

SSC MTS 2020 Tier I : 8

Oct S2

Mock Test Questions & Solutions

Mock Test Solutions in English

Questions

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

They _____ like bitter enemies but soon make up.

- | | |
|-------------|------------|
| A. tumult | B. quarrel |
| C. conflict | D. uproar |

2. Select the most appropriate one-word substitution for the given group of words.

Science which deals with celestial objects and space

- A. Geography
 - B. Astrology
 - C. Geology
 - D. Astronomy

3. Select the INCORRECTLY spelt word.

- | | |
|-----------|-----------|
| A. froun | B. froth |
| C. friend | D. frozen |

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

Shikha said that the paper was lengthy and no difficult.

- A. lengthy but not
B. lengthy or not
C. long so not
D. No substitution required

5. Select the INCORRECTLY spelt word.

- A. chronic
 - B. preamble
 - C. ambulance
 - D. prospect

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

Comb through

- A. To carefully look through
 - B. To be trapped somewhere
 - C. To hide information
 - D. To come out of a problem

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

RELY

- A. depend
- B. protect
- C. ignore
- D. doubt

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

It is the duty of every Indian to _____ communal harmony.

- A. present
- B. repair
- C. maintain
- D. release

9. Select the most appropriate one-word substitution for the given group of words.

Compulsion to steal

- A. Megalomania
- B. Pyromania
- C. Kleptomania
- D. Nymphomania

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

The workers' interests must be protected, _____ they will go on a strike.

- A. and
- B. so
- C. else
- D. but

11. 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.'

The principals of government schools are being train in leadership skills at the IIM, Ahmedabad from 15th to 24th July.

- A. is being train
- B. are being trained
- C. was been trained
- D. No substitution required

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

He stopped copying when the examiner warn him.

- A. warn him
- B. copying
- C. He stopped
- D. when the examiner

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

HAZARDOUS

- A. certain
- B. secure
- C. bulky
- D. risky

14. Identify the segment in the sentence that contains a grammatical error.

She used to teach dance in a school, did she?

- A. did she
- B. in a school
- C. teach dance
- D. She used to

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

REMOTE

- A. unlikely
- B. secret
- C. unknown
- D. close

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

Loudmouth

- A. One who talks well
- B. One who talks boastfully
- C. One who speaks calmly
- D. One who speaks nervously

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

NEGLECT

- A. taste
- B. care
- C. wish
- D. mock

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

Why not give him a free hand _____ conduct his business?

- A. at
- B. to
- C. in
- D. for

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

I have lost my school diary; I can't find it nowhere.

- A. wherever
- B. everywhere
- C. anywhere
- D. somewhere

20. Identify the segment in the sentence that contains a grammatical error.

She is capable to do better but she lacks confidence.

- A. She is capable
 - B. but she
 - C. lacks confidence
 - D. to do better

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.

Namita did not have enough cash. She did not (1) ____ a credit card either. She found herself in a (2) _____. She had the contact number of a (3) _____ friend whom she called for help. Her friend came (4) ____ and settled the bill. Namita thanked her and expressed her (5) _____. She promised to return the money to her friend soon.

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

- A. has
 - B. having
 - C. have
 - D. had

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

- A. fix
 - B. puzzle
 - C. pressure
 - D. trouble

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

- | | |
|-----------|-------------|
| A. near | B. intimate |
| C. direct | D. close |

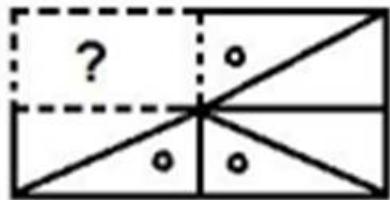
24. Select the most appropriate option to fill in blank no. 4.

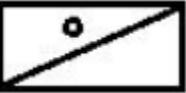
- A. purposely
 - B. regularly
 - C. immediately
 - D. slowly

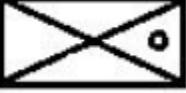
25. Select the most appropriate option to fill in blank no. 5

- | | |
|-------------|--------------|
| A. solitude | B. gratitude |
| C. aptitude | D. attitude |

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



- A. 
- C. 

- B. 
- D. 

27. Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.

$$5 * 7 * 36 * 18 * 2 * 8$$

- A. $\times, \div, +, -, =$
- C. $\times, -, +, \div, =$
- B. $\times, +, \div, -, =$
- D. $\div, \times, -, +, =$

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

Mango : Fruits :: Cauliflower : ?

- A. Plants
- C. Vegetables
- B. Cabbage
- D. Cook

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

YKS, VHP, SEM, ?, MYG

- A. PDI
- C. QBJ
- B. PCK
- D. PBJ

30. Five objects A, B, C, D and E are of different weights. The weight of B is double the weight of E. The weight of C is three times the weight of A. D's weight is four times the weight of C. The weight of B is half

the weight of D. Which object is the heaviest among all?

31. In a certain code language, 'NOISE' is written as '59141519'. How will 'DORMANT' be written in that language?

A. 141314151922 B. 141317151920
C. 182614151820 D. 141314151820

32. In a certain code language, 'PRICK' is written as 'QTLGP', and 'DOUBLE' is written as 'EQXFQK'. How will 'ACEGARD' be written in that language?

A. BEHKFXK B. BDFHBSE
C. BEGKFYL D. BEHLGZK

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

7	12	50
10	11	53
12	15	?

34. 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.

QUEEN : TRBBQ :: PITCH : ?

35. Three 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 engineers are doctors.

All doctors are lawyers.

No lawyer is a dancer.

Conclusions:

I. No doctor is a dancer.

II. No engineer is dancer.

III. Some lawyers are engineers.

A. Only conclusions I and III follow

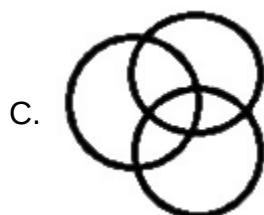
C. All of the conclusions follow

B. Only conclusions I and II follow

D. None of the conclusions follow

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

Brothers, Sisters, Fathers



37. Which of the following numbers will replace the question mark (?) in the given series?

40, 40, 42, 126, 130, ?

A. 260

B. 275

C. 452

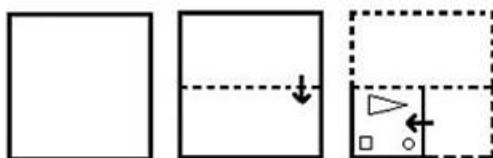
D. 650

38. Select the correct mirror image of the given combination when the mirror is placed at MN as

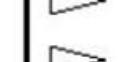
shown below.

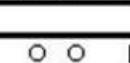


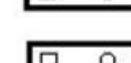
- A. **7 8 6 9 8** B. **2 4 6 9 7**
C. **7 8 9 9 8** D. **2 4 6 9 5**



- A. 

B. 

C. 

D. 

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 beds are tables.

All beds are chairs.

Conclusions:

I. Some chairs are tables.

II. No chair is a table.

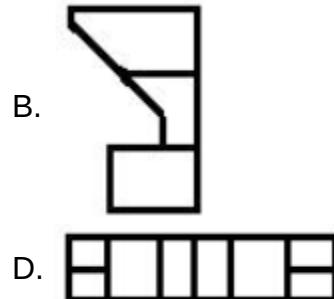
A. Either conclusion I or II follows

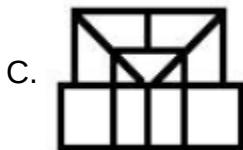
C. Both conclusions I and II follow

B. Only conclusion II follows

D. Only conclusion I follows

43. **Select the option figure which is embedded in the given figure as its part (rotation is NOT allowed).**



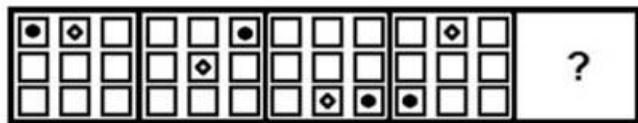


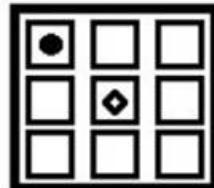
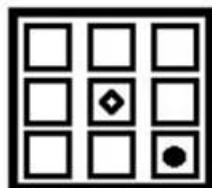
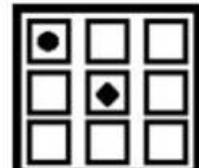
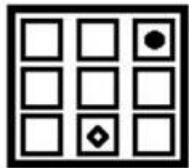
44. Which of the following numbers will replace the question mark (?) in the given series?

35, 50, 80, 125, 185, ?

5 : 61 :: 8 : ?

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





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

Metre : Millimetre :: Kilogram : ?

- | | |
|-----------|------------|
| A. Weight | B. Quintal |
| C. Pound | D. Gram |

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

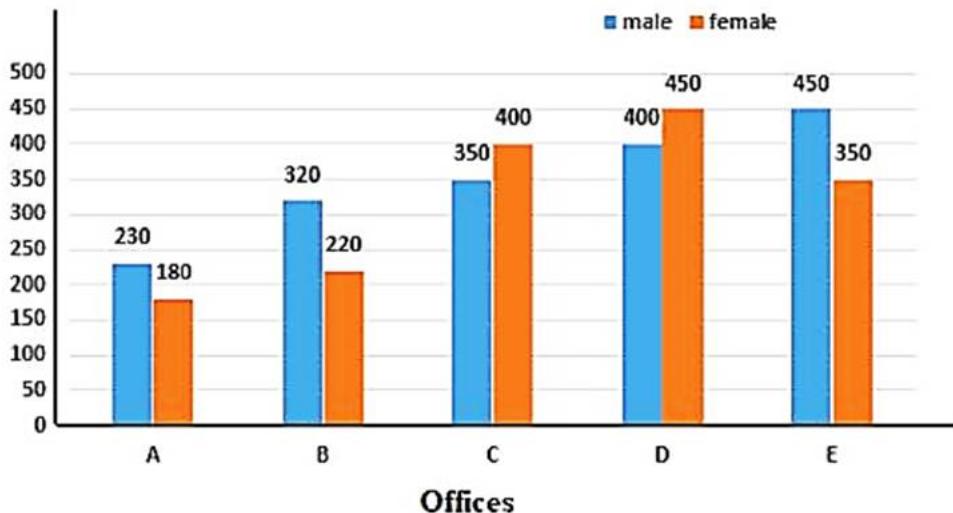
$$64 - 24 \div 3 + 32 \times 12 = 158$$

51. A solid metallic cylinder with a base radius of 3 cm and a height of 120 cm is melted and recast into a sphere of radius r cm. What is the value of r if there is a 10% metal loss in the conversion?

52. The value of $\frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5} \right)} - \left(2\frac{1}{3} \text{ of } 1\frac{1}{2} \right)$ is

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

Number of Male and Female employees of a Company working in Five Offices



In which office of the company is the number of male employees 25% more than the average number of female employees in all five offices?

57. If the mean of the distribution

Class	0-10	10-20	20-30	30-40	40-50
Frequency	6	12	15	x	5

is 24.6, then the value of x is:

58. A and B can do a certain work in 12 and 18 days, respectively. They work together for 5 days. The remaining work was completed by C alone in $27\frac{1}{2}$ days. What part of the same work can be completed by A, B and C together in 6 days?

- A. $\frac{5}{6}$ B. $\frac{9}{10}$
C. $\frac{14}{15}$ D. $\frac{29}{30}$

59. A sum of ₹ 4,000 is lent at 10% p.a., interest compounded annually. What is the difference between the compound interest for the 2nd year and the 3rd year?

60. The speed of a bus without stoppages is 40 km/h and with stoppages is 32 km/h. How many minutes per hour does the bus stop?

61. An article is sold at a profit of 25%. If both the cost price and the selling price of the article are increased by ₹200, then the profit percentage is 20%. What is the original cost price of the article?

62. A dealer sells an article by allowing a 20% discount on its marked price and still gains 12%. If the cost price of the article is ₹750, then its marked price (in ₹) is:

- C. loss of 10% D. loss of 8%

70. A certain sum amounts to ₹4,600 after 5 years and to ₹6,000 after 8 years at the same rate of simple interest per annum. What will be the simple interest on a sum of ₹8,500 for $6\frac{1}{2}$ years at the same rate?
A. ₹10,515 B. ₹10,215
C. ₹11,375 D. ₹11,460

71. The value of $\frac{2}{3} \div \left(\frac{4}{5} - \frac{1}{2}\right) \times \frac{18}{25} - \left(\frac{4}{5} \div \frac{5}{6} \text{ of } 2\frac{2}{3}\right) + 3\frac{1}{5} \div \frac{8}{5} \times \frac{2}{5}$ is:
A. $3\frac{1}{5}$ B. $4\frac{2}{5}$
C. $3\frac{2}{25}$ D. $2\frac{1}{25}$

72. Let x be the least number between 56,000 and 60,000 which when divided by 40, 45, 50 and 55 leaves a remainder of 23 in each case. What is the sum of the digits of x ?
A. 23 B. 21
C. 26 D. 19

73. The average weight of all the students in a class is 55 kg. The ratio of the average weight of boys to that of girls is 5 : 4. If 40% of the students are boys and the rest are girls, then what is the average weight (in kg) of boys?
A. 62.5 B. 65
C. 66 D. 60.8

74. The average of the 3-digit numbers 524, 466, $3x4$ and $x52$ is 529. What is the average of $(10x + 7)$ and $(14x - 9)$?
A. 83 B. 71
C. 59 D. 68

75. The ratio of copper and zinc in alloy A is 5 : 7 and that in alloy B is 4 : 5. A and B are taken in the ratio of 1: 2 and mixed to form a new alloy C. What part of C is copper?
A. $\frac{47}{108}$ B. $\frac{5}{12}$
C. $\frac{4}{9}$ D. $\frac{61}{108}$

76. 'Pateti' or the day of repentance is an important day in the _____ calendar.

