार:



स्पष्ट रूप से, अमन, अनामिका और पुनीत के मध्य में बैठा है।

इसलिए, विकल्प D सही उत्तर है।

38. A

Sol. पैटर्न इस प्रकार है:

$$15 \times 1 = 15$$

$$15 + 2 = 17$$

$$17 \times 3 = 51$$

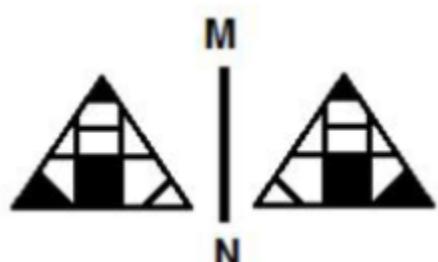
$$51 + 4 = 55$$

$$55 \times 5 = 275$$

इसलिए, विकल्प A सही उत्तर है।

39. C

Sol. सही दर्पण प्रतिबिम्ब नीचे दिखाया गया है:



इसलिए, विकल्प C सही उत्तर है।

40. C

Sol. पैटर्न इस प्रकार है:

C	R	E	C	H
+1	+2	+3	+4	+5
D	T	H	G	M

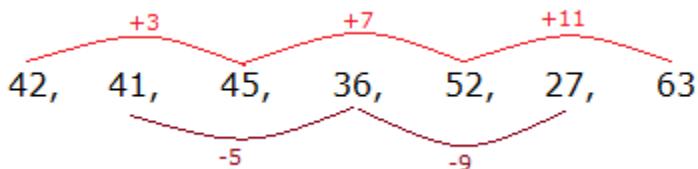
इसी प्रकार,

F	E	T	C	H
+1	+2	+3	+4	+5
G	G	W	G	M

इसलिए, विकल्प C सही उत्तर है।

41. A

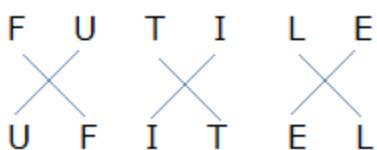
Sol. पैटर्न इस प्रकार है:



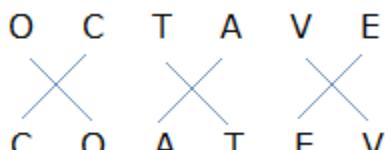
इसलिए, विकल्प A सही उत्तर है।

42. A

Sol. पैटर्न इस प्रकार है:



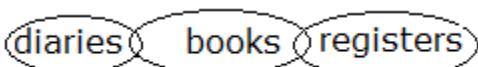
इसी प्रकार,



इसलिए, विकल्प A सही उत्तर है।

43. C

Sol. न्यूनतम संभावित आरेख होगा:



निष्कर्षः

I. कुछ रजिस्टर, डायरीज़ हैं – यह एक निश्चित मामला नहीं है, इसलिए गलत है।

II. सभी रजिस्टर, डायरीज़ हैं - यह एक निश्चित मामला नहीं है, इसलिए गलत है।

इस प्रकार, न तो निष्कर्ष | न ही || अनुसरण करता है।

इसलिए, विकल्प C सही उत्तर है।

44. B

Sol. स्पष्ट रूप से, विकल्प (B) में दी गई आकृति पैटर्न को पूरा करेगी;



इसलिए, विकल्प B सही उत्तर है।

45. D

Sol. सभी विकल्पों की जांच करने के बाद हम पाते हैं कि विकल्प (D) की संख्याओं को आपस में बदलने पर समीकरण सही हो जाएगा:

$$28 + 32 - 56 \div 14 \times 5 = 40$$

बाईं ओर से हल करने पर;

$$\rightarrow 28 + 32 - 56 \div 14 \times 5$$

$$\rightarrow 28 + 32 - 4 \times 5$$

$$\rightarrow 28 + 32 - 20$$

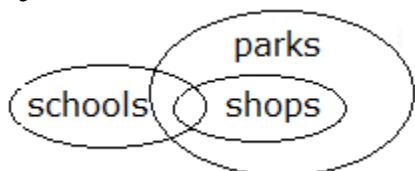
$$\rightarrow 60 - 20 = 40$$

इस प्रकार, बाईं ओर से = दाईं ओर से

इसलिए, विकल्प D सही उत्तर है।

46. A

Sol. न्यूनतम संभावित वेन-आरेख होगा:



निष्कर्षः

I. कुछ पार्क, स्कूल हैं – यह एक निश्चित मामला है, इसलिए सही है।

II. कोई स्कूल, पार्क नहीं है – यह एक निश्चित मामला नहीं है, इसलिए गलत है।

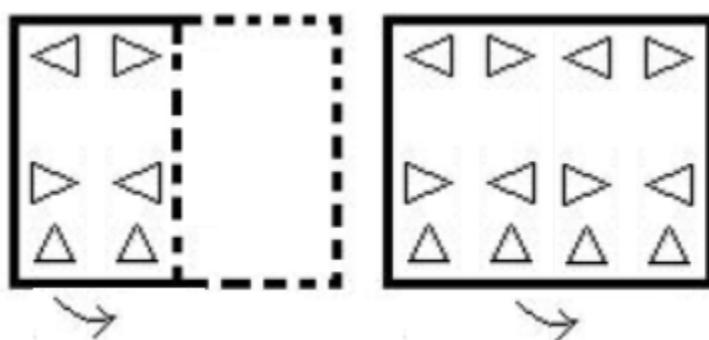
III. कुछ पार्क, शॉप हैं - यह एक निश्चित मामला है, इसलिए सही है।

अतः, केवल निष्कर्ष I और III अनुसरण करते हैं।

इसलिए, विकल्प A सही उत्तर है।

47. C

Sol. जब कागज की दी गई शीट को खोल दिया जाता है तो यह नीचे दिखाए अनुसार दिखाई देगी:



इसलिए, विकल्प C सही उत्तर है।

48. D

Sol. मोतियाबिंद आंख की एक चिकित्सीय स्थिति है जिसमें आंख का लेंस धुंधला हो जाता है। एकिजमा त्वचा की खुजली वाली सूजन है।

इसलिए, विकल्प D सही उत्तर है।

49. C

Sol. यहां स्वरों (A,E,I,O,U) को क्रमशः (1,2,3,4,5) के रूप में कूटबद्ध किया जाएगा, जबकि अभिव्यक्ति का कूट वर्णमाला शृंखला में अपनी स्थिति के अनुसार अक्षर का स्थानीय मान है।