- C. Kiran Desai D. Margaret Atwood

86. Which of the following is a tributary of the Yamuna river?
A. Gandak B. Son
C. Ghaghra D. Chambal

87. As per the Union Budget, 2020-21, a resident Indian Individual with an annual taxable income above Rs 15 lakh will pay tax at the rate of ____ %.
A. 10 B. 20
C. 5 D. 30

88. Which of the following is a pan-India electronic trading portal aimed at integrating the existing mandis for agricultural products in India?
A. e-ANNA B. e-BAZAAR
C. e-NAM D. e-Agriculture

89. Pradhan Mantri Jeevan Jyoti Bima Yojana provides life insurance cover of ____ to all the holders of bank accounts.
A. Rs 3 Lakh B. Rs 2 Lakh
C. Rs 5 Lakh D. Rs 4 Lakh

90. Who among the following nationalist leaders was popularly known as 'Deshbandhu'?
A. Dadabhai Naoroji B. Chittaranjan Das
C. Ashutosh Mukherjee D. Madan Mohan Malaviya

91. Which of the following is the only water-soluble vitamin that can be stored in the liver for many years?
A. Vitamin B-12 B. Vitamin C
C. Vitamin K D. Vitamin D

92. In April 2020, Aerobiosys Innovations declared the development of a _____ which was named 'Jeevan Lite'.
A. ventilator B. personal protective equipment (PPE) kit
C. face mask based on Nanotechnology D. contact tracing mobile application

93. In which year was the Value Added Tax introduced in India?
A. 2007 B. 2005
C. 2002 D. 2010

94. Who among the following Gupta rulers married a girl from the Lichchhavi clan?
A. Samudragupta B. Sri Gupta

C. Chandragupta-I

D. Ramagupta

95. Which of the following was the first language conferred with the status of Classical Language in India?

A. Kannada

B. Sanskrit

C. Tamil

D. Malayalam

96. Which of the following is one of the six pollutants under Kyoto Protocol regulations?

A. Chlorine

B. Phosgene

C. Carbon monoxide

D. Perfluorocarbons

97. Which of the following cities became the capital of the Bahamani sultanate immediately after its foundation?

A. Devagiri

B. Daulatabad

C. Ahsanabad

D. Berar

98. Which of the following companies has developed a braille keyboard named 'TalkBack'?

A. Google

B. Apple

C. Microsoft

D. Huawei

99. With which of the following games/sports is the 'Sultan Azlan Shah Cup' associated?

A. Tennis

B. Hockey

C. Kabaddi

D. Shooting

100. The Gitanjali Literary Prize is awarded in association with which country?

A. Germany

B. England

C. France

D. The US

Solutions

1. B

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

- * Tumult = a state in which your thoughts or feelings are confused
- * Quarrel = to have an angry argument or disagreement.
- * Conflict = clash
- * Uproar = a situation in which people shout and make a lot of noise because they are angry or upset about something.

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

- * "Tumult" is used in context of "state of confusion". Thus, option A is incorrect.
- * "Conflict" is used in context of "clash". Thus, option C is incorrect.
- * "Uproar" is used in context of "outcry". Thus, option D is incorrect.
- * "Quarrel" is used in context of "angry argument".
- * Here in the given sentence, it is used to show that the subject ("they") get engaged in an angry argument.

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

The correct sentence will be: **They quarrel like bitter enemies but soon make up.**

2. D

Sol. Geography: the scientific study of the earth's surface, physical features, divisions etc.

Astrology: the study of position of stars and the movement of the planets in the belief that they influence human affairs.

Geology: the scientific study of the physical structure of earth, including the origin and history of the rocks.

Astronomy: the scientific study of the moon, sun, stars, planets etc.

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

3. A

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

“Frown” is the correct spelling of the incorrect word “Froun”. It means a serious, angry or worried expression on a person’s face that causes lines on their forehead.

The meaning of other words are:

Froth: a mass of small bubbles, especially on the surface of a liquid.

Friend: a person you know well and like, and who is not usually a member of your family.

Frozen: extremely cold.

4. A

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

* Underlined part needs correction in Conjunction and Adverb.

* “But” as a conjunction is used to show contrast.

For example:

Her mother won’t be there, **but** her father might.

* “Not” is an adverb and it is used to give negative meaning to an adjective/adverb/verb.

For example:

The government does **not propose** to abandon the project altogether.

Here, “not” is used for the verb “propose”.

* “No” is a determiner and it means “not any”. It is used before the nouns.

For example:

No student will leave the room.

* The underlined part needs a conjunction that shows the contrast with the previous part of the sentence. So, use of conjunction “and” that just joins two phrases is not enough here.

* Thus, “but” as a conjunction should be used here that contrasts as well as joins two parts of the sentence.

* Also, “difficult” is an adjective so usage of determiner “no” is wrong here. Only an adverb can qualify an adjective. Thus, adverb “not” should be used in place of determiner “no”.

* So, **“lengthy but not”** is the correct substitution.

Thus, the correct sentence will be: **Shikha said that the paper was lengthy but not difficult.**

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

5. C

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

“Ambulance” is the correct spelling of the incorrect word “ambulence”. It means a vehicle with special equipment, used for taking sick or injured people to a hospital.

The meaning of other words are:

Chronic: lasting for a long time; difficult to cure.

Preamble: an introduction to a book or a written document.

Prospect: the possibility that something will happen.

6. A

Sol. The idiom "**Comb through**" means to examine or search something very carefully.

Example: The police have **gone over** the house **with a fine-tooth comb**.

Note: Proper idiom is "Go over/through something with a fine-tooth/fine-toothed comb"

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

7. A

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

Rely = to need or depend on someone/something.

E.g.: Our organisation **rely** entirely on the works of volunteers.

Depend = to rely on someone/something and be able to trust them.

E.g.: She was the sort of person you could **depend** on.

Protect = to make sure that someone/something is not harmed, injured, damaged etc.

Ignore = to pay no attention to something.

Doubt = a feeling of uncertain about something or not believing something.

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

8. C

Sol.

Let us understand the meaning of the given words:-

- * Present = to show or offer something for other people to look at
- * Repair = to fix something that is broken, damaged or torn.
- * Maintain = to make something continue OR keep or preserve something
- * Release = to let someone come out of a place where they have been kept.

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

- * "Present" is used in context of "offering something". Thus, option A is incorrect.
- * "Repair" is used in context of "fixing something". Thus, option B is incorrect.
- * "Release" is used in context of "to free someone from captivity". Thus, option D is incorrect.
- * "Maintain" is used in context of "keeping/preserving".
- * Here in the given sentence, it is used to show that keeping/preserving "communal harmony" of India is the duty of every Indian.

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

The correct sentence will be: **It is the duty of every Indian to maintain communal harmony.**

9. C

Sol. Megalomania: a strong feeling that you want to have more and more power
Pyromania: a mental illness that causes a strong desire to set fire to things.
Kleptomania: an excessive desire to steal things

Nymphomania: the behaviour of a person who has, or wants to have, sex very often.

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

10. C

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

- * And = (conjunction) is used to show “also; in addition to”
- * So = (adverb) is used to show “to such a great degree”.
- * Else = (adverb) is used to show “if not” or “otherwise”.
- * But = (conjunction) is used to show contrast.

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

- * “And” as a conjunction is used in the context of “also”. Thus, option A is incorrect.
- * “So” as an adverb is used for the purpose of “to such a great degree”. Thus, option B is incorrect.
- * “But” as a conjunction is used to show “contrast”. Thus, option D is incorrect.
- * “Else” as an adverb is used to show the meaning similar to “otherwise”. It is used to state that what the result would be if something did not happen or if the situation were different.
- * Here in the given sentence, it is used to state the result of “going on a strike” if the event of “protecting workers’ interests” did not happen.

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

The correct sentence will be: **The workers' interests must be protected, else they will go on a strike.**

11. B

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

- * Underlined part needs correction in Verb.
- * In case of present continuous tense,

The structures for active/passive voices are:

Active Voice: Subject + is/ am/ are + Verb (V1+ing form) + Object

Passive Voice: Object + is/am/are + being + Verb (V3 form) + by + Subject

For example:

The students **are decorating** the stage for the annual day.

The stage **is being decorated** by the students for the annual day celebrations.

* The given sentence is set in passive voice because here the actual doer of the action verb ("train") is not the subject. As per the passive verb structure, third form of verb should be used after the verb "are being". Thus, third form of the verb i.e. "trained" should be used in place of first form of verb "train".

* So, "**are being trained**" is the correct substitution.

The correct sentence will be: **The principals of government schools are being trained in leadership skills at the IIM, Ahmedabad from 15th to 24th July.**

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

12. A

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

* Whenever sentence is talking about the two actions of the past. Then the action that happened first is written in past perfect tense and the second action is written in simple past tense.

* **For example:**

When I **reached** there, the show **had started**.

* In the given sentence, the action of “warn” is done first and action of “stopped copying” is done after the first action.

* “Stopped” is the second form of verb. Thus, it is correct because it shows the simple past tense. But the first action “warn” is written in first form of verb which is incorrect. It should be written in past perfect verb structure: “had + third form of verb”. Thus, “had warned” should be used in place of “warn”.

* So, “**had warned**” is the correct substitution.

The correct sentence will be: **He stopped copying when the examiner had warned him.**

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

13. D

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

Hazardous= involving risk or danger, especially to someone's health or safety.

E.g.: We endured a **hazardous** journey through thickening fog.

Certain = strongly believing something; having no doubts.

Secure = to obtain or achieve something especially when this means using a lot of effort.

Bulky = large and difficult to move or carry.

Risky = dangerous

E.g.: Even a very good organisation can be a **risky** investment if it is overvalued.

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

14. A

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

* Question tags are written according to the subject and auxiliary of the main clause. If the main clause is in positive sense then a negative tag is used.

* **For example:**

He is an honest and forthright person, **isn't he?**

* In the given sentence, we have erroneously used a positive question tag “did she” when main clause is written in positive sense. So, an adverb “not” should be added to the question tag to convey the negative sense.

* So, “**didn't she**” is the most appropriate here.

The correct sentence will be: **She used to teach dance in a school, didn't she?**

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

15. D

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

Remote = far away from places where other people live

E.g.: Our farmhouse is **remote** from any other buildings.

Unlikely = not likely to happen; not probable.

Secret = known about by only a few people; kept hidden from others.

Unknown = not known or identified.

Close = near in space or time.

E.g.: He is looking for a job **closer** to home.

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

16. B

Sol. The idiom "**loudmouth**" means talking too loudly or too much in an offensive or stupid way.

Example: Everyone in our company knows that he is a **loudmouth**.

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

17. B

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

Neglect = the fact of not giving enough care or attention to something/someone.

E.g.: This place smelled of decay and **neglect**.

Taste = the particular quality that different foods and drinks have that allows you to recognize them when you put them in your mouth.

Care = the process of caring for someone/something.

E.g.: Some people are badly injured and needed medical **care**.

Wish = an attempt to make something happen by thinking hard about it

Mock = a practice exam that you do before the official one.

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

18. B

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

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

* To = (Infinitive marker) is used to show purpose or intention.

* In = (preposition) is used to show at a point within an area or a space

* For = (preposition) is used to show purpose or function.

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

* "At" as a preposition is used to show the location. Thus, option A is incorrect.

* "In" as a preposition is used to for the purpose of "location within something". Thus, option C is incorrect.

* "For" as a preposition is used to show "purpose". Thus, option D is incorrect.

* "To" is used as a preposition and infinitive marker.

* As an infinitive marker, it is used to show the purpose.

* Here in the given sentence, it is used to purpose of giving a free hand i.e. "to conduct" business.

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

The correct sentence will be: **Why not give him a free hand to conduct his business?**

19. C

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

- * Underlined part needs correction in adverb.
- * “Anywhere” as an adverb is used in negative sentences and in questions instead of somewhere. It means in, at, or to any place, when it does not matter where.

For example:

She has never been **anywhere** outside India.

- * “Nowhere” as an adverb means “not in or to any place”

For example:

There was **nowhere** for me to sit.

- * The given sentence is a negative sentence because the word “not” is used before the underlined part.
- * Also, the location of “school diary” does not matter here, the only prime concern is “inability to find” it.
- * So, when the sentence is negative and the location of something does not matter, then it is appropriate to use “anywhere” in place of “nowhere”.
- * So, “**anywhere**” is the correct substitution.

The correct sentence will be: **I have lost my school diary; I can't find it anywhere.**

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

20. D

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

- * "Well" is an adverb and it means "in a good, right or acceptable way".
- * "Better" is the comparative degree. "Best" is the superlative degree.

For example:

They played **well** in the tournament.

- * In the given sentence, we need an adverb for the verb "do".
- * "Better" is the comparative degree of adverb "well".
- * But there is no sense of comparison in the sentence.
- * Thus, a positive degree of adverb (i.e. well) should be used to qualify "do" (verb).
- * So, "**to do well**" is the correct substitution.

The correct sentence will be: **She is capable to do well but she lacks confidence.**

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

21. C

Sol. The given passage is about "**Inability of Namita in paying the billing amount**".

"Has" is used in present tense to show the possession. But here we need verb in past tense. Thus, option A is wrong.

"Having" is used to show the continuous aspect of possession in present tense. But here we need verb in past tense. Thus, option B is wrong.

“Had” is used in past tense to show the possession. But here we need “base form of verb” after “did not”. Thus, option D is wrong.

“Have” is the base form of verb. It is used to show the possession.

Here in the given sentence, it is used to show the possession of “credit card” by “Namita”.

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

22. A

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Puzzle” means a game, etc. that you have to think about carefully in order to answer it. Thus, option B is wrong.

“Pressure” means the act of trying to persuade or to force someone to do something. Thus, option C is wrong.

“Trouble” means a problem, worry, difficulty etc. or a situation causing this. Thus, option D is wrong.

“In a Fix” means to be in a difficult or embarrassing situation.

In the given sentence, Namita is in a difficult situation when she found that she does not have cash/credit card to pay the billing amount.

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

23. D

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Near” as an adjective means “a short distance away”. Thus, option A is wrong.

“Intimate” is an adjective. It is used to show relationships especially those that are sexual in nature. Thus, option B is wrong.

“Direct” means going in the straightest line between two paces without stopping or changing the direction. Thus, option C is wrong.

“Close” is an adjective. It is used to show knowing someone very well and liking them very much.

In the given sentence, it is used as an adjective for noun “friend” and Namita knows this friend very well.

So, she called her well known friend for help.

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

24. C

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Purposely” as an adverb means “deliberately”. Thus, option A is wrong.

“Regularly” as an adverb means “at regular intervals or times”. Thus, option B is wrong.

“Slowly” as an adverb means “at a slow speed”. Thus, option D is wrong.

“Immediately” as an adverb means “without delay”.

In the given sentence, it is used to mention the arrival of close friend for help “without any delay”.

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

25. B

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Solitude” means the state of being alone. Thus, option A is wrong.

“Aptitude” means natural ability or skill at doing something. Thus, option C is wrong.

“Attitude” means the way that you think and feel about someone/something. Thus, option D is wrong.

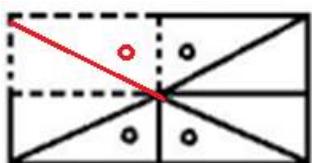
“Gratitude” means the feeling of being grateful and wanting to express your thanks.

In the given sentence, it is used to mention Namita being “grateful and thankful” to his close friend for the immediate help in paying the billing amount.

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

26. D

Sol. Complete figure is:



Hence, option D is the correct answer.

27. C

Sol. **By checking option A:**

$$5 * 7 * 36 * 18 * 2 * 8$$

After interchanging:

$$5 \times 7 \div 36 + 18 - 2 = 8$$

Here, 7 is perfectly not divisible by 36, so it will result in decimal.

so, its not correct option.

By checking option B:

$$5 * 7 * 36 * 18 * 2 * 8$$

After interchanging:

$$5 \times 7 + 36 \div 18 - 2 = 8$$

$$\text{or, } 35 + 2 - 2 = 8$$

$$\text{or, } 35=8$$

so, its not correct option.

By checking option C:

$$5 \times 7 \times 36 \times 18 \times 2 \times 8$$

After interchanging:

$$5 \times 7 - 36 + 18 \div 2 = 8$$

$$\text{or, } 35 - 36 +9 = 8$$

$$\text{or, } 8=8$$

so, its correct option.

as, we found the correct answer, so no need to check more options.

Hence, option C is the correct answer.

28. C

Sol. as,

Mango is a Fruit.

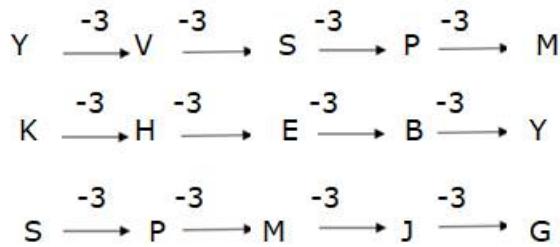
similarly,

Cauliflower is a Vegetable.

Hence, option C is the correct answer.

29. D

Sol. pattern is:



Hence, option D is the correct answer.

30. C

Sol. The weight of B is double the weight of E.

$$B=2E$$

The weight of C is three times the weight of A.

$$C=3A$$

D's weight is four times the weight of C.

$$D=4C$$

The weight of B is half the weight of D.

$$B=D/2$$

Let weight of D = 100 kg

weight of B = $100/2 = 50\text{kg}$

weight of E = $50/2 = 25\text{ kg}$

weight of C = $100/4 = 25\text{ kg}$

weight of A = $25/3 = 8.33\text{ kg}$

So, object D is the heaviest among all.

Hence, option C is the correct answer.

31. D

Sol. Let A=1, B=2, C=3,.....Z=26

as,

NOISE = EINOS (letters arranged in alphabetical order)

$$= E(5)I(9)N(14)O(15)S(19) = 59141519$$

similarly,

DORMANT=ADMNORT(letters arranged in alphabetical order)

=A(1)D(4)M(13)N(14)O(15)R(18)T(20)

=141314151820

Hence, option D is the correct answer.

32. A

Sol.

as,

P	R	I	C	K		
+1	+2	+3	+4	+5		
↓	↓	↓	↓	↓		
Q	T	L	G	P		
and						
D	O	U	B	L	E	
+1	+2	+3	+4	+5	+6	
↓	↓	↓	↓	↓	↓	
E	Q	X	F	Q	K	
similarly,						
A	C	E	G	A	R	D
+1	+2	+3	+4	+5	+6	+7
↓	↓	↓	↓	↓	↓	↓
B	E	H	K	F	X	K

Hence, option A is the correct answer.

33. D

Sol. Row 1:

$$[(7+12)*3]-7=[19*3]-7=57-7=50$$

Row 2:

$$[(10+11)*3]-10=[21*3]-10=63-10=53$$

Row 3:

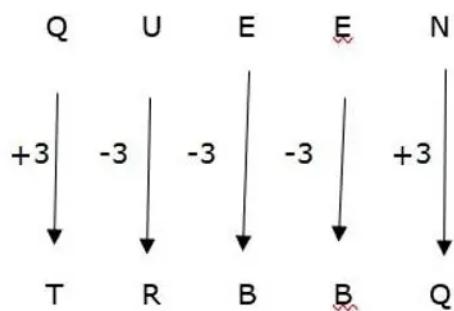
$$[(12+15)*3]-12=[27*3]-12=81-12=69$$

Hence, option D is the correct answer.

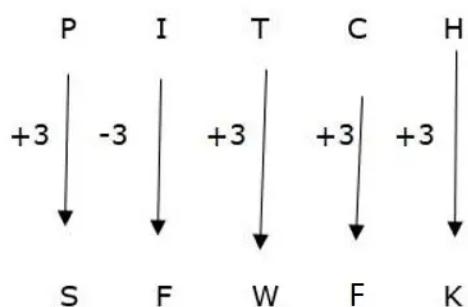
34. D

Sol. Logic: Each consonant is taken three step forward and each vowel is taken three step backward.

as,



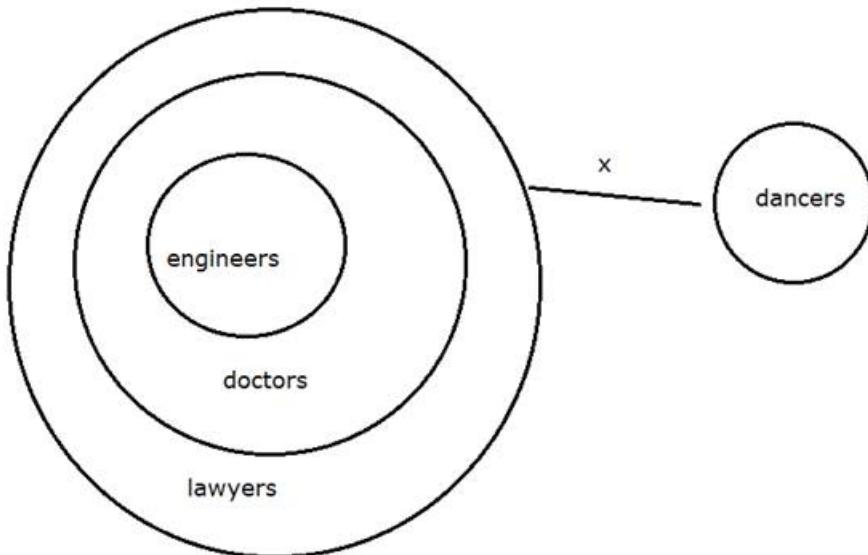
similarly,



Hence, option D is the correct answer.

35. C

Sol. Minimum Possible diagram is-



Conclusions:

- I. No doctor is a dancer. (It follows because All doctors are lawyers and No lawyer is a dancer.)
- II. No engineer is dancer. (It also follows because All engineers are doctors, All doctors are lawyers and No lawyer is a dancer.)
- III. Some lawyers are engineers. (It also follows because All engineers are doctors and All doctors are lawyers.)

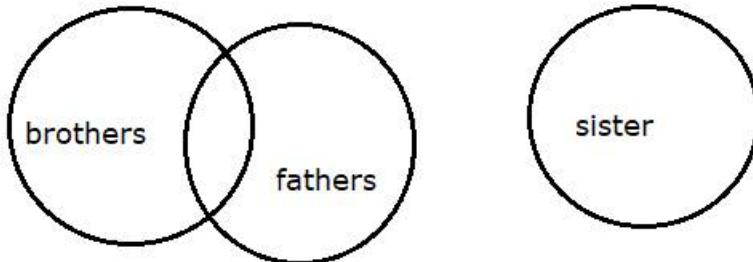
So, All of the conclusions follow.

Hence, option C is the correct answer.

36. D

Sol. Brothers can be Fathers and vice-versa. Sisters are female while Brothers and Fathers are male.

So, the best representation is:



Hence, option D is the correct answer.

37. D

Sol. pattern is:

$$40 \times 1 = 40$$

$$40 + 2 = 42$$

$$42 \times 3 = 126$$

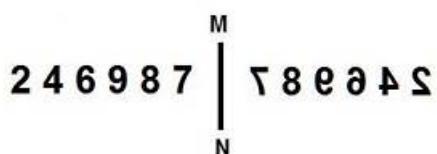
$$126 + 4 = 130$$

$$130 \times 5 = 650$$

Hence, option D is the correct answer.

38. C

Sol. In a plane mirror, a mirror image is a reflected duplication of an object that appears almost identical, but it is reversed in the direction perpendicular to the mirror surface. As an optical effect it results from reflection of substances such as a mirror or water.



Hence, option C is the correct answer.

39. A

Sol. The logic is that each alphabet is coded with the alphabet at its reverse position.

As,

PLAN=KOZM

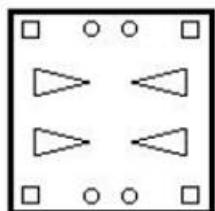
Similarly,

FLICK=UORXP

Hence, option A is the correct answer.

40. B

Sol. As given in the figure, we need to fold it in the given(handkerchief folding) manner and Option B would appear when unfolded.



Hence, option B is the correct answer.

41. A

Sol. Let A=1, B=2, C=3,.....Z=26

as,

$$\text{CLOT} = \text{C}(3)\text{L}(12)\text{O}(15)\text{T}(20)$$

$$= \text{C}(3*2)\text{L}(12*2)\text{O}(15*2)\text{T}(20*2)$$

$$= \text{C}(6)\text{L}(24)\text{O}(30)\text{T}(40) = 6243040$$

similarly,

$$\text{MOSAIC} = \text{M}(13)\text{O}(15)\text{S}(19)\text{A}(1)\text{I}(9)\text{C}(3)$$

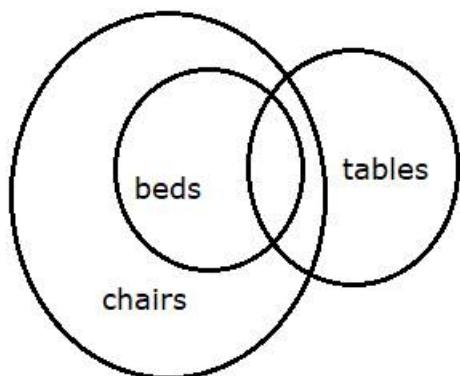
$$= \text{M}(13*2)\text{O}(15*2)\text{S}(19*2)\text{A}(1*2)\text{I}(9*2)\text{C}(3*2)$$

$$= M(26)O(30)S(38)A(2)I(18)C(6) = 2630382186$$

Hence, option A is the correct answer.

42. D

Sol. Minimum Possible diagram is-



Conclusions:

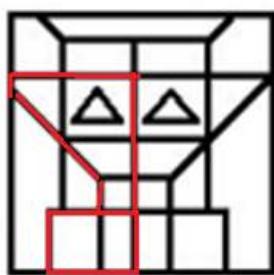
- I. Some chairs are tables. (it follows because Some beds are tables and All beds are chairs.)
- II. No chair is a table. (it does not follow because Some beds are tables and All beds are chairs.)

So, Only conclusions I follows.

Hence, option D is the correct answer.

43. B

Sol. After carefully observing the figures given in the question and answers, it is very clear that the answer figure B is embedded in the given question figure. It is shown as given below:



Hence, option B is the correct answer.

44. D

Sol. pattern is:

$$35+15=50$$

$$50+30=80$$

$$80+45=125$$

$$125+60=185$$

$$185+75=260$$

Hence, option D is the correct answer.

45. C

Sol. O is third to the left of K.

O _ _ K

N is third to right of L.

L _ _ N

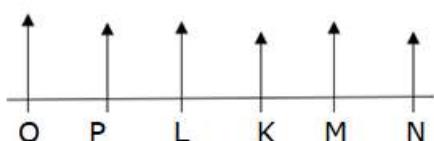
K is to the immediate left of M.

K M

M is between K and N

L K M N

So, the final arrangement is:

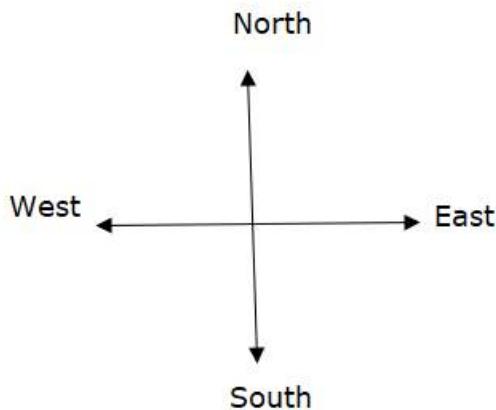


Therefore, P is sitting between O and L.

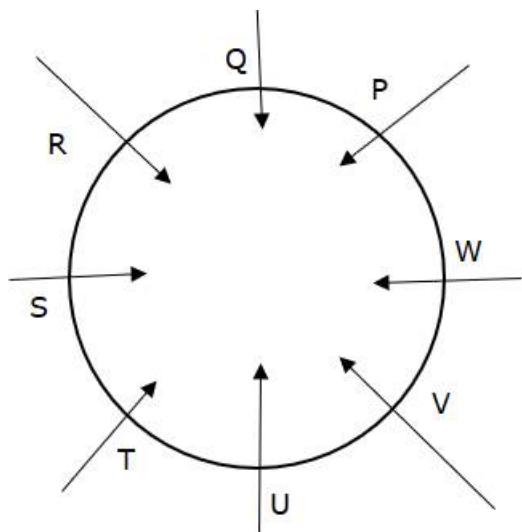
Hence, option C is the correct answer.

46. D

Sol.



T is sitting in the north-east direction. So, the final arrangement is:



Therefore, W is sitting in the west direction.

Hence, option D is the correct answer.

47. A

Sol. As,

$$5 \times (5 + 5 + 2) + 1 = 61$$

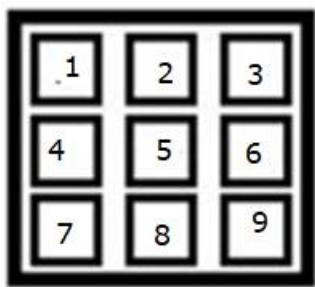
Similarly,

$$8 \times (8 + 8 + 2) + 1 = 145$$

Hence, option A is the correct answer.