F	O	R	C	E
6	4	18	3	2

इसी तरह,

M	I	S	T
13	3	19	20

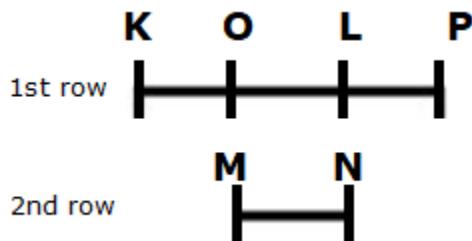
अतः,

U	R	A	N	U	S
5	18	1	14	5	19

इसलिए, विकल्प C सही उत्तर है।

50. B

Sol. दी गई जानकारी के अनुसार:



K, L, O और P पहली पंक्ति में बैठे हैं।

इसलिए, विकल्प B सही उत्तर है।

51. B

Sol. माना (1, 2, 7) का चतुर्थानुपात x है।

$\Rightarrow 1, 2, 7$ और x अनुपात में हैं।

$$\Rightarrow x = 2 \times 7 = 14$$

माना (14, 16, 2401) का चतुर्थानुपात y है।

$\Rightarrow 14, 16, 2401$ और y अनुपात में हैं।

$$\Rightarrow 14y = 16 \times 2401$$

$$\Rightarrow y = 2744$$

$$(1, 2, 7) \text{ और } (14, 16, 2401) \text{ के चतुर्थानुपाती के बीच मध्यानुपात} = \sqrt{14 \times 2744} = \sqrt{38416} = 196$$

52. C

Sol. X द्वारा आधा कार्य पूरा करने में लिए गए दिनों की संख्या = 5 दिन

पूरे कार्य को पूरा करने में X द्वारा लिए गए दिनों की संख्या = $5 \times 2 = 10$ days

कार्य का 1/3 भाग पूरा करने में Y द्वारा लिए गए दिनों की संख्या = 10 दिन

Y द्वारा पूरे कार्य को पूरा करने में लिए गए दिनों की संख्या = $10 \times 3 = 30$ days

माना कुल कार्य = (10, 30) ल.स. = 30 इकाई

$$X \text{ की दक्षता} = \frac{30}{10} = 3 \text{ unit/day}$$

$$Y \text{ की दक्षता} = \frac{30}{30} = 1 \text{ unit/day}$$

X और Y की संयुक्त दक्षता = $3 + 1 = 4$ इकाई/दिन

दिनों की संख्या जिसमें वे कार्य का दुगना कार्य पूरा करने में सक्षम होंगे =

$$\frac{2 \times 30}{4} = \frac{60}{4} = 15 \text{ days}$$

53. D

Sol. B के लिए Y1 से Y2 तक रेलवे ट्रैक की लंबाई में प्रतिशत वृद्धि =

$$\frac{250 - 100}{100} \times 100 = 150\%$$

D के लिए Y1 से Y2 तक रेलवे ट्रैक की लंबाई में प्रतिशत वृद्धि =

$$\frac{100 - 50}{50} \times 100 = 100\%$$

$$\text{अभीष्ट प्रतिशत} = 150\% - 100\% = 50\%$$

54. C

Sol. Y2 के दौरान A, B, D की औसत ट्रैक लंबाई (किमी में) =

$$\frac{100 + 250 + 100}{3} = \frac{450}{3} = 150 \text{ km}$$

Y1 में C की ट्रैक लंबाई = 150 किमी

तो, Y2 के दौरान A, B, D की औसत ट्रैक लंबाई (किमी में) Y1 में C की ट्रैक लंबाई के बराबर है।

55. C

$$\text{Sol. } 4 - \left(1 \frac{1}{2} + \frac{1}{3} \div 4 \text{ का } \frac{1}{2} - \frac{1}{4} \right) \text{का } 3$$

$$\Rightarrow 4 - \left(\frac{3}{2} + \frac{1}{3} \div 4 \text{ का } \frac{1}{2} - \frac{1}{4} \right) \text{का } 3$$

BODMAS का प्रयोग करने पर:

$$\Rightarrow 4 - \left(\frac{3}{2} + \frac{1}{3} \div 2 - \frac{1}{4} \right) \text{का } 3$$

$$\Rightarrow 4 - \left(\frac{3}{2} + \frac{1}{6} - \frac{1}{4} \right) \text{का } 3$$

$$\Rightarrow 4 - \left(\frac{18+2-3}{12} \right) \text{का } 3$$

$$\Rightarrow 4 - \left(\frac{17}{12} \right) \text{का } 3$$

$$\Rightarrow 4 - \frac{17}{4}$$

$$\Rightarrow -\frac{1}{4}$$

56. A

Sol. एक फुटकर विक्रेता ने थोक बाजार से 50 किग्रा सब्जी खरीदी।

माना सब्जी का क्रय मूल्य प्रति किग्रा = x रुपये

50 किग्रा सब्जी का क्रय मूल्य = $50x$ रुपये

450 रुपये के लाभ पर बेची जाने वाली 25 किग्रा सब्जी का विक्रय मूल्य = $25x + 450$

275 रुपये की हानि बेची जाने वाली 25 किग्रा सब्जी का विक्रय मूल्य = $25x - 275$

इन दोनों के विक्रय मूल्य में अंतर = $25x + 450 - 25x + 275 = 725$

सब्जी के प्रति किग्रा दोनों विक्रय मूल्यों के बीच अंतर (रुपये में) = $\frac{725}{25} = \text{Rs. } 29$

57. D

$$\text{Sol. } 5 \frac{6}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{3}{2} - \frac{1}{5} - \frac{1}{3} \right) \right\} \right]$$

BODMAS का प्रयोग करने पर:

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{45-6-10}{30} \right) \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{29}{30} \right) \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{29}{40} \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \div \left\{ \frac{29}{40} \right\} \right]$$

$$\Rightarrow \frac{151}{29} - \left[\frac{15}{4} \times \frac{40}{29} \right] = \frac{151}{29} - \frac{150}{29} = \frac{1}{29}$$

58. B

Sol. समान क्षमता के तीन जग दूध और पानी के मिश्रण से 3:1, 7:1 और 11:5 के अनुपात में भरे जाते हैं, यदि इन तीनों जग को एक कंटेनर में खाली कर दिया जाता है।