48. D

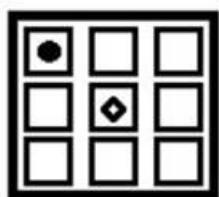
Sol.



Moving order of ● is: 1 3 9 7 1

Moving order of ♦ is: 2 5 8 2 5

so, the next figure is-



Hence, Option D is the correct answer.

49. D

Sol. as,

$$1000 \text{ Millimetre} = 1 \text{ Metre}$$

similarly,

$$1000 \text{ gram} = 1 \text{ kilogram}$$

Hence, option D is the correct answer.

50. B

Sol. **By checking option A:**

$$64 - 24 \div 3 + 32 \times 12 = 158$$

After interchanging:

$$64 - 24 \div 3 + 12 \times 32 = 158$$

$$\text{or, } 64 - 8 + 384 = 158$$

$$\text{or, } 440 = 158$$

so, its not correct option.

By checking option B:

$$64 - 24 \div 3 + 32 \times 12 = 158$$

After interchanging:

$$64 - 24 \div 12 + 32 \times 3 = 158$$

$$\text{or, } 64 - 2 + 96 = 158$$

$$\text{or, } 158 = 158$$

so, its correct option.

as, we found the correct answer, so no need to check more options.

Hence, option B is the correct answer.

51. A

Sol. Base radius of solid metallic cylinder (R) = 3 cm

Height of solid metallic cylinder (H) = 120 cm

There is a 10% metal loss in the conversion.

$$\Rightarrow \pi R^2 H - \frac{10}{100}(\pi R^2 H) = \frac{4}{3}\pi r^3$$

$$\Rightarrow R^2 H - \frac{1}{10}(R^2 H) = \frac{4}{3}r^3$$

$$\Rightarrow \frac{9}{10}(R^2 H) = \frac{4}{3}r^3$$

$$\Rightarrow \frac{9}{10}[(3)^2(120)] = \frac{4}{3}r^3$$

$$\Rightarrow 9[(3)^3(3)] = r^3$$

$$\Rightarrow r = 9 \text{ cm}$$

52. C

Sol.

$$\frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5} \right)} - \left(2\frac{1}{3} \text{ of } 1\frac{1}{2} \right)$$

USING BODMAS :

$$\Rightarrow \frac{\frac{13}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{\frac{13}{3} \div \frac{1}{5} - \left(\frac{3}{10} + \frac{106}{5} \right)} - \left(\frac{7}{3} \times \frac{3}{2} \right)$$

$$\Rightarrow \frac{\frac{13}{4} - \frac{2}{3}}{\frac{13}{3} \div \frac{1}{5} - \left(\frac{215}{10} \right)} - \left(\frac{7}{2} \right)$$

$$\Rightarrow \frac{\frac{13}{4} - \frac{2}{3}}{\frac{65}{3} - \left(\frac{215}{10}\right)} - \left(\frac{7}{2}\right)$$

$$\Rightarrow \frac{\frac{39-8}{12}}{\frac{650-645}{30}} - \left(\frac{7}{2}\right)$$

$$\Rightarrow \frac{\frac{31}{12}}{\frac{5}{30}} - \left(\frac{7}{2}\right)$$

$$\Rightarrow \frac{\frac{31}{12}}{\frac{1}{6}} - \left(\frac{7}{2}\right)$$

$$\Rightarrow \frac{186}{12} - \left(\frac{7}{2}\right) = \frac{186}{12} - \left(\frac{42}{12}\right) = \frac{144}{12} = 12$$

53. A

Sol. Consider option A:

Average number of female employees in all five offices =

$$\frac{180 + 220 + 400 + 450 + 350}{5} = \frac{1600}{5} = 320$$

Number of male employees in company D = 400

Percentage by which number of male employees in company D more than the average

$$\text{number of female employees in all five offices} = \frac{400 - 320}{320} \times 100 = 25\%$$

Hence, option A is correct.

54. B

Sol. Number of male employees in office E = 450

Number of female employees in office C = 400

45% of the female employees in office C are transferred to office B.

Number of female employees in office B =

$$\frac{45}{220 + 100} \times 400 = 220 + 180 = 400$$

Percentage by which number of male employees in office E is more than the female

$$\text{employees in office B} = \frac{\frac{450 - 400}{400} \times 100}{400} = 12.5\%$$

55. A

Sol. Total number of female employees of the company in offices B, D and E = $220 + 450 + 350 = 1020$

Total number of male employees in offices A, B, C and E = $230 + 320 + 350 + 450 = 1350$

$$\text{Required percentage} = \frac{\frac{1350 - 1020}{1350} \times 100}{1350} = \frac{330}{1350} \times 100 = 24.4\%$$

56. D

Sol. Pipes A, B and C can fill a tank in 30 hours, 36 hours and 28 hours, respectively.

Let total capacity of tank = LCM (30,36,28) = 1260 unit

$$\text{Efficiency of pipe A} = \frac{1260}{30} = 42 \text{ unit/hour}$$

$$\text{Efficiency of pipe B} = \frac{1260}{36} = 35 \text{ unit/hour}$$

$$\text{Efficiency of pipe C} = \frac{1260}{28} = 45 \text{ unit/hour}$$

Let tank is filled in x hours.

A and C were closed 5 hours and 8 hours, respectively, before the tank was filled completely.

$$\Rightarrow (x - 5) \times 42 + (x) \times 35 + (x - 8) \times 45 = 1260$$

$$\Rightarrow 42x - 210 + 35x + 45x - 360 = 1260$$

$$\Rightarrow 122x = 1830$$

$$\Rightarrow x = 15$$

Hence, Tank will be filled in 15 hours.

57. C

Sol.

Class	Mid point (x_i)	Frequency (f_i)	$(f_i) \cdot (x_i)$
0-10	5	6	30
10-20	15	12	180
20-30	25	15	375
30-40	35	x	35x
40-50	45	5	225
		38+x	810+35x

$$\text{Mean} = \frac{\sum f_i \cdot x_i}{\sum f_i} = \frac{810 + 35x}{38 + x}$$

$$\Rightarrow \frac{810 + 35x}{38 + x} = 24.6$$

$$\Rightarrow 810 + 35x = 934.8 + 24.6x$$

$$\Rightarrow 10.4x = 124.8$$

$$\Rightarrow x = 12$$

58. B

Sol. A and B can do a certain work in 12 and 18 days, respectively.

Let total work = LCM (12,18) = 36 unit

$$\text{Efficiency of A} = \frac{36}{12} = 3 \text{ unit/day}$$

$$\text{Efficiency of B} = \frac{36}{18} = 2 \text{ unit/day}$$

They work together for 5 days.

$$\text{Work done by A and B together in 5 days} = (3 + 2) \times 5 = 25 \text{ unit}$$

$$\text{Remaining work} = 36 \text{ unit} - 25 \text{ unit} = 11 \text{ unit}$$

The remaining work was completed by C alone in $27\frac{1}{2}$ days

$$\frac{11}{55} = \frac{2}{5} \text{ unit/day}$$

$$\text{Efficiency of C} = \frac{2}{2}$$

$$\text{Efficiency of A + B + C} = 3 + 2 + \frac{2}{5} = \frac{27}{5} \text{ unit/day}$$

$$\text{Work done by A, B and C together in 6 days} = \frac{27}{5} \times 6 = \frac{162}{5} \text{ unit}$$

Part of the work that is completed by A, B and C together in 6 days =

$$\frac{162}{5 \times 36} = \frac{45}{50} = \frac{9}{10}$$

59. D

Sol. A sum of ₹ 4,000 is lent at 10% p.a., interest compounded annually.

$$\text{Amount after one year} = 4000 \left(1 + \frac{10}{100}\right) = 4000 \times \frac{11}{10} = \text{Rs.} 4400$$

$$\text{Amount after two years} = 4000 \left(1 + \frac{10}{100}\right)^2 = 4000 \times \frac{11}{10} \times \frac{11}{10} = \text{Rs.} 4840$$

$$\text{Compound interest for 2nd year} = \text{Rs.} 4840 - \text{Rs.} 4400 = \text{Rs.} 440$$

Amount after three years =

$$4000 \left(1 + \frac{10}{100}\right)^3 = 4000 \times \frac{11}{10} \times \frac{11}{10} \times \frac{11}{10} = \text{Rs.} 5324$$

Compound interest for 3rd year = Rs. 5324 – Rs. 4840 = Rs. 484

Required difference = Rs. 484 – Rs. 440 = Rs. 44

60. A

Sol. Excluding stoppages, the speed of a bus is 40 km/h and including stoppages, it is 32 km/h.

Excluding stoppages, distance covered by bus in 60 minutes = 40 km

Including stoppages, distance covered by bus in 60 minutes = 32 km

$$\text{Number of minutes bus stopped per hour} = \frac{(40 - 32)}{40} \times 60 = \frac{48}{4} = 12 \text{ minute}$$

61. A

Sol. An article is sold at a profit of 25%.

Let cost price of article = 100x

$$\text{Selling price of article} = 100x + 100x \times \frac{25}{100} = 125x$$

If both the cost price and the selling price of the article are increased by ₹200, then the profit percentage is 20%.

New cost price of article = 100x + 200

New selling price of article = 125x + 200

According to question :

$$\begin{aligned} & 100x + 200 + [100x + 200] \times \frac{20}{100} = 125x + 200 \\ \Rightarrow & 100x + 200 + 20x + 40 = 125x + 200 \\ \Rightarrow & 120x + 40 = 125x \\ \Rightarrow & 5x = 40 \\ \Rightarrow & x = 8 \end{aligned}$$

Now, original cost price of article = Rs. 800

62. A

Sol. Let marked price of article = $100x$ unit

Discount = 20%

$$\text{Selling price of article} = 100x - 100x \times \frac{20}{100} = 80x \text{ unit}$$

Gain = 12%

$$\text{Cost price of article} = 80x \times \frac{100}{(100 + 12)} \text{ unit}$$

According to question :

$$\Rightarrow 80x \times \frac{100}{(100 + 12)} = 750$$

$$\Rightarrow 80x \times \frac{100}{(112)} = 750$$

$$\Rightarrow x = 750 \times \frac{112}{100} \times \frac{1}{80} = 10.5$$

Now, marked price of article = $10.5 \times 100 = \text{Rs.}1050$

63. A

Sol. The price of an article increases by 20% every year.

Let initial price of article = Rs. x

Difference between the price of the article at the end of the third year and at the end of the fourth year is ₹324

$$\Rightarrow x \left(1 + \frac{20}{100}\right)^4 - x \left(1 + \frac{20}{100}\right)^3 = 324$$

$$\Rightarrow \frac{1296}{625}x - \frac{216}{125}x = 324$$

$$\Rightarrow \frac{1296x - 1080x}{625} = 324$$

$$\Rightarrow 216x = 324 \times 625$$

$$\Rightarrow x = 937.5$$

Price of the article at the end of the second year =

$$x \left(1 + \frac{20}{100}\right)^2 = 937.5 \times \frac{36}{25} = \text{Rs. } 1350$$

64. A

Sol. Let time = 72 sec

Person travels at a speed of $8\frac{1}{3}$ m/sec.

$$\text{Distance covered in 72 sec} = \frac{25}{3} \times 72 = 600 \text{ m}$$

He covers $\frac{2}{3}$ of the journey in $\frac{5}{8}$ of the time.

$$\frac{2}{3} \text{ of the journey} = \frac{2}{3} \times 600 = 400 \text{ m}$$

$$\frac{5}{8} \text{ of the time} = \frac{5}{8} \times 72 = 45 \text{ sec}$$

$$\text{Remaining distance} = 600 \text{ m} - 400 \text{ m} = 200 \text{ m}$$

$$\text{Remaining time} = 72 - 45 = 27 \text{ sec}$$

$$\text{Required speed} = \frac{200}{27} \times \frac{18}{5} = \frac{80}{3} = 26\frac{2}{3} \text{ km/hr}$$

65. B

Sol. $120 \div [13 + \{47 - (36 - 36 \div 9 \text{ of } 2 \times 3)\}]$

Using BODMAS :

$$\begin{aligned}&\Rightarrow 120 \div [13 + \{47 - (36 - 36 \div 18 \times 3)\}] \\&\Rightarrow 120 \div [13 + \{47 - (36 - 2 \times 3)\}] \\&\Rightarrow 120 \div [13 + \{47 - (30)\}] \\&\Rightarrow 120 \div [13 + 17] \\&\Rightarrow 120 \div 30 \\&\Rightarrow 4\end{aligned}$$

66. C

Sol. A sum of ₹12,384 is divided between A, B, C and D such that the ratio of the shares of A and B is 3 : 4, that of B and C is 5 : 6, and that of C and D is 8 : 9.

$$A : B = 3 : 4$$

Multiply by 40

$$\Rightarrow A : B = 120 : 160 \dots\dots\dots(1)$$

$$B : C = 5 : 6$$

Multiply by 32

$$\Rightarrow B : C = 160 : 192 \dots\dots\dots(2)$$

$$C : D = 8 : 9$$

Multiply by 24

$$\Rightarrow C : D = 192 : 216 \dots\dots\dots(3)$$

Combining all equations :

$$A : B : C : D = 120 : 160 : 192 : 216 = 15 : 20 : 24 : 27$$

According to question :

$$\Rightarrow (15 + 20 + 24 + 27) \text{ unit} = \text{Rs. } 12384$$

$$\Rightarrow 86 \text{ unit} = \text{Rs. } 12384$$

$$\Rightarrow 1 \text{ unit} = 144$$

$$\Rightarrow 24 \text{ unit} = \text{Rs. } 3456$$

Hence, Share of C = Rs. 3456

67. D

$$\text{Sol. } (a + b) : (b + c) : (c + a) = 15 : 14 : 11$$

$$\text{Let } a + b = 15k \dots\dots\dots(1)$$

$$b + c = 14k \dots\dots\dots(2)$$

$$c + a = 11k \dots\dots\dots(3)$$

Adding (1), (2) and (3)

$$2(a + b + c) = 40k$$

$$\Rightarrow (a + b + c) = 20k$$

Also, $a + b + c = 40$

$$\Rightarrow 20k = 40$$

$$\Rightarrow k = 2$$

$$\text{Now, } a+b = 30 \dots\dots\dots(4)$$

$$b + c = 28 \dots\dots\dots(5)$$

$$c + a = 22 \dots\dots\dots(6)$$

$$a + b + c = 40 \dots\dots\dots(7)$$

Subtract (4) from (7)

$$\Rightarrow c = 40 - 30 = 10$$

Put value of c in (5) and (6) respectively

$$\Rightarrow b = 18$$

and $a = 12$

$$\text{Now, } 3a + b - 4c = 36 + 18 - 40 = 14$$

68. B

Sol. The difference between the areas of two concentric circles is 88 cm^2 .

Radius of the inner circle is 6 cm

$$\text{Area of the inner circle} = \pi(6)^2 = \frac{22}{7} \times 36 = 113.1 \text{ cm}^2$$

$$\text{Area of the outer circle} = 113.1 + 88 = 201.1 \approx 201 \text{ cm}^2$$

69. A

Sol. When an article is sold for ₹531, there is a gain of 18%.

$$\text{Cost price of article} = 531 \times \frac{100}{(100+18)} = 531 \times \frac{100}{(118)} = \text{Rs. } 450$$

But if selling price is Rs. 486 then

$$\text{Profit} = \text{Rs. } 486 - \text{Rs. } 450 = \text{Rs. } 36$$

$$\text{Profit \%} = \frac{36}{450} \times 100 = 8\%$$

70. C

Sol. A certain sum amounts to ₹4,600 after 5 years and to ₹6,000 after 8 years at the same rate of simple interest per annum.

$$\text{Simple interest for 3 years} = \text{Rs. } 6000 - \text{Rs. } 4600 = \text{Rs. } 1400$$

Simple interest for 5 years = Rs. $\left(\frac{7000}{3} \right)$

$$\text{Principal} = 4600 - \left(\frac{7000}{3} \right) = \text{Rs. } \left(\frac{6800}{3} \right)$$

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

Now,

$$\Rightarrow (1400) = \frac{\left(\frac{6800}{3} \right) \times R \times 3}{100}$$

$$\Rightarrow R = \frac{1400}{68} \%$$

Now, we will find simple interest on a sum of ₹8,500 for $6\frac{1}{2}$ years at the rate of $\frac{1400}{68}\%$.

$$\text{Simple interest} = \frac{(8500) \times \frac{1400}{68} \times \frac{13}{2}}{100} = \text{Rs. } 11375$$

71. D

$$\text{Sol. } \frac{2}{3} \div \left(\frac{4}{5} - \frac{1}{2} \right) \times \frac{18}{25} - \left(\frac{4}{5} \div \frac{5}{6} \text{ of } 2\frac{2}{3} \right) + 3\frac{1}{5} \div \frac{8}{5} \times \frac{2}{5}$$

Using BODMAS:

$$\Rightarrow \frac{2}{3} \div \left(\frac{3}{10} \right) \times \frac{18}{25} - \left(\frac{4}{5} \div \frac{5}{6} \text{ of } \frac{8}{3} \right) + \frac{16}{5} \div \frac{8}{5} \times \frac{2}{5}$$

$$\Rightarrow \frac{2}{3} \div \left(\frac{3}{10} \right) \times \frac{18}{25} - \left(\frac{4}{5} \div \frac{20}{9} \right) + \frac{16}{5} \div \frac{8}{5} \times \frac{2}{5}$$

$$\Rightarrow \left(\frac{20}{9} \right) \times \frac{18}{25} - \left(\frac{36}{100} \right) + 2 \times \frac{2}{5}$$

$$\Rightarrow \frac{8}{5} - \frac{9}{25} + \frac{4}{5} = \frac{40 - 9 + 20}{25} = \frac{51}{25} = 2 \frac{1}{25}$$

72. A

Sol. x be the least number between 56,000 and 60,000 which when divided by 40, 45, 50 and 55 leaves a remainder of 23 in each case.

$$x = \text{LCM} (40, 45, 50 \text{ and } 55) \times K + 23$$

$$x = 19800 \times K + 23$$

Now, we will find that value of K for which x lies between 56,000 and 60,000.

By inspection, Put K = 3

$$\Rightarrow x = 19800 \times 3 + 23 = 59400 + 23 = 59423$$

$$\text{Sum of the digits of } x = 5 + 9 + 4 + 2 + 3 = 23$$

73. A

Sol. 40% of the students are boys and the rest are girls

Ratio of boys to girls in class = $40\% : 60\% = 2 : 3$

The ratio of the average weight of boys to that of girls is $5 : 4$.

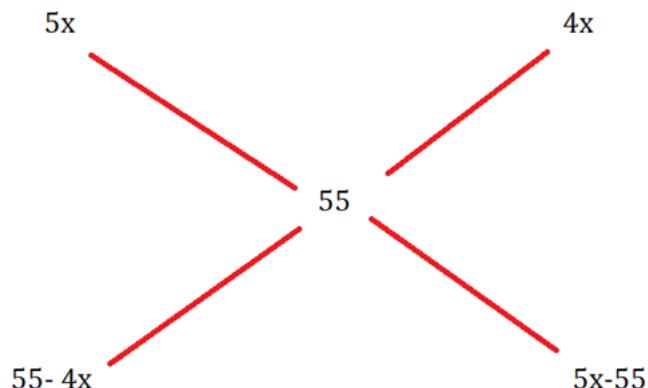
Let average weight of boys = $5x$

Average weight of girls = $4x$

Average weight of all the students in a class = 55 kg.

Using Alligation method:

Average weight of Boys Average weight of Girls



$$\begin{aligned} \frac{55 - 4x}{5x - 55} &= \frac{2}{3} \\ \Rightarrow 165 - 12x &= 10x - 110 \end{aligned}$$

$$\Rightarrow 22x = 275$$

$$\Rightarrow x = \frac{275}{22} = \frac{25}{2}$$

$$\text{Hence, Average weight of boys} = 5x = \frac{25}{2} \times 5 = \frac{125}{2} = 62.5 \text{ kg}$$

74. A

Sol. Average of the 3-digit numbers 524, 466, 3x4 and x52 is 529.

$$\text{Sum of the 3-digit numbers } 524, 466, 3x4 \text{ and } x52 = 4 \times 529 = 2116$$

$$\Rightarrow 990 + 3x4 + x52 = 2116$$

$$\Rightarrow 3x4 + x52 = 1126$$

$$\text{Clearly, } 374 + 752 = 1126$$

$$\text{Hence, } x = 7$$

$$\text{Average of } (10x + 7) \text{ and } (14x - 9) =$$

$$\frac{10x + 7 + 14x - 9}{2} = \frac{77 + 89}{2} = \frac{166}{2} = 83$$

75. A

Sol. Ratio of copper and zinc in alloy A = 5 : 7(1) { 5 + 7 = 12 }

Ratio of copper and zinc in alloy B = 4 : 5(2) { 4 + 5 = 9 }

We have to make an equal quantity and take alloys A and B in 1 : 2.

Multiply by 3×1 in equation (1) and multiply by 4×2 in equation (2)

Ratio of copper and zinc in alloy A = 15 : 21

Ratio of copper and zinc in alloy B = 32 : 40

$$\text{Now, part of C that is copper} = \frac{15 + 32}{15 + 32 + 21 + 40} = \frac{47}{108}$$

76. A

- Sol. • **Pateti or the day of repentance is an important day in the Parsi calendar.**
• It is a **festival of the Parsis** and it is **celebrated on the eve of the New Year of the Zoroastrian calendar**.
• It is also known as **Jamshedi Navroz** after the **legendary King of Persia Jamshed who started the Parsi calendar**.
• **Parsis** are an **ethnoreligious group of the Indian subcontinent whose religion is Zoroastrianism**.
• The **Parsi community is one of the most successful minorities and migrant groups in the world**.
• **Christian** is someone **who follows the teachings of Jesus Christ**.

77. D

- Sol. • **Girl, Woman, Other work was written by Bernardine Evaristo.**

- It is the **eighth novel** written by **Bernardine Evaristo**, published in **2019** by **Hamish Hamilton**.
- **Bernardine Evaristo** is a **longstanding advocate for the inclusion of writers and artists of colour**.
- She was the **first black woman** and the **first black British person** to win the **Booker**.
- She **founded the Brunel International African Poetry Prize**.
- **An Orchestra of Minorities** is a **2019** novel by **Chigozie Obioma**.
- **Ducks, Newburyport** is a **2019** novel by **British author Lucy Ellmann**.

78. B

- Sol.
- **The post of National Security Advisor was created in India in 1998.**
 - **National Security Advisor** is the **senior official on the National Security Council of India**.
 - He is the **chief adviser to the Prime Minister of India** on national security policy and international affairs.
 - He receives **all intelligence reports** and coordinates them to present before the **Prime Minister**.
 - It is a **highly prominent and powerful office** in the **Government of India**.
 - **Brajesh Mishra** was appointed as the **first National Security Advisor of India**.

79. D

- Sol.
- **Telangana has implemented a programme for tree plantation under the name 'Haritha Haram'**.
 - **Haritha Haram** is a **large-scale tree-planting program** and It is also known as **Telangana Ku Haritha Haram**.
 - It was **implemented to increase the amount of tree cover in the state from 24% to 33%**.
 - The program was **launched by Telangana Chief Minister Chandrashekhar Rao on 3 July 2015**.
 - It is **one of the Telangana Flagship programmes to rejuvenate degraded forests**.

- It adopted intensive soil and moisture conservation measures based on a watershed approach.

80. B

- Sol.
- Pteroylglutamic acid is another name for folic acid.
 - Folic acid is a type of B vitamin and It helps the body make healthy new cells.
 - It is a synthetic, water-soluble vitamin used in supplements and fortified foods.
 - Ascorbic Acid is a natural water-soluble vitamin and It is in a class of medications called antioxidants.
 - Lactic acid is an organic acid and It is mainly produced in muscle cells and red blood cells.
 - Glycolic acid is a water-soluble alpha hydroxy acid made from sugar cane.

81. C

- Sol.
- Sutlej river has Spiti river as its subsidiary.
 - It is the easternmost tributary of the Indus River and is also known as Satadree.
 - Spiti River nurtures the beautiful valleys of the Lahaul-Spiti district of Himachal Pradesh.
 - Chenab River is a major river that flows in India and Pakistan.
 - Beas River is a river in north India and It rises in the Himalayas in central Himachal Pradesh.
 - Ravi River is a transboundary river crossing northwestern India and eastern Pakistan.

82. A

- Sol.
- Mauritius was the second-largest source of Foreign Direct Investment in India in FY 2019-20.
 - Singapore was the largest source of Foreign Direct Investment in India in FY 2019-20.
 - Foreign Direct Investment is an investment in the form of controlling ownership in a business in one country by an entity based in another country.

- It is the **sum of equity capital, long-term capital and short-term capital** as shown in the **balance of payments**.
- **Foreign direct investment in India** is a major monetary source for economic development in India.
- There are two routes by which India gets FDI:
 - a) **Automatic route**
 - b) **Government route**

83. D

- Sol.
- K Srikanth, who was recommended for the Khel Ratna Award in June 2020, is a professional badminton player.
 - He is a former captain of the Indian cricket team and former chairman of the selection committee.
 - He is known for his aggressive batting style.
 - Khel Ratna Award is the highest sporting honour of India.
 - It is awarded annually by the Ministry of Youth Affairs and Sports.
 - The first recipient of the award was Chess Grandmaster Viswanathan Anand.

84. D

- Sol.
- 'Kajali Paintings', in which no brush is used, traditionally belong to Rajasthan.
 - It is more prominent in the eastern part of the state.
 - It is finished by a handful of the populace in certain areas of Rajasthan.
 - Rajasthan is known for its magnificent architecture, vibrant & colourful culture and beautiful arts & handicrafts.
 - It is a leading producer of limestone, silver, gold, copper, marble, sandstone etc.
 - It is the largest Indian state by area and the seventh-largest by population.

85. B

- Sol.
- Salman Rushdie is the author of the book 'Quichote'.

- **Quichotte** is a **2019 novel** by **Salman Rushdie**.
- It is his **fourteenth novel** and It was **published on 29 August 2019**.
- It was **published by Jonathan Cape in the United Kingdom** and **Penguin Books India in India**.
- It received **favourable reviews** and was **shortlisted for the 2019 Booker Prize**.
- **Salman Rushdie** is known for his **incisive use of magical realism in his novels** to **highlight cultural and political issues**.
- **Vikram Seth** is among **the most celebrated Indian novelists and poets**.

86. D

Sol. ● **Chambal** is a **tributary of the Yamuna river**.

- It is a **legendary river** and **finds mention in ancient scriptures**.
- **Ghaghara** is a **perennial transboundary river originating on the Tibetan Plateau near Lake Manasarovar**.
- **Gandak River** is formed by the **union of the Kali and Trisuli rivers**.
- **Son River** is a **perennial river located in central India** and It originates near **Amarkantak Hill**.
- It is the **second-largest southern tributary of the Ganges'** and It is **famous for its sand across the country**.
- **The Yamuna** is the **second-largest tributary river of the Ganges by discharge** and **the longest tributary in India**.

87. D

Sol. ● **A resident Indian Individual with an annual taxable income above Rs 15 lakh will pay tax at the rate of 30% as per the Union Budget, 2020-21.**

- An Indian Individual with a **personal income between Rs 10 lakh to Rs 12.5 lakh** is taxed at a rate of **20 per cent**.
- An Indian Individual with a **personal income between Rs 12.5 lakh to Rs 15 lakh** is taxed at **25 per cent**.

- An Indian Individual with a **personal income from Rs 5 lakh to Rs 7.5 lakh** is taxed at a rate of **10 per cent**.
- An Indian Individual with an **Income between Rs 7.5 lakh to Rs 10 lakh** is taxed at a rate of **15 per cent**.

88. C

- Sol.
- **e-NAM** is a pan-India electronic trading portal aimed at integrating the existing mandis for agricultural products in India.
 - It is an **online trading platform for agricultural commodities in India**.
 - It facilitates **farmers, traders and buyers with online trading in commodities**.
 - It is **linked with 1000 markets in 18 states and 2 union territories with over 50 lakh farmer membership in 18 states**.
 - It helps in **better price discovery and provides facilities for smooth marketing of produce**.
 - It was **launched by the Ministry of Agriculture, Government of India**.

89. B

- Sol.
- **Pradhan Mantri Jeevan Jyoti Bima Yojana** provides a life insurance cover of 2 lakh to all the holders of bank accounts.
 - It is a **government-backed Life insurance scheme in India**.
 - It was originally mentioned in the year **2015 Budget speech by Finance Minister Arun Jaitley**.
 - It was formally launched by Prime Minister Narendra Modi on 9 May in Kolkata.
 - There is **no need for a person to submit a health report or certificate while joining to this scheme**.
 - It is **available to people between 18 and 50 years of age with bank accounts**.