	दूध	पानी
पहला जग	3	1
दूसरा जग	7	1
तीसरा जग	11	5

अब, हम तीनों जगों की क्षमता की बराबरी करेंगे।

$$[(3+1), (7+1), (11+5)] \text{ ल.स.} = [4, 8, 16] \text{ ल.स.} = 16$$

	दूध	पानी
पहला जग	$3_{\times 4}$	$1_{\times 4}$
दूसरा जग	$7_{\times 2}$	$1_{\times 2}$
तीसरा जग	$11_{\times 1}$	$5_{\times 1}$

	दूध	पानी
पहला जग	12	4
दूसरा जग	14	2
तीसरा जग	11	5

दिए गये कंटेनर में पानी और दूध का अनुपात = (4+2+5) : (12+14+11) = 11 : 37

59. A

Sol. औसत निर्धारित करने के लिए N क्रमागत सम संख्याओं को सूचीबद्ध करते समय, अंतिम संख्या, गलती से, अगली विषम संख्या से बदल गई और इस तरह औसत वांछित मान से 0.0125 अधिक हो गया।

अगली विषम संख्या = 1 के साथ प्रतिस्थापन के बाद N लगातार सम संख्याओं के योग में वृद्धि

अगली विषम संख्या के प्रतिस्थापन के बाद N क्रमागत सम संख्याओं के औसत में वृद्धि = $\frac{1}{N}$

प्रश्नानुसार:

$$\Rightarrow \frac{1}{N} = 0.0125$$

$$\Rightarrow N = \frac{1}{0.0125} = \frac{10000}{125} = 80$$

60. C

Sol. 16,000 रुपये की राशि चक्रवृद्धि ब्याज पर निवेश की गई और दो वर्षों में यह राशि 21,160 रुपये हो जाती है।

$$\text{राशि} = P \left(1 + \frac{\text{Rate}}{100} \right)^{\text{time}}$$

$$\Rightarrow 21160 = 16000 \left(1 + \frac{R}{100} \right)^2$$

$$\Rightarrow \frac{21160}{16000} = \left(1 + \frac{R}{100} \right)^2$$

$$\Rightarrow \frac{2116}{1600} = \left(1 + \frac{R}{100} \right)^2$$

$$\Rightarrow \left(1 + \frac{R}{100} \right) = \sqrt{\frac{2116}{1600}} = \frac{46}{40}$$

$$\Rightarrow \left(\frac{R}{100} \right) = \frac{6}{40}$$

$$\Rightarrow R = \frac{60}{4} = 15\%$$

ब्याज की दर प्रतिशत प्रति वर्ष = 15%

61. D

Sol. यदि एक आयत की एक भुजा और एक विकर्ण की लंबाई क्रमशः 63 सेमी और 65 सेमी है।

माना एक आयत की दूसरी भुजा की लंबाई = x

$$\text{अब, } x^2 + (63)^2 = (65)^2$$

$$\Rightarrow x^2 = 4225 - 3969 = 256$$

$$\Rightarrow x = 16 \text{ cm}$$

$$\text{आयत का क्षेत्रफल} = (63 \times 16) \text{ cm}^2$$

वर्ग का क्षेत्रफल आयत के क्षेत्रफल का सातवां हिस्सा है।

$$\text{वर्ग का क्षेत्रफल} = \frac{1}{7} \times (63 \times 16) \text{ cm}^2 = 144 \text{ cm}^2$$

$$\text{वर्ग की भुजा} = \sqrt{144} = 12 \text{ cm}$$

$$\text{एक वर्ग का परिमाप (सेमी में)} = 4 \times 12 \text{ cm} = 48 \text{ cm}$$

62. C

Sol. संख्या 800 और 900 के बीच इस प्रकार पड़ी है कि जब इसे 34 और 51 में से किसी एक से विभाजित किया जाता है, तो शेष शेष 19 बचता है = (34, 51) K L.S. + 19 = 102k + 19

अब, k का मान इस प्रकार चुनें कि [102 k+19] का मान 800 और 900 के बीच हो।

निरीक्षण द्वारा, $k = 8$

$$\text{अतः अभीष्ट संख्या} = 102(8) + 19 = 816 + 19 = 835$$

63. D

Sol. वस्तु का क्रय मूल्य = 184,90 रुपये

एक दुकानदार एक वस्तु को उसके अंकित मूल्य पर 14% छूट पर बेचता है और फिर भी वह 20% का लाभ प्राप्त करता है।

माना वस्तु का अंकित मूल्य = x रुपये

प्रश्न के अनुसार:

$$\Rightarrow x \times \frac{(100-14)}{100} \times \frac{(100)}{120} = 184.90$$

$$\Rightarrow x = \frac{184.90 \times 120}{86} = \text{Rs. } 258$$

वस्तु का अंकित मूल्य = 258 रुपये

64. A

Sol. यदि एक ठोस लम्ब वृत्तीय शंकु का कुल पृष्ठीय क्षेत्रफल समान त्रिज्या के एक गोले के बराबर है।

$$\Rightarrow \pi r l + \pi r^2 = 4\pi r^2$$

$$\Rightarrow l + r = 4r$$

$$\Rightarrow l = 3r$$

अब, शंकु की ऊँचाई = $\sqrt{l^2 - r^2} = \sqrt{9r^2 - r^2} = 2\sqrt{2}r = \sqrt{2} \times$ गोले का व्यास

65. D

Sol. x और y दो संख्याएँ हैं जिनमें विपरीत चिह्न इस प्रकार हैं कि $x^2 : y^2 = 49 : 64$ है।

$$\Rightarrow \frac{x^2}{y^2} = \frac{49}{64}$$

$$\Rightarrow \frac{x}{y} = \frac{7}{8}$$

माना $x = 7k$

$y = -8k$

$$\text{अब, } \frac{5x - 6y}{6x - 7y} = \frac{5(7k) - 6(-8k)}{6(7k) - 7(-8k)} = \frac{35 + 48}{42 + 56} = \frac{83}{98}$$

66. A

Sol. 2014, 2015 और 2017 में कॉलेज B में नामांकित छात्रों की औसत संख्या=

$$\frac{720 + 750 + 780}{3} = \frac{2250}{3} = 750$$

2014 में कॉलेज A में नामांकित छात्रों की संख्या = 600

$$\text{आवश्यक अनुपात} = 750 : 600 = 5 : 4$$

67. A

Sol. एक भर्ती परीक्षा में, उम्मीदवारों का सामान्य जागरूकता (GA) और मात्रात्मक तकनीक (QT) के लिए परीक्षण किया गया था।