90. B

- Sol.
- **Chittaranjan Das** was popularly known as 'Deshbandhu'.

- He was **founder-leader of the Swaraj Party in Bengal during the period of British colonial rule in India.**
- **Dadabhai Naoroji** was also known as the **Grand Old Man of India** and **Unofficial Ambassador of India**.
- **Ashutosh Mukherjee** was the **most emphatic figure of Indian education**.
- He was **responsible for the foundation of the Bengal Technical Institute in 1906**.
- **Madan Mohan Malaviya** was **one of the founders of the Bharat Scouts and Guides**.

91. A

- Sol.
- **Vitamin B-12 is the only water-soluble vitamin that can be stored in the liver for many years.**
 - It is **important in the normal functioning of the nervous system** and It is the **most chemically complex of all vitamins**.
 - **Vitamin C** is a **water-soluble vitamin found in various foods and sold as a dietary supplement**.
 - It is **required for the functioning of several enzymes** and is **important for immune system function**.
 - **Vitamin K** plays a key role in **helping the blood clot, preventing excessive bleeding**.
 - **Vitamin D** has a **significant role in calcium homeostasis and metabolism**.

92. A

- Sol.
- **Aerobiosis Innovations declared the development of a ventilator which was named 'Jeevan Lite' in April 2020.**
 - 'Jeevan Lite' is the **Internet of Things-enabled** and **can be operated through a phone app**.
 - It can also be **battery-operated, enabling its deployment in areas without an assured power supply**.
 - It can **provide both invasive and non-invasive ventilation across a comprehensive set of modes and settings**.

- It can work on rechargeable lithium-ion batteries for five hours without a power supply.
- It has a provision for attaching an oxygen cylinder and can operate on its own in ambient air.

93. B

Sol. • The Value Added Tax was introduced in India in 2005.

- It is a type of tax that is assessed incrementally and it is an indirect tax.
- It is commonly expressed as a percentage of the total cost.
- It is levied on the price of a product or service at each stage of production, distribution, or sale to the end consumer.
- Germany and France were the first countries to implement Value Added Tax.
- It is designed to tax only the value added by a business on top of the services and goods it can purchase from the market.

94. C

Sol. • Chandragupta-I married a girl from the Lichchhavi clan.

- He was a king of the Gupta dynasty and he ruled in northern India.
- Samudragupta is known chiefly for his numerous military campaigns and he was the first to dub him as the Indian Napoleon.
- Ramagupta was known from the traditional narratives only and He is considered as the supposed successor of Samudragupta.
- Sri Gupta was the founder of the Gupta dynasty of northern India.
- The Gupta Empire was an ancient Indian empire that existed from the early 4th century CE to the late 6th century CE.

95. C

Sol. • Tamil was the first language conferred with the status of Classical Language in India.

- It is the official language of the Indian state of Tamil Nadu.

- It is **one of the longest-surviving classical languages in the world.**
- It is the **only language of contemporary India that is recognizably continuous with a classical past.**
- It is described as **one of the great classical traditions and literature of the world.**
- It is the **first Indian language to be printed and published.**

96. D

- Sol.
- **Perfluorocarbons** are **one of the six pollutants under the Kyoto Protocol regulations.**
 - They are **man-made compounds containing just fluorine and carbon.**
 - They are **generally colourless, odourless non-flammable gases at environmental temperatures and for the most part chemically unreactive.**
 - Kyoto Protocol is an **international agreement linked to the United Nations Framework Convention on Climate Change.**
 - Carbon monoxide consists of **one carbon atom & one oxygen atom** and It is the **simplest molecule of the oxocarbon family.**
 - **Phosgene** is a **highly toxic gas produced by the burning of chlorinated hydrocarbons.**

97. C

- Sol.
- **Ahsanabad** became the capital of the Bahamani sultanate immediately after its foundation.
 - Bahamani sultanate was a **Persianate Sunni Muslim empire of the Deccan in South India.**
 - It was the **first independent Muslim kingdom of the Deccan** and was **known for its perpetual wars with its Hindu rivals of Vijayanagara.**
 - It was **founded in 1347 by Ala-ud-Din Bahman Shah.**
 - **Ahsanabad** is a **city in the Indian state of Karnataka** and It is the **largest city in the region of North Karnataka.**

98. A

- Sol. • Google has developed a braille keyboard named 'TalkBack'.
• Braille keyboard was launched to simplify smartphone typing for those who are suffering from visual impairment.
• Google was founded on September 4, 1998, by Larry Page and Sergey Brin.
• It is ranked second by Forbes and fourth by Interbrand.
• Apple is the largest information technology company by revenue and the world's most valuable company.
• It is the fourth-largest personal computer vendor by unit sales and the second-largest mobile phone manufacturer.

99. B

- Sol. • The 'Sultan Azlan Shah Cup' is associated with Hockey.
• Sultan Azlan Shah Cup is an annual invitational international men's field hockey tournament held in Malaysia.
• It began in 1983 as a biennial contest.
• Hockey is the oldest known ball and stick game.
• Kabaddi is popular in the Indian subcontinent and is the national sport of Bangladesh.
• Shooting is the act or process of discharging a projectile from a ranged weapon.
• Tennis is an Olympic sport and It is played at all levels of society and at all ages.

100. C

- Sol. • The Gitanjali Literary Prize is awarded in association with France.
• It is a Franco-Indian literary award established in 2012.
• It was founded by the Mohsen Hachtroudi Foundation and CHG Earth Group.
• It includes a Gitanjali Medal, a literary sojourn of 15 days and a translation of the work.
• It is open to all works and genres that correspond to the theme of the year.
• It is named for the collection of poems Gitanjali by Rabindranath Tagore.

Mock Test Solutions in Hindi

Questions

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

They _____ like bitter enemies but soon make up.

- | | |
|-------------|------------|
| A. tumult | B. quarrel |
| C. conflict | D. uproar |

2. Select the most appropriate one-word substitution for the given group of words.

Science which deals with celestial objects and space

- | | |
|--------------|--------------|
| A. Geography | B. Astrology |
| C. Geology | D. Astronomy |

3. Select the INCORRECTLY spelt word.

- | | |
|-----------|-----------|
| A. froun | B. froth |
| C. friend | D. frozen |

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

Shikha said that the paper was lengthy and no difficult.

5. Select the INCORRECTLY spelt word.

- A. chronic
 - B. preamble
 - C. ambulance
 - D. prospect

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

Comb through

- A. To carefully look through
 - B. To be trapped somewhere
 - C. To hide information
 - D. To come out of a problem

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

RELY

- A. depend
- B. protect
- C. ignore
- D. doubt

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

It is the duty of every Indian to _____ communal harmony.

- A. present
- B. repair
- C. maintain
- D. release

9. Select the most appropriate one-word substitution for the given group of words.

Compulsion to steal

- A. Megalomania
- B. Pyromania
- C. Kleptomania
- D. Nymphomania

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

The workers' interests must be protected, _____ they will go on a strike.

- A. and
- B. so
- C. else
- D. but

11. 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.'

The principals of government schools are being train in leadership skills at the IIM, Ahmedabad from 15th to 24th July.

- A. is being train
- B. are being trained
- C. was been trained
- D. No substitution required

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

He stopped copying when the examiner warn him.

- A. warn him
- B. copying
- C. He stopped
- D. when the examiner

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

HAZARDOUS

- A. certain
- B. secure
- C. bulky
- D. risky

14. Identify the segment in the sentence that contains a grammatical error.

She used to teach dance in a school, did she?

- A. did she
- B. in a school
- C. teach dance
- D. She used to

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

REMOTE

- A. unlikely
- B. secret
- C. unknown
- D. close

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

Loudmouth

- A. One who talks well
- B. One who talks boastfully
- C. One who speaks calmly
- D. One who speaks nervously

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

NEGLECT

- A. taste
- B. care
- C. wish
- D. mock

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

Why not give him a free hand _____ conduct his business?

- A. at
- B. to
- C. in
- D. for

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

I have lost my school diary; I can't find it nowhere.

- A. wherever
- B. everywhere
- C. anywhere
- D. somewhere

20. Identify the segment in the sentence that contains a grammatical error.

She is capable to do better but she lacks confidence.

- A. She is capable
 - B. but she
 - C. lacks confidence
 - D. to do better

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.

Namita did not have enough cash. She did not (1) ____ a credit card either. She found herself in a (2) _____. She had the contact number of a (3) _____ friend whom she called for help. Her friend came (4) ____ and settled the bill. Namita thanked her and expressed her (5) _____. She promised to return the money to her friend soon.

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

- A. has
 - B. having
 - C. have
 - D. had

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

- | | |
|-------------|------------|
| A. fix | B. puzzle |
| C. pressure | D. trouble |

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

- A. near
 - B. intimate
 - C. direct
 - D. close

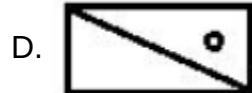
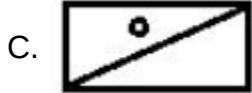
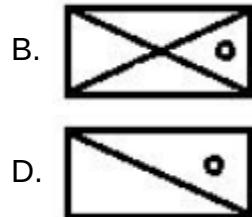
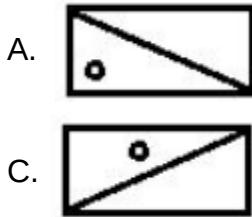
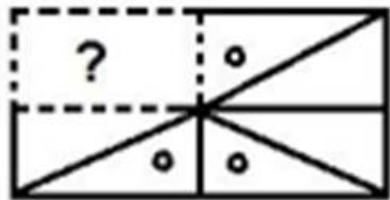
24. Select the most appropriate option to fill in blank no. 4

- A. purposely
 - B. regularly
 - C. immediately
 - D. slowly

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

- | | |
|-------------|--------------|
| A. solitude | B. gratitude |
| C. aptitude | D. attitude |

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



27. * प्रतीकों को बदलने और दिए गए समीकरण को संतुलित करने के लिए गणितीय प्रतीकों के सभी संयोजन का चयन करें।

$$5 * 7 * 36 * 18 * 2 * 8$$

- A. $\times, \div, +, -, =$ B. $x, +, \div, -, =$
 C. $\times, -, +, \div, =$ D. $\div, \times, -, +, =$

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

आम : फल :: फूलगोभी : ?

- A. पौधे B. पत्ता गोभी
 C. सब्जी D. पकाना

29. निम्नलिखित में से कौन सा अक्षर समूह दी गई शरूखला में प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगा?

YKS, VHP, SEM, ?, MYG

- A. PDI B. PCK
 C. QBJ D. PBJ

30. पांच वस्तुएं अर्थात् A, B, C, D और E भिन्न-भिन्न वज़न की हैं। B का वज़न E के वज़न का दोगुना है। C का वज़न A के वज़न का तीन गुना है। D का वज़न C के वज़न का चार गुना है। B का वज़न D के वज़न का आधा है। इनमें से कौन सी वस्तु सबसे भारी है?

- A. B B. C
 C. D D. E

7	12	50
10	11	53
12	15	?

QUEEN : TRBBQ :: PITCH : ?

五〇三

सभी दंजीनियर दॉक्टर हैं।

सभी डॉक्टर तकील हैं।

कोई तलील इंसर नहीं है।

निष्कर्षः

- I. कोई डॉक्टर, डांसर नहीं है।

II. कोई इंजीनियर, डांसर नहीं है।

III. कुछ वकील, इंजीनियर हैं।

A. केवल निष्कर्ष। और III अनुसरण करते हैं

B. केवल निष्कर्ष। और II अनुसरण करते हैं

C. सभी निष्कर्ष अनुसरण करते हैं।

D. कोई भी निष्कर्ष अनुसरण नहीं करता है

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

भाई, बहनें, पिता

- A. 
 - B. 
 - C. 
 - D. 

37. निम्नलिखित में से कौन सी संख्या दी गई शरूंखला में प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगी?

M
—
N

B. 24687

A. **۷ ۸ ۶ ۹ ۴ ۲**

C. **۷ ۸ ۰ ۹ ۴ ۲**

D. **۵ ۴ ۹ ۰ ۸ ۱**

39. एक निश्चित कूट भाषा में, 'PLAN' को 'KOZM' के रूप में लिखा जाता है। तो उसी भाषा में 'FLICK' को किस प्रकार लिखा जाएगा?

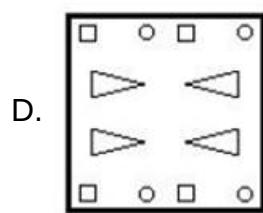
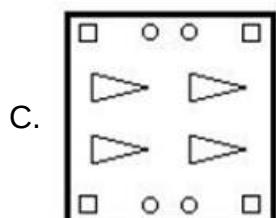
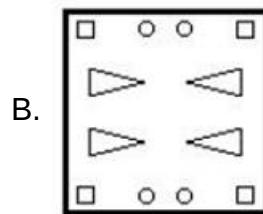
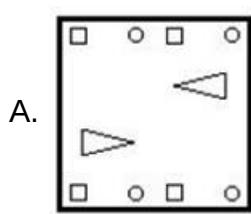
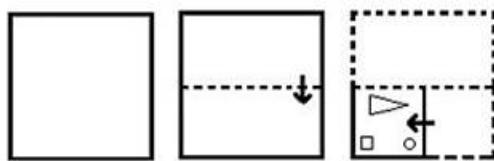
A. UORXP

B. UQRXR

C. UOZXP

D. WNRXP

40. एक कागज को दी गई आकृतियों के अनुसार मोड़ा और काटा जाता है। कागज खोले जाने पर कैसा दिखाई देगा?



41. एक निश्चित कूट भाषा में, 'CLOT' को '6243040' के रूप में लिखा जाता है। तो उसी भाषा में 'MOSAIC' को किस प्रकार लिखा जाएगा?

A. 2630382186

B. 2630382206

C. 2830382183

D. 2632362186

42. दो कथनों के बाद दो निष्कर्ष संख्या । और ॥ 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:

कुछ बेड, टेबल हैं।

सभी बेड, चेयर हैं।

निष्कर्षः

I. कुछ चेयर, टेबल हैं।

II. कोई चेयर, टेबल नहीं है।

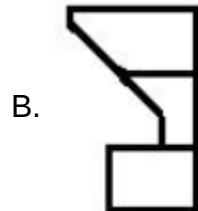
A. या तो निष्कर्ष I या II अनुसरण करता है

C. दोनों निष्कर्ष I और II अनुसरण करते हैं

B. केवल निष्कर्ष II अनुसरण करता है

D. केवल निष्कर्ष I अनुसरण करता है

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



44. निम्नलिखित में से कौन सी संख्या दी गई शृंखला में प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगी?

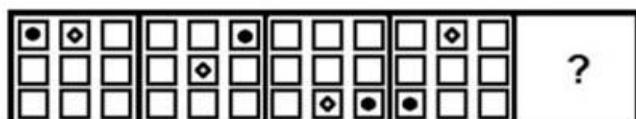
35, 50, 80, 125, 185, ?

A. 220

B. 257

C. 238

D. 260



- A. 

B. 

C. 

D. 

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

मीटर : मिलीमीटर :: किलोग्राम : ?

A. वज़न

B. विवंटल

C. पाउंड

D. ग्राम

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

$$64 - 24 \div 3 + 32 \times 12 = 158$$

A. 12 और 32

B. 12 और 3

C. 64 और 12

D. 32 और 64

51. 3 सेमी आधार त्रिज्या और 120 सेमी ऊंचाई वाले एक ठोस धातु के बेलन को पिघलाया जाता है और इसे r सेमी त्रिज्या के एक गोले में बदल दिया जाता है। यदि इस रूपांतरण में 10% धातु की हानि होती है, तो r का मान क्या होगा?

A. 9

B. 8

C. 13.5

D. 12

52. $\frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5} \right)} - \left(2\frac{1}{3} \text{ of } 1\frac{1}{2} \right)$ का मान निम्न में से क्या होगा?

A. 9

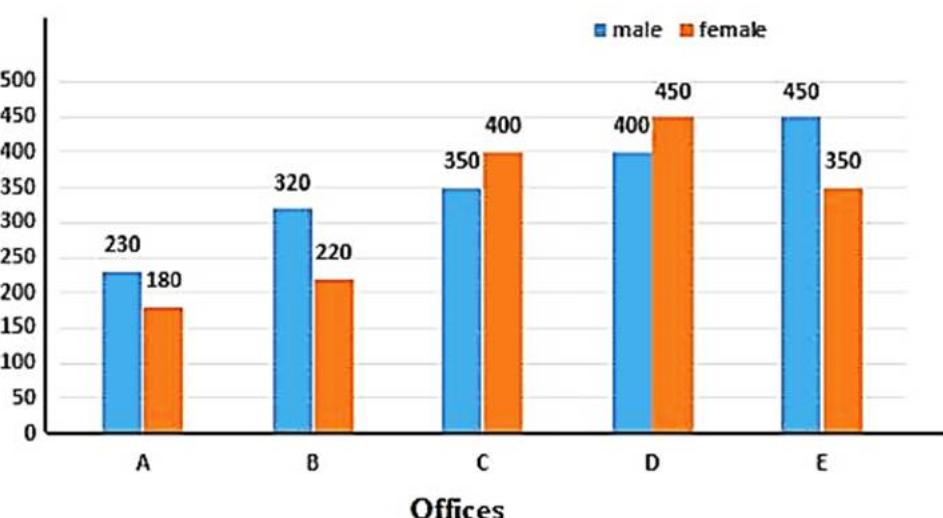
B. 13

C. 12

D. 11

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

Number of Male and Female employees of a Company working in Five Offices



कंपनी के किस कार्यालय में सभी पांच कार्यालयों में पुरुष कर्मचारियों की संख्या महिला कर्मचारियों की औसत संख्या से 25% अधिक है?

54. यदि कार्यालय C में 45% महिला कर्मचारियों को कार्यालय B में स्थानांतरित कर दिया जाता है, तो कार्यालय E में पुरुष कर्मचारियों की संख्या कार्यालय B में महिला कर्मचारियों से कितने प्रतिशत अधिक है?

55. कार्यालय B, D और E में कंपनी की महिला कर्मचारियों की कुल संख्या, कार्यालय A, B, C और E में पुरुष कर्मचारियों की कुल संख्या से कितना प्रतिशत कम है (एक दशमलव स्थान तक सही मान)?

56. पाइप A, B और C एक टैंक को क्रमशः 30 घंटे, 36 घंटे और 28 घंटे में भर सकते हैं। तीनों पाइप एक साथ खोले जाने पर यदि टैंक के पूरी तरह भरने से पहले पाइप A और C को क्रमशः 5 घंटे और 8 घंटे पहले बंद कर दिया गया, तो यह टैंक कितने घंटों में भरा था?

57. यदि निम्नलिखित वितरण का माध्य 24.6 है, तो x का मान ज्ञात करें।

वर्ग	0-10	10-20	20-30	30-40	40-50
आवृत्ति	6	12	15	x	5

58. A और B एक निश्चित कार्य को क्रमशः 12 और 18 दिनों में कर सकते हैं। वे 5 दिनों तक एक साथ काम करते हैं। यदि शेष कार्य अकेले C द्वारा $2\frac{1}{2}$ दिनों में पूरा किया जाता है। तो समान कार्य का कितना भाग A, B और C मिलकर 6 दिनों में पूरा कर सकते हैं?

59. 4,000 रुपये की राशि 10% प्रति वर्ष की दर से उधार दी जाती है, यदि ब्याज वार्षिक रूप से संयोजित होता है। तो दूसरे वर्ष और तीसरे

वर्ष के चक्रवृद्धि ब्याज के बीच कितना अंतर होगा?

- C. 66 D. 60.8

74. यदि 3 अंकों की संख्या $524, 466, 3 \times 4$ और $x \times 2$ का औसत 529 है। तो $(10x + 7)$ और $(14x - 9)$ का औसत ज्ञात करें?

A. 83 B. 71
C. 59 D. 68

75. मिश्र धातु A में तांबा और जस्ता का अनुपात $5:7$ है और मिश्र धातु B में यह अनुपात $4:5$ है। यदि A और B को $1:2$ के अनुपात में लिया जाता है और एक नया मिश्र धातु C बनाने के लिए इसे मिलाया जाता है। तो C का कितना भाग तांबा होगा?

A. $\frac{47}{108}$ B. $\frac{5}{12}$
C. $\frac{4}{9}$ D. $\frac{61}{108}$

76. 'पतेती' या पश्चाताप का दिन _____ कैलेंडर में एक महत्वपूर्ण दिन है।

A. पारसी B. बौद्ध
C. जैन D. ईसाई

77. निम्नलिखित में से कौन सी रचना बर्नार्डिन एवरिस्टो द्वारा लिखी गई थी?

A. डक्स, न्यूबरीपोर्ट B. 10 मिनट 38 सेकंड्स इन दिस स्ट्रेंज वर्ल्ड
C. एन ऑर्केस्टरा ऑफ माइनॉरिटीज D. गर्ल, वुमन, अदर

78. भारत में राष्ट्रीय सुरक्षा सलाहकार का पद किस वर्ष सूजित किया गया?

A. 2000 B. 1998
C. 2003 D. 1999

79. निम्नलिखित में से किस राज्य ने 'हरिता हरम' नाम से वृक्षारोपण कार्यक्रम लागू किया है?

A. बिहार B. उत्तर प्रदेश
C. राजस्थान D. तेलंगाना

80. निम्न में से कौन सा फोलिक एसिड का दूसरा नाम है?

A. लैकिटक अम्ल B. पटरॉयलग्लुटेमिक अम्ल
C. एस्कॉर्बिक अम्ल D. ग्लाइकोलिक अम्ल

81. निम्नलिखित में से किस नदी की सहायक नदी स्पीति नदी है?

A. चिनाब B. रावी
C. सतलुज D. ब्यास

82. वित्त वर्ष 2019-20 में निम्नलिखित में से कौन सा देश भारत में प्रत्यक्ष विदेशी निवेश का दूसरा सबसे बड़ा स्रोत था?

A. मॉरीशस B. चीन
C. अमेरिका D. बिर्टेन

83. के श्रीकांत, जिन्हें जून 2020 में खेल रत्न पुरस्कार के लिए अनुशंसित किया गया था, एक पेशेवर _____ खिलाड़ी हैं।
A. टेबल टेनिस B. गोल्फ
C. फुटबॉल D. बैडमिंटन

84. 'कजली पैटिंग्स' निम्नलिखित में से किस राज्य से संबंधित हैं, जिसमें पारंपरिक रूप से ब्रश का उपयोग नहीं किया जाता है?
A. झारखण्ड B. तमिलनाडु
C. केरल D. राजस्थान

85. 'विचचोटे' पुस्तक के लेखक कौन हैं?
A. विक्रम सेठ B. सलमान रुशदी
C. किरण देसाई D. मार्गरेट एटवुड

86. निम्नलिखित में से कौन यमुना नदी की सहायक नदी है?
A. गंडक B. सौन
C. घाघरा D. चंबल

87. केंद्रीय बजट, 2020-21 के अनुसार, एक भारतीय निवासी व्यक्ति जिसकी वार्षिक कर योग्य आय 15 लाख रुपये से अधिक है, ____ % की दर से कर का भुगतान करेगा।
A. 10 B. 20
C. 5 D. 30

88. निम्नलिखित में से कौन भारत में कृषि उत्पादों के लिए मौजूदा मंडियों को एकीकृत करने के उद्देश्य से एक अखिल भारतीय इलेक्ट्रॉनिक ट्रेडिंग पोर्टल है?
A. ई-अन्न B. ई-बाजार
C. ई-नाम D. ई-कृषि

89. प्रधान मंत्री जीवन ज्योति बीमा योजना बैंक खातों के सभी धारकों को _____ का जीवन बीमा कवर प्रदान करती है।
A. 3 लाख रुपये B. 2 लाख रुपये
C. 5 लाख रुपये D. 4 लाख रुपये

90. निम्नलिखित राष्ट्रवादी नेताओं में से कौन 'देशबंधु' के नाम से प्रसिद्ध थे?
A. दादाभाई नौरोजी B. चित्तरंजन दास
C. आशुतोष मुखर्जी D. मदन मोहन मालवीय

91. निम्नलिखित में से कौन-सा एकमात्र पानी में घुलनशील विटामिन है जिसे यकृत में कई वर्षों तक संग्रहीत किया जा सकता है?
A. विटामिन B-12 B. विटामिन C
C. विटामिन K D. विटामिन D

92. अप्रैल 2020 में, एरोबायोसिस इनोवेशन ने _____ के विकास की घोषणा की जिसे 'जीवन लाइट' नाम दिया गया।
A. वैटिलेटर B. व्यक्तिगत सुरक्षा उपकरण (PPE) किट

- C. नैनो तकनीक पर आधारित फेस मास्क
- D. संपर्क अनुरेखण मोबाइल एप्लिकेशन
93. भारत में मूल्य वर्धित कर किस वर्ष लागू किया गया था?
- A. 2007
- B. 2005
- C. 2002
- D. 2010
94. निम्नलिखित गुप्त शासकों में से किसने लिच्छवी वंश की एक लड़की से विवाह किया?
- A. समुद्रगुप्त
- B. श्री गुप्ता
- C. चंद्रगुप्त-।
- D. रामगुप्त
95. निम्नलिखित में से कौन सी पहली भाषा को भारत में शास्त्रीय भाषा का दर्जा प्रदान किया गया था?
- A. कन्नड़
- B. संस्कृत
- C. तमिल
- D. मलयालम
96. निम्नलिखित में से कौन-सा क्योटो प्रोटोकॉल नियमों के तहत छह प्रदूषकों में से एक है?
- A. क्लोरीन
- B. फॉस्जीन
- C. कार्बन मोनोऑक्साइड
- D. परफ्लुओरोकार्बन
97. निम्नलिखित में से कौन सा शहर इसकी स्थापना के तुरंत बाद बहमनी सल्तनत की राजधानी बन गया?
- A. देवगिरी
- B. दौलताबाद
- C. एहसानाबाद
- D. बरार
98. निम्नलिखित में से किस कंपनी ने 'टॉकबैक' नामक ब्रेल कीबोर्ड विकसित किया है?
- A. गूगल
- B. एप्ल
- C. माइक्रोसॉफ्ट
- D. हुआवेर्ड
99. 'सुल्तान अजलान शाह कप' निम्नलिखित में से किस खेल से संबंधित है?
- A. टेनिस
- B. हॉकी
- C. कबड्डी
- D. निशानेबाजी
100. गीतांजलि साहित्यिक पुस्तकार किस देश के सहयोग से दिया जाता है?
- A. जर्मनी
- B. इंग्लैंड
- C. फ्रांस
- D. अमेरिका

Solutions

1. B

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

- * Tumult = a state in which your thoughts or feelings are confused
- * Quarrel = to have an angry argument or disagreement.
- * Conflict = clash
- * Uproar = a situation in which people shout and make a lot of noise because they are angry or upset about something.

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

- * "Tumult" is used in context of "state of confusion". Thus, option A is incorrect.
- * "Conflict" is used in context of "clash". Thus, option C is incorrect.
- * "Uproar" is used in context of "outcry". Thus, option D is incorrect.
- * "Quarrel" is used in context of "angry argument".
- * Here in the given sentence, it is used to show that the subject ("they") get engaged in an angry argument.

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

The correct sentence will be: **They quarrel like bitter enemies but soon make up.**

2. D

Sol. Geography: the scientific study of the earth's surface, physical features, divisions etc.

Astrology: the study of position of stars and the movement of the planets in the belief that they influence human affairs.

Geology: the scientific study of the physical structure of earth, including the origin and history of the rocks.

Astronomy: the scientific study of the moon, sun, stars, planets etc.

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

3. A

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

“Frown” is the correct spelling of the incorrect word “Froun”. It means a serious, angry or worried expression on a person’s face that causes lines on their forehead.

The meaning of other words are:

Froth: a mass of small bubbles, especially on the surface of a liquid.

Friend: a person you know well and like, and who is not usually a member of your family.

Frozen: extremely cold.

4. A

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

* Underlined part needs correction in Conjunction and Adverb.

* “But” as a conjunction is used to show contrast.

For example:

Her mother won’t be there, **but** her father might.

* “Not” is an adverb and it is used to give negative meaning to an adjective/adverb/verb.

For example:

The government does **not propose** to abandon the project altogether.