GA और QT में क्रमशः 54% और 45% असफल रहे, जबकि 16% दोनों में असफल रहे।

कम से कम एक विषय में कुल असफल उम्मीदवार = GA में असफल उम्मीदवार + QT में असफल उम्मीदवार - GA और QT दोनों में असफल रहे उम्मीदवार = $54\% + 45\% - 16\% = 83\%$

दोनों विषयों में कुल उत्तीर्ण उम्मीदवार = 100%- 83% = 17%

प्रश्नानुसारः

$$\Rightarrow 17\% = 136$$

$$\Rightarrow 1\% = 8$$

$$\Rightarrow 100\% = 800$$

उम्मीदवारों की कुल संख्या = 800

68. A

Sol. बरसात के दिनों में जलाशयों में पानी का भारी प्रवाह होता है। जलाशय को साफ करने के उपाय किए जाते हैं जबकि पानी निरंतर दर से बहता रहता है।

यह देखा गया है कि सात और पांच आदमी जलाशय को क्रमशः 20 और 50 दिनों में साफ कर सकते हैं, यदि जलाशय में पानी की प्रारंभिक मात्रा क्रमशः 24 और 36 किलोलीटर है।

माना प्रतिदिन पानी का प्रवाह = x किलोलीटर

प्रश्न के अनुसारः

$$5M \times 50 = 36 + 50x \dots\dots\dots(2)$$

(1) को (2) से विभाजित करने पर

$$\Rightarrow \frac{7M \times 20}{5M \times 50} = \frac{24 + 20x}{36 + 50x}$$

$$\Rightarrow \frac{7}{25} = \frac{6+5x}{18+25x}$$

$$\Rightarrow 126 + 175x = 150 + 125x$$

$$\Rightarrow 50x = 24$$

$$\Rightarrow x = \frac{24}{50} \text{ kilolitres} = \frac{24}{50} \times 1000 \text{ litres} = 480 \text{ litres}$$

प्रति दिन लीटर में जलाशय में पानी के प्रवाह की दर = 480 लीटर

69. B

Sol. एक संख्या और उसके व्युत्करम का औसत 1 है।

माना संख्या = x

प्रश्न के अनुसारः

$$\Rightarrow \frac{x + \frac{1}{x}}{2} = 1$$

$$\Rightarrow x + \frac{1}{x} = 2$$

$$\Rightarrow \frac{x^2 + 1}{x} = 2$$

$$\Rightarrow x^2 + 1 = 2x$$

$$\Rightarrow x^2 - 2x + 1 = 0$$

$$\Rightarrow (x-1)^2 = 0$$

$$\Rightarrow x = 1$$

अब, इसके वर्ग, घन और चौथी घात का औसत = $\frac{x^2 + x^3 + x^4}{3} = \frac{1+1+1}{3} = 1$

70. B

Sol. 120 अवलोकनों के समुच्चय का माध्य 80 है।

प्रत्येक अवलोकन में से 10 घटाया जाता है और प्रत्येक संगत परिणाम को 7 से विभाजित किया जाता है।

हम जानते हैं कि यदि हम किसी डेटा सेट के प्रत्येक अवलोकन से एक स्थिर मान घटाते हैं तो उस डेटा सेट का माध्य मान भी उस स्थिर मान से कम हो जाता है।

साथ ही, यदि हम डेटा सेट के प्रत्येक अवलोकन को एक स्थिर पद से विभाजित करते हैं तो उस डेटा सेट के माध्य को भी स्थिर पद से विभाजित किया जाता है।

$$\text{नए सेट का माध्य} = \frac{80 - 10}{7} = 10$$

71. C

Sol. किसी विशेष लेनदेन के मामले में, अर्जित लाभ $14\frac{2}{7}\%$ है।

$$\text{अब}, 14\frac{2}{7}\% = \frac{1}{7}$$

माना लागत मूल्य = x रुपये

$$\text{विक्रय मूल्य} = x + \frac{x}{7} = \frac{8x}{7}$$

$$\text{अब}, \frac{\text{cost price}}{\text{selling price}} = \frac{7x}{8x} = \frac{7}{8}$$

72. B

Sol. एक आदमी को 49 किमी की यात्रा करनी थी, जिसे उसने इस यात्रा को छह हिस्सों में विभाजित किया जो कि 4 किमी या 5 किमी की गुणज में थी।

पहले चार हिस्से 4 किमी, 5 किमी, 8 किमी और 10 किमी थे।

5वें और 6वें हिस्सों का योग = $49 - 4 - 5 - 8 - 10 = 22 \text{ km}$

चूंकि 5वां और छठा हिस्सा 4 किमी या 5 किमी के गुणज थे।

तो, निरीक्षण द्वारा:

5वें हिस्से की लंबाई = 12 किमी

छठे हिस्से की लंबाई = 10 किमी

4 किमी और 5 किमी के गुणजों को क्रमशः 40 और 60 किमी/घंटा की दर से तय किया गया था, और लगातार दो हिस्सों के बीच, उसने छह मिनट के लिए आराम किया था।

इन 6 हिस्सों की यात्रा में लगने वाला समय =

$$\frac{4}{40} + \frac{5}{60} + \frac{8}{40} + \frac{10}{60} + \frac{12}{40} + \frac{10}{60} = \frac{12+10+24+20+36+20}{120} = \frac{122}{120} = \frac{61}{60} \text{ घंटे}$$

$$\text{आराम करने में लगा समय} = \frac{6 \times 5}{60} \text{ hours} = \frac{30}{60} \text{ hours}$$

$$\text{यात्रा के लिए लिया गया कुल समय} = \frac{61}{60} \text{ hours} + \frac{30}{60} \text{ hours} = \frac{91}{60} \text{ hours}$$

$$\text{पूरी यात्रा के लिए औसत गति (किमी/घंटा में)} = \frac{49 \times 60}{91} = \frac{420}{13} = 32 \frac{4}{13} \text{ hours}$$

73. B

Sol. तीन वृत्त, जिनमें से प्रत्येक की त्रिज्या 4 सेमी के बराबर है, केंद्र के रूप में एक समबाहु त्रिभुज के शीर्षों के साथ खींचे गए हैं।

त्रिभुज की प्रत्येक भुज की लंबाई 8 सेमी के बराबर है।

$$\text{प्रयोग किया गया गति सूत्र : समबाहु त्रिभुज का क्षेत्रफल} = \frac{\sqrt{3}}{4} (\text{side})^2$$

$$\text{वृत्तखंड का क्षेत्रफल} = \frac{\pi r^2 \theta}{360^\circ}$$

समबाहु त्रिभुज के प्रत्येक शीर्ष पर कोण 60° है इसलिए $\theta = 60^\circ$

त्रिभुज के उस भाग का क्षेत्रफल (सेमी^2 में) जो वृत्तों के त्रिज्यखंडों द्वारा त्रिज्यखंडों द्वारा घिरा हुआ नहीं है = त्रिभुज का क्षेत्रफल – 3 त्रिज्यखंडों का क्षेत्रफल =

$$\frac{\sqrt{3}}{4}(\text{side})^2 - 3 \times \frac{\pi r^2 \theta}{360^\circ} = \frac{\sqrt{3}}{4}(8)^2 - 3 \times \frac{\pi(4)^2(60^\circ)}{360^\circ} = 16\sqrt{3} - 8\pi = 8(2\sqrt{3} - \pi)$$

74. D

Sol. एक आदमी 1 जनवरी 2019 को अपने दोस्त से 6,000 रुपये का ऋण इस शर्त के साथ लेता है कि वह इस ऋण को 6.25% की दर से अर्जित साधारण ब्याज के साथ चुकाएगा, तो जब यह ब्याज 75 रुपये तक पहुंच जाएगा

$$\text{Simple Interest} = \frac{\text{Principal} \times \text{Rate} \times \text{time}}{100} \quad \text{साधारण ब्याज} = \text{मूलधन} * \text{दर} * \text{समय} / 100$$

$$\Rightarrow 75 = \frac{6000 \times 6.25 \times \text{time}}{100}$$

$$\Rightarrow \text{Time} = \frac{1200}{6000} = \frac{1}{5} \text{ years} = \frac{12}{5} \text{ months} = 2 \text{ months } \left(\frac{2}{5} \times 31 \right) \text{ days} = 2 \text{ months } 13 \text{ days}$$

ऋण अवधि समाप्त होने की तिथि = 1 जनवरी 2019 + 2 महीने 13 दिन = 15 मार्च 2019

75. C

Sol. यदि एक स्टीमर और एक मोटर बोट क्रमशः 7 घंटे 20 मिनट और 10 घंटे 40 मिनट में एक बंदरगाह और एक डॉक के बीच के हिस्से को तय करते हैं।

यदि दूरी स्थिर है तो गति लिए गए समय के व्युत्क्रमानुपाती होती है।

स्टीमर द्वारा लिए गए समय और मोटर बोट द्वारा लिए गए समय का अनुपात = 7 घंटे 20 मिनट : 10 घंटे 40 मिनट = 440 मिनट : 640 मिनट = 11 : 16

उनकी गति का अनुपात = 16 : 11

76. A

Sol. • यूएसएसआर ने पहला कृतिरूप उपग्रह स्पृतनिक 1 लॉन्च किया।

• इसे 4 अक्टूबर 1957 को एक अण्डाकार निम्न पृथ्वी कक्षा में प्रक्षेपित किया गया था।

• इसने प्रत्येक कक्षा की यात्रा को पूरा करने के लिए 96.20 मिनट का समय लेते हुए लगभग 8 किमी/सेकेंड की चरम गति से यात्रा की।

- USSR का पूर्ण रूप सोवियत समाजवादी गणराज्य संघ है।
- यह नाममात्र रूप से कई राष्ट्रीय गणराज्यों का एक संघीय संघ था, व्यवहार में इसकी सरकार और अर्थव्यवस्था अपने अंतिम वर्षों तक अत्यधिक केंद्रीकृत थीं।
- फ्रांस में दुनिया का सबसे बड़ा विशेष आर्थिक क्षेत्र है।

77. C

- Sol. • पौधे के स्टोमेटा कार्बन डाइऑक्साइड के अवशोषण की अनुमति देते हैं और वाष्णीकरण के कारण पानी की हानि को सीमित करते हैं।
- वे पत्तियों के एपिडर्मिस पर मौजूद छोटे छिद्र होते हैं।

- वे पौधों और वातावरण के बीच कार्बन डाइऑक्साइड और पानी के आदान-प्रदान में मदद करते हैं।
- लैमिना पत्ती का विस्तारित, सपाट घटक है जिसमें क्लोरोप्लास्ट होते हैं।
- स्टाइपुल आम तौर पर एक पत्ती के तने के आधार के दोनों किनारों पर पैदा होने वाला एक प्रकोप है।
- पेटिओल एक डंठल है जो ब्लेड को पत्ती के आधार से जोड़ता है।

78. B

- Sol. • एशिया के सबसे पुराने अखाड़े में से एक 'रंग घर' अहोम वंश के राजा द्वारा बनवाया गया था।
- यह शानदार संरचना एशिया के सबसे पुराने जीवित अखाड़ों में से एक है।
 - इसे बाद में 1744-1750 ईस्वी में स्वर्गदेव प्रमत्त सिंह द्वारा ईटों से फिर से बनाया गया था।
 - अहोम साम्राज्य 1228 में असम में ब्रह्मपुत्र धाटी में स्थापित एक मध्यकालीन साम्राज्य था।
 - मुगल साम्राज्य दक्षिण एशिया में एक प्रारंभिक आधुनिक इस्लामी साम्राज्य था।

79. C

- Sol. • रामागुंडम बिजली संयंत्र तापीय ऊर्जा के उत्पादन के लिए प्रसिद्ध है।
- यह तेलंगाना के रामागुंडम में स्थित 2,600 मेगावाट का पावर स्टेशन है।
 - यह वर्तमान में दक्षिण भारत का सबसे बड़ा विद्युत केंद्र है।
 - यह भारत का पहला ISO 14001 प्रमाणित "सुपर थर्मल पावर स्टेशन" है।
 - ऊर्जीय ऊर्जा वस्तु या प्रणाली के भीतर कणों की गति के कारण किसी वस्तु या प्रणाली के पास मौजूद ऊर्जा है।

- परमाणु ऊर्जा का उपयोग बिजली बनाने के लिए किया जा सकता है, लेकिन इसे पहले परमाणु से मुक्त किया जाना चाहिए।

80. C

Sol. • भारतीय कम्युनिस्ट पार्टी - मार्क्सवादी का गठन 1962 में हुआ था।

- यह भारत में एक कम्युनिस्ट राजनीतिक दल है और भारत के राष्ट्रीय दलों में से एक है।
- सदस्यता और चुनावी सीटों के मामले में यह भारत की सबसे बड़ी कम्युनिस्ट पार्टी है।
- यह 7 नवंबर 1964 को भारतीय कम्युनिस्ट पार्टी में विभाजन से उभरा था।
- अखिल भारतीय पार्टी कांग्रेस भारतीय कम्युनिस्ट पार्टी (मार्क्सवादी) की सर्वोच्च सत्ता है।

81. C

Sol. • सुधा मूर्ति 'डॉलर बहू' पुस्तक की लेखिका हैं।

- वह इंफोसिस फाउंडेशन की चेयरपर्सन और गेट्स फाउंडेशन की सार्वजनिक स्वास्थ्य देखभाल पहल की सदस्य हैं।
- डॉलर बहू इस बात की कहानी है कि अगर चीजें नियंत्रण से बाहर हो जाती हैं तो पैसा किसी भी परिवार के जीवन में कैसे कहर बरपा सकता है।
- तसलीमा नसरीन महिलाओं के उत्पीड़न और धर्म की आलोचना पर अपने लेखन के लिए जानी जाती हैं।
- अरुंधति राँय भारतीय लेखकों की समकालीन पीढ़ी के सबसे प्रसिद्ध प्रतिनिधियों में से एक हैं जो अंग्रेजी में लिखते हैं।

82. A

Sol. • बलबीर सिंह दोसांझ भारत सरकार से पद्म शशी पुरस्कार प्राप्त करने वाले पहले खिलाड़ी हैं।

- उन्हें सर्वकालिक महान हॉकी खिलाड़ियों में से एक माना जाता है।
- उन्हें व्यापक रूप से खेल का अब तक का सबसे बड़ा सेंटर-फॉरवर्ड माना जाता है।
- मनपरीत सिंह भारत के सर्वश्रेष्ठ फील्ड हॉकी खिलाड़ियों में से एक हैं और भारतीय पुरुष हॉकी टीम के कप्तान हैं।
- मिल्खा सिंह एशियाई खेलों के साथ-साथ राष्ट्रमंडल खेलों में 400 मीटर में स्वर्ण जीतने वाले एकमात्र एथलीट हैं।
- धनराज पिल्लई 3 ओलंपिक, 3 विश्व कप और 4 एशियाई खेलों में खेलने वाले एकमात्र भारतीय हैं।

83. A

Sol. • प्रभास ने 2020 के लिए 'रशियन ऑडियंस हार्ट' अवार्ड जीता है।

- वह रशियन ऑडियंस, हार्ट अवार्ड जीतने वाले दूसरे भारतीय अभिनेता हैं।
- वह भारतीय सिनेमा में सबसे अधिक भुगतान पाने वाले अभिनेताओं में से एक हैं।
- रणवीर सिंह बॉलीवुड के बेजोड़ लाइव वायर हैं।
- सलमान खान को मीडिया में भारतीय सिनेमा के सबसे व्यावसायिक रूप से सफल अभिनेताओं में से एक के रूप में उद्घृत किया जाता है।
- महेश बाबू को तेलुगु सिनेमा के सबसे लोकप्रिय अभिनेताओं में से एक माना जाता है।
- उन्हें मीडिया में टॉलीवुड के सुपरस्टार और प्रिंस महेश बाबू के रूप में व्यापक रूप से जाना जाता है।

84. B

Sol. • मानव शरीर में टांके (Suture) का जोड़ श्लेष जोड़ नहीं है।

- यह खोपड़ी की अधिकांश हड्डियों के बीच पाया जाने वाला संकीर्ण रेशेदार जोड़ है।
- सिनोवियल जोड़ शरीर में सबसे आम प्रकार के जोड़ हैं।
- इन जोड़ों को प्लानर, हिंज, पिवट, कॉन्डिलॉइड, सैडल और बॉल और सॉकेट जोड़ों के रूप में वर्णित किया जा सकता है।
- उलखूल जोड़ों को कार्यात्मक रूप से बहुअक्षीय जोड़ों के रूप में वर्गीकृत किया जाता है क्योंकि वे हड्डियों को कई अक्षों के साथ स्थानांतरित कर सकते हैं।
- काज जोड़ एक प्रकार का श्लेष जोड़ होता है जो दरवाजे के हिंज के जैसे एक दिशा में गति की अनुमति देता है।

85. D

Sol. • जुलाई 2020 तक, जिन कर्मचारियों का मासिक वेतन 15,000 रुपये या उससे कम है, वे ईएसआई अधिनियम के अंतर्गत आते हैं।

- संसद द्वारा कर्मचारी राज्य बीमा अधिनियम, 1948 स्वतंत्र भारत में शरमिकों के लिए सामाजिक सुरक्षा पर पहला प्रमुख कानून था।
- इसमें कुछ स्वास्थ्य संबंधी घटनाएँ शामिल हैं जो शरमिकों को आम तौर पर बीमारी, मातृत्व, अस्थायी या स्थायी विकलांगता के रूप में सामने आती हैं।
- यह अधिनियम शरमिकों और उनके तत्काल आश्रितों को उचित रूप से अच्छी चिकित्सा देखभाल की गारंटी भी देता है।
- यह कर्मचारी राज्य बीमा निगम के माध्यम से अपने कार्य करता है।

86. C

Sol. • 'पुकोड़ झील' केरल में स्थित है।

- यह एक सुंदर मीठे पानी की झील है और केरल में अपनी तरह की एकमात्र झील है।
- यह समुद्र तल से 770 मीटर की ऊँचाई पर सदाबहार जंगलों और पहाड़ी ढलानों के बीच बसी एक प्राकृतिक मीठे पानी की झील है।
- यह केरल की सबसे छोटी और सबसे अधिक ऊँचाई वाले ताजे पानी की झील है।
- यह 8.5 हेक्टेयर के क्षेत्र में फैला हुआ है और इसकी अधिकतम गहराई 6.5 मीटर है।
- झील दक्षिण वायनाड वन प्रभाग के अंतर्गत है और जिला पर्यटन संवर्धन परिषद द्वारा संचालित है।

87. D

Sol. • पहली ब्रिटिश फैक्ट्री हुगली नदी के तट पर 1651 में स्थापित की गई थी।

- हुगली नदी पश्चिम बंगाल की एक महत्वपूर्ण नदी है।
- गोदावरी भारत की दूसरी सबसे लंबी और भारत की तीसरी सबसे बड़ी नदी है।
- नर्मदा भारत की 5वीं सबसे लंबी और कुल मिलाकर पश्चिम की ओर बहने वाली सबसे लंबी नदी है।
- इसे मध्य प्रदेश और गुजरात की जीवन रेखा के रूप में भी जाना जाता है।
- मंडोवी नदी गोवा राज्य की पश्चिम की ओर बहने वाली प्रमुख नदियों में से एक है।

88. C

Sol. • वीनिया जलप्रपात मेघालय में स्थित है।

- यह पृष्ठभूमि में एक दोहरे धनुषाकार पुल के कारण विशिष्ट चित्र प्रदान करता है और इसके पूल से स्परे पूरी घाटी को भर देता है।
- झरने की गर्जना दूर से सुनी जा सकती है और प्रवाह अविश्वसनीय रूप से शक्तिशाली है।
- मेघालय एक बहुत ही खूबसूरत और पहाड़ी राज्य है।
- यह ज्यादातर अपनी बलुआ पत्थर की गुफाओं, स्वच्छ गांवों, मंत्रमुग्ध कर देने वाले झरनों, लुभावने हिल स्टेशनों, संस्कृति, समाज, त्योहारों आदि के लिए प्रसिद्ध है।
- गोवा क्षेत्रफल के हिसाब से भारत का सबसे छोटा और जनसंख्या के हिसाब से चौथा सबसे छोटा राज्य है।
- सिक्किम भारत में सबसे कम आबादी वाला और दूसरा सबसे छोटा राज्य है।

89. D

Sol. • हम्पी का प्राचीन शहर विजयनगर साम्राज्य की राजधानी था।

- हम्पी एक गढ़वाले शहर है और तुंगभद्रा नदी के तट पर स्थित है।
- विजयनगर साम्राज्य दक्षिण भारत में दक्कन के पठार क्षेत्र में स्थित था।
- कृष्णदेव राय के शासन के दौरान साम्राज्य अपने चरम पर पहुंच गया।
- 17वीं शताब्दी में भारतीय उपमहाद्वीप के एक बड़े हिस्से पर मराठा साम्राज्य का प्रभुत्व था।
- राष्ट्रकूट छठी और 10वीं शताब्दी के बीच भारतीय उपमहाद्वीप के बड़े हिस्से पर शासन करने वाला एक शाही भारतीय राजवंश था।

90. C

Sol. • पंचायत समिति पंचायती राज संस्थाओं में मध्यवर्ती स्तर है।

- यह तहसील के उन गांवों के लिए काम करता है जो मिलकर विकासखंड का निर्माण करता है।
- यह ग्राम पंचायत और जिला परिषद के बीच की कड़ी है।
- यह पांच साल के लिए चुना जाता है और इसका नेतृत्व एक अध्यक्ष और उपाध्यक्ष करते हैं।
- ग्राम पंचायत भारतीय गांवों में एक बुनियादी गांव-शासी संस्थान है और यह भारत में जमीनी स्तर पर एक लोकतांत्रिक संरचना है।
- जिला पंचायत पंचायती राज व्यवस्था का तीसरा स्तर है और सभी राज्यों में जिला स्तर पर कार्य करती है।

91. D

Sol. • मीथेन प्राकृतिक गैस का प्राथमिक घटक है।

- यह एक ग्रीनहाउस गैस भी है और वातावरण में इसकी उपस्थिति पृथकी के तापमान और जलवायु प्रणाली को प्रभावित करती है।
- नाइट्रोजन की खोज सबसे पहले स्कॉटिश चिकित्सक डेनियल रदरफोर्ड ने 1772 में की थी।
- यह जीवन के लिए एक आवश्यक तत्व है और जीवित बायोमास में चौथा सबसे प्रचुर मात्रा में तत्व है।
- कार्बन डाइऑक्साइड सामान्य तापमान और दबाव पर एक रंगहीन और गैर-ज्वलनशील गैस है।
- अवलोकनीय ब्रह्मांड में हीलियम दूसरा सबसे हल्का और दूसरा सबसे प्रचुर तत्व है।

92. D

Sol. • भारत के संविधान के अनुच्छेद 153 में राज्यों के राज्यपाल होने का प्रावधान है।

- अनुच्छेद 124 उच्चतम न्यायालय की स्थापना और गठन से संबंधित है।

- भारतीय संविधान का अनुच्छेद 136 एक विशेष क्षेत्राधिकार से संबंधित है जो भारत में सर्वोच्च न्यायालय का प्रावधान करता है।
- अनुच्छेद 148 कहता है कि भारत का एक नियंत्रक-महालेखापरीक्षक होगा।
- किसी राज्य के राज्यपाल की नियुक्ति भारत के राष्ट्रपति द्वारा की जाती है।
- राज्यपाल का प्राथमिक कार्य संविधान की रक्षा करना, उसको संरक्षित करना और उसकी हिफाजत करना है।

93. D

Sol. • युकी भांबरी 2008 में ऑरेंज बाउल टूर्नामेंट में अंडर-18 खिताब जीतने वाले पहले भारतीय बने।

- वह जूनियर ऑस्ट्रेलियन ओपन खिताब जीतने वाले पहले भारतीय और गर्ड स्लैम चैंपियनशिप में जूनियर एकल खिताब जीतने वाले इतिहास के चौथे भारतीय हैं।
- लिएंडर पेस को युगल में सबसे महान टेनिस खिलाड़ियों में से एक माना जाता है।
- मानस धामने पिछले कुछ वर्षों से भारतीय जूनियर टेनिस की चमक बिखेर रहे हैं।
- ऑरेंज बाउल टूर्नामेंट 1947 में मियामी बीच के एडी हेर द्वारा स्थापित किया गया था।

94. A

Sol. • विदेशी मुद्रा प्रबंधन अधिनियम (FEMA) को 1999 में विदेशी मुद्रा विनियमन अधिनियम (FERA) को बदलने के लिए अधिनियमित किया गया था।

- फेमा (FEMA) विदेशी मुद्रा से संबंधित कानून को समेकित और संशोधित करने के लिए भारत की संसद का एक अधिनियम है।
- इसका मुख्य उद्देश्य विदेशी व्यापार और भुगतान को सुविधाजनक बनाना और भारत में विदेशी मुद्रा बाजार के व्यवस्थित विकास और रखरखाव को बढ़ावा देना है।
- फेरा (FERA) विदेशी मुद्रा से संबंधित कानून को समेकित और संशोधित करने के लिए भारत की संसद का एक अधिनियम है।
- यह विदेशी मुद्रा और प्रतिभूतियों से संबंधित वित्तीय लेनदेन को विनियमित करने के लिए पारित किया गया था।

95. C

Sol. • किसी पिंड की गतिज और स्थितिज ऊर्जा उसकी यांत्रिक ऊर्जा के घटक हैं।

- यांत्रिक ऊर्जा वह ऊर्जा है जो किसी वस्तु के पास उसकी गति के कारण या उसकी स्थिति के कारण होती है।
- विद्युत ऊर्जा आवेशित कणों की विद्युत स्थितिज ऊर्जा या गतिज ऊर्जा से प्राप्त ऊर्जा है।

- ऊर्जा ऊर्जा का एक रूप है जो उच्च तापमान वाले पदार्थ से कम तापमान वाले पदार्थ में स्थानांतरित होती है।
- रासायनिक ऊर्जा रासायनिक पदार्थों की ऊर्जा है जो तब निकलती है जब वे एक रासायनिक प्रतिक्रिया से गुजरते हैं और अन्य पदार्थों में परिवर्तित हो जाते हैं।

96. D

Sol. • सिडबी (SIDBI) का फुल फॉर्म स्मॉल इंडस्ट्रीज डेवलपमेंट बैंक ऑफ इंडिया (Small Industries Development Bank of India) है।

- यह भारत में सूक्ष्म, लघु और मध्यम उद्यम वित्त कंपनियों के समग्र लाइसेंसिंग और विनियमन के लिए सर्वोच्च नियामक निकाय है।
- यह भारत सरकार के वित्त मंत्रालय के अधिकार क्षेत्र में है।
- यह समान गतिविधियों में लगे संस्थानों के कार्यों का भी समन्वय करता है।
- यह 2 अप्रैल 1990 को संसद के एक अधिनियम के माध्यम से स्थापित किया गया था।
- यह एमएसएमई क्षेत्र को बढ़ावा देने, विकसित करने और वित्तपोषण के लिए प्राथमिक वित्तीय संस्थान है।

97. B

Sol. • चुराही, मंडेली और क्योंथली हिमाचल प्रदेश राज्य में बोली जाने वाली बोलियाँ हैं।

- हिमाचल प्रदेश भारत का सबसे उत्तरी राज्य है और इसे देवभूमि के नाम से भी जाना जाता है।
- उत्तर प्रदेश भारत में सबसे अधिक आबादी वाला राज्य है और दुनिया में सबसे अधिक आबादी वाला देश उपर्युक्त है।
- मध्य प्रदेश क्षेत्रफल के हिसाब से दूसरा सबसे बड़ा भारतीय राज्य है और जनसंख्या के हिसाब से पाँचवाँ सबसे बड़ा राज्य है।
- अरुणाचल प्रदेश क्षेत्रफल के हिसाब से पूर्वोत्तर भारत के सेवन सिस्टर स्टेट्स में सबसे बड़ा है।

98. A

Sol. • घेरिया नृत्य गुजरात से ताल्लुक रखता है।

- यह सभी पुरुषों द्वारा साड़ी को धोती और दुपट्टा के रूप में लपेटकर किया जाता है।
- गुजरात क्षेत्रफल के हिसाब से भारत का पांचवा सबसे बड़ा और जनसंख्या के हिसाब से नौवां सबसे बड़ा राज्य है।
- यह अपने समुद्र तटों, मंदिर कस्बों और ऐतिहासिक राजधानियों, वन्यजीव अभयारण्यों, पहाड़ी रिसॉर्ट्स और प्राकृतिक भवता के लिए प्रसिद्ध है।

• महाराष्ट्र भारत में दूसरा सबसे अधिक आबादी वाला राज्य है और विश्व स्तर पर दूसरा सबसे अधिक आबादी वाला देश उपर्युक्त है।

• यह भारत में सबसे अधिक औद्योगीकृत में से एक है और यह सबसे विकसित भारतीय राज्यों में से एक है।

99. D

Sol. • मेघालय का एक लोकप्रिय पारंपरिक नृत्य उत्सव 'चाड सुकरा', बुवाई उत्सव के रूप में मनाया जाता है।

• यह एक वसंत त्योहार है और कई संस्कृतियों में, खाद्य उत्पादन में इसके महत्व के इर्द-गिर्द धूमने वाले संस्कारों और रीति-रिवाजों के अनुसार वसंत मनाया जाता रहा है।

• यह मेघालय में जयंतिया हिल्स के पनार लोगों द्वारा हर साल मनाया जाने वाला एक सामुदायिक त्योहार है।

• यह आनंद का त्योहार है और इसे बीज बोने से पहले मनाया जाता है।

• यह अपरैल के मध्य या मई के पहले सप्ताह में पनार लोगों द्वारा मनाया जाने वाला त्योहार है।

• मेघालय अपने विभिन्न प्रकार के ऑर्किड, औषधीय पौधों, विदेशी फलों और सब्जियों के लिए प्रसिद्ध है।

100. D

Sol. • 'एमनेस्टी' पुस्तक के लेखक अरविंद अडिगा हैं।

• शशि थर्सर सोशल मीडिया को राजनीतिक संपर्क के एक साधन के रूप में इस्तेमाल करने में अग्रणी थे।

• अमीश तिरपाठी को उनकी पुस्तक शूरुंखला शिव तरयी और राम चंद्र शूरुंखला के लिए जाना जाता है।

• वह एक मान्यता प्राप्त भारतीय लेखक हैं और उन्हें उनकी सर्वश्रेष्ठ लेखन पुस्तकों के लिए जाना जाता है।

• विक्रम सेठ सबसे प्रसिद्ध भारतीय उपन्यासकारों और कवियों में से हैं।

• उनकी आठ कविताएँ और तीन उपन्यास प्रकाशित हो चुके हैं।