Here, “not” is used for the verb “propose”.

* “No” is a determiner and it means “not any”. It is used before the nouns.

For example:

No student will leave the room.

* The underlined part needs a conjunction that shows the contrast with the previous part of the sentence. So, use of conjunction “and” that just joins two phrases is not enough here.

* Thus, “but” as a conjunction should be used here that contrasts as well as joins two parts of the sentence.

* Also, “difficult” is an adjective so usage of determiner “no” is wrong here. Only an adverb can qualify an adjective. Thus, adverb “not” should be used in place of determiner “no”.

* So, **“lengthy but not”** is the correct substitution.

Thus, the correct sentence will be: **Shikha said that the paper was lengthy but not difficult.**

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

5. C

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

“Ambulance” is the correct spelling of the incorrect word “ambulence”. It means a vehicle with special equipment, used for taking sick or injured people to a hospital.

The meaning of other words are:

Chronic: lasting for a long time; difficult to cure.

Preamble: an introduction to a book or a written document.

Prospect: the possibility that something will happen.

6. A

Sol. The idiom "**Comb through**" means to examine or search something very carefully.

Example: The police have **gone over** the house **with a fine-tooth comb**.

Note: Proper idiom is "Go over/through something with a fine-tooth/fine-toothed comb"

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

7. A

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

Rely = to need or depend on someone/something.

E.g.: Our organisation **rely** entirely on the works of volunteers.

Depend = to rely on someone/something and be able to trust them.

E.g.: She was the sort of person you could **depend** on.

Protect = to make sure that someone/something is not harmed, injured, damaged etc.

Ignore = to pay no attention to something.

Doubt = a feeling of uncertain about something or not believing something.

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

8. C

Sol.

Let us understand the meaning of the given words:-

- * Present = to show or offer something for other people to look at
- * Repair = to fix something that is broken, damaged or torn.
- * Maintain = to make something continue OR keep or preserve something
- * Release = to let someone come out of a place where they have been kept.

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

- * "Present" is used in context of "offering something". Thus, option A is incorrect.
- * "Repair" is used in context of "fixing something". Thus, option B is incorrect.
- * "Release" is used in context of "to free someone from captivity". Thus, option D is incorrect.
- * "Maintain" is used in context of "keeping/preserving".
- * Here in the given sentence, it is used to show that keeping/preserving "communal harmony" of India is the duty of every Indian.

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

The correct sentence will be: **It is the duty of every Indian to maintain communal harmony.**

9. C

Sol. Megalomania: a strong feeling that you want to have more and more power
Pyromania: a mental illness that causes a strong desire to set fire to things.
Kleptomania: an excessive desire to steal things

Nymphomania: the behaviour of a person who has, or wants to have, sex very often.

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

10. C

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

- * And = (conjunction) is used to show “also; in addition to”
- * So = (adverb) is used to show “to such a great degree”.
- * Else = (adverb) is used to show “if not” or “otherwise”.
- * But = (conjunction) is used to show contrast.

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

- * “And” as a conjunction is used in the context of “also”. Thus, option A is incorrect.
- * “So” as an adverb is used for the purpose of “to such a great degree”. Thus, option B is incorrect.
- * “But” as a conjunction is used to show “contrast”. Thus, option D is incorrect.
- * “Else” as an adverb is used to show the meaning similar to “otherwise”. It is used to state that what the result would be if something did not happen or if the situation were different.
- * Here in the given sentence, it is used to state the result of “going on a strike” if the event of “protecting workers’ interests” did not happen.

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

The correct sentence will be: **The workers' interests must be protected, else they will go on a strike.**

11. B

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

- * Underlined part needs correction in Verb.
- * In case of present continuous tense,

The structures for active/passive voices are:

Active Voice: Subject + is/ am/ are + Verb (V1+ing form) + Object

Passive Voice: Object + is/am/are + being + Verb (V3 form) + by + Subject

For example:

The students **are decorating** the stage for the annual day.

The stage **is being decorated** by the students for the annual day celebrations.

* The given sentence is set in passive voice because here the actual doer of the action verb ("train") is not the subject. As per the passive verb structure, third form of verb should be used after the verb "are being". Thus, third form of the verb i.e. "trained" should be used in place of first form of verb "train".

* So, "**are being trained**" is the correct substitution.

The correct sentence will be: **The principals of government schools are being trained in leadership skills at the IIM, Ahmedabad from 15th to 24th July.**

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

12. A

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

* Whenever sentence is talking about the two actions of the past. Then the action that happened first is written in past perfect tense and the second action is written in simple past tense.

* **For example:**

When I **reached** there, the show **had started**.

* In the given sentence, the action of “warn” is done first and action of “stopped copying” is done after the first action.

* “Stopped” is the second form of verb. Thus, it is correct because it shows the simple past tense. But the first action “warn” is written in first form of verb which is incorrect. It should be written in past perfect verb structure: “had + third form of verb”. Thus, “had warned” should be used in place of “warn”.

* So, “**had warned**” is the correct substitution.

The correct sentence will be: **He stopped copying when the examiner had warned him.**

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

13. D

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

Hazardous= involving risk or danger, especially to someone's health or safety.

E.g.: We endured a **hazardous** journey through thickening fog.

Certain = strongly believing something; having no doubts.

Secure = to obtain or achieve something especially when this means using a lot of effort.

Bulky = large and difficult to move or carry.

Risky = dangerous

E.g.: Even a very good organisation can be a **risky** investment if it is overvalued.

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

14. A

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

* Question tags are written according to the subject and auxiliary of the main clause. If the main clause is in positive sense then a negative tag is used.

* **For example:**

He is an honest and forthright person, **isn't he?**

* In the given sentence, we have erroneously used a positive question tag “did she” when main clause is written in positive sense. So, an adverb “not” should be added to the question tag to convey the negative sense.

* So, “**didn't she**” is the most appropriate here.

The correct sentence will be: **She used to teach dance in a school, didn't she?**

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

15. D

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

Remote = far away from places where other people live

E.g.: Our farmhouse is **remote** from any other buildings.

Unlikely = not likely to happen; not probable.

Secret = known about by only a few people; kept hidden from others.

Unknown = not known or identified.

Close = near in space or time.

E.g.: He is looking for a job **closer** to home.

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

16. B

Sol. The idiom "**loudmouth**" means talking too loudly or too much in an offensive or stupid way.

Example: Everyone in our company knows that he is a **loudmouth**.

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

17. B

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

Neglect = the fact of not giving enough care or attention to something/someone.

E.g.: This place smelled of decay and **neglect**.

Taste = the particular quality that different foods and drinks have that allows you to recognize them when you put them in your mouth.

Care = the process of caring for someone/something.

E.g.: Some people are badly injured and needed medical **care**.

Wish = an attempt to make something happen by thinking hard about it

Mock = a practice exam that you do before the official one.

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

18. B

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

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

* To = (Infinitive marker) is used to show purpose or intention.

* In = (preposition) is used to show at a point within an area or a space

* For = (preposition) is used to show purpose or function.

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

* "At" as a preposition is used to show the location. Thus, option A is incorrect.

* "In" as a preposition is used to for the purpose of "location within something". Thus, option C is incorrect.

* "For" as a preposition is used to show "purpose". Thus, option D is incorrect.

* "To" is used as a preposition and infinitive marker.

* As an infinitive marker, it is used to show the purpose.

* Here in the given sentence, it is used to purpose of giving a free hand i.e. "to conduct" business.

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

The correct sentence will be: **Why not give him a free hand to conduct his business?**

19. C

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

- * Underlined part needs correction in adverb.
- * “Anywhere” as an adverb is used in negative sentences and in questions instead of somewhere. It means in, at, or to any place, when it does not matter where.

For example:

She has never been **anywhere** outside India.

- * “Nowhere” as an adverb means “not in or to any place”

For example:

There was **nowhere** for me to sit.

- * The given sentence is a negative sentence because the word “not” is used before the underlined part.
- * Also, the location of “school diary” does not matter here, the only prime concern is “inability to find” it.
- * So, when the sentence is negative and the location of something does not matter, then it is appropriate to use “anywhere” in place of “nowhere”.
- * So, “**anywhere**” is the correct substitution.

The correct sentence will be: **I have lost my school diary; I can't find it anywhere.**

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

20. D

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

- * "Well" is an adverb and it means "in a good, right or acceptable way".
- * "Better" is the comparative degree. "Best" is the superlative degree.

For example:

They played **well** in the tournament.

- * In the given sentence, we need an adverb for the verb "do".
- * "Better" is the comparative degree of adverb "well".
- * But there is no sense of comparison in the sentence.
- * Thus, a positive degree of adverb (i.e. well) should be used to qualify "do" (verb).
- * So, "**to do well**" is the correct substitution.

The correct sentence will be: **She is capable to do well but she lacks confidence.**

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

21. C

Sol. The given passage is about "**Inability of Namita in paying the billing amount**".

"Has" is used in present tense to show the possession. But here we need verb in past tense. Thus, option A is wrong.

"Having" is used to show the continuous aspect of possession in present tense. But here we need verb in past tense. Thus, option B is wrong.

“Had” is used in past tense to show the possession. But here we need “base form of verb” after “did not”. Thus, option D is wrong.

“Have” is the base form of verb. It is used to show the possession.

Here in the given sentence, it is used to show the possession of “credit card” by “Namita”.

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

22. A

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Puzzle” means a game, etc. that you have to think about carefully in order to answer it. Thus, option B is wrong.

“Pressure” means the act of trying to persuade or to force someone to do something. Thus, option C is wrong.

“Trouble” means a problem, worry, difficulty etc. or a situation causing this. Thus, option D is wrong.

“In a Fix” means to be in a difficult or embarrassing situation.

In the given sentence, Namita is in a difficult situation when she found that she does not have cash/credit card to pay the billing amount.

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

23. D

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Near” as an adjective means “a short distance away”. Thus, option A is wrong.

“Intimate” is an adjective. It is used to show relationships especially those that are sexual in nature. Thus, option B is wrong.

“Direct” means going in the straightest line between two paces without stopping or changing the direction. Thus, option C is wrong.

“Close” is an adjective. It is used to show knowing someone very well and liking them very much.

In the given sentence, it is used as an adjective for noun “friend” and Namita knows this friend very well.

So, she called her well known friend for help.

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

24. C

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Purposely” as an adverb means “deliberately”. Thus, option A is wrong.

“Regularly” as an adverb means “at regular intervals or times”. Thus, option B is wrong.

“Slowly” as an adverb means “at a slow speed”. Thus, option D is wrong.

“Immediately” as an adverb means “without delay”.

In the given sentence, it is used to mention the arrival of close friend for help “without any delay”.

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

25. B

Sol. The given passage is about **“Inability of Namita in paying the billing amount”**.

“Solitude” means the state of being alone. Thus, option A is wrong.

“Aptitude” means natural ability or skill at doing something. Thus, option C is wrong.

“Attitude” means the way that you think and feel about someone/something. Thus, option D is wrong.

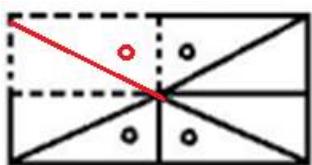
“Gratitude” means the feeling of being grateful and wanting to express your thanks.

In the given sentence, it is used to mention Namita being “grateful and thankful” to his close friend for the immediate help in paying the billing amount.

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

26. D

Sol. पूर्ण आकृति है:



इसलिए, विकल्प D सही उत्तर है।

27. C

Sol. विकल्प A की जांच करने पर:

$$5 * 7 * 36 * 18 * 2 * 8$$

परस्पर बदलाव के बाद:

$$5 \times 7 \div 36 + 18 - 2 = 8$$

यहाँ, 7, 36 से पूर्णतः विभाज्य नहीं है, इसलिए इसका परिणाम दशमलव में होगा।

तो, यह सही विकल्प नहीं है।

विकल्प B की जांच करने पर:

$$5 * 7 * 36 * 18 * 2 * 8$$

परस्पर बदलाव के बाद:

$$5 \times 7 + 36 \div 18 - 2 = 8$$

या, $35 + 2 - 2 = 8$

या, $35=8$

तो, यह सही विकल्प नहीं है।

विकल्प C की जांच करने पर:

$$5 * 7 * 36 * 18 * 2 * 8$$

परस्पर बदलाव के बाद:

$$5 \times 7 - 36 + 18 \div 2 = 8$$

या, $35 - 36 + 9 = 8$

या, $8=8$

तो, यह सही विकल्प है।

जैसा कि, हमें सही उत्तर प्राप्त हो गया है, इसलिए अधिक विकल्पों की जांच करने की आवश्यकता नहीं है।

इसलिए, विकल्प C सही उत्तर है।

28. C

Sol. जैसाकि,

आम एक फल है।

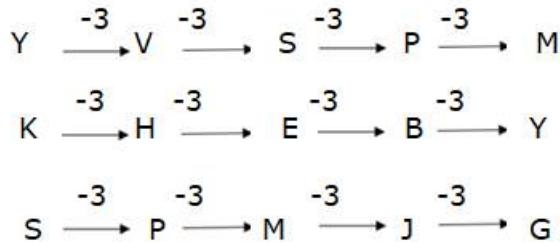
इसी तरह,

फूलगोभी एक सब्जी है।

इसलिए, विकल्प C सही उत्तर है।

29. D

Sol. पैटर्न इस प्रकार है:



इसलिए, विकल्प D सही उत्तर है।

30. C

Sol. B का वजन E के वजन का दोगुना है।

$$B=2E$$

C का वजन A के वजन का तीन गुना है।

$$C=3A$$

D का वजन, C के वजन का चार गुना है।

$$D=4C$$

B का वजन, D के वजन का आधा है।

$$B=D/2$$

माना D का वजन = 100 किग्रा

$$B \text{ का वजन} = 100/2 = 50 \text{ किग्रा}$$

$$E \text{ का वजन} = 50/2 = 25 \text{ किग्रा}$$

$$C \text{ का वजन} = 100/4 = 25 \text{ किग्रा}$$

$$A \text{ का वजन} = 25/3 = 8.33 \text{ किग्रा}$$

अतः वस्तु D सबसे भारी है।

इसलिए, विकल्प C सही उत्तर है।

31. D

Sol. माना A=1, B=2, C=3,.....Z=26

जैसाकि,

NOISE= EINOS(अक्षरों को वर्णानुक्रम में व्यवस्थित किया जाता है)

$$= E(5)I(9)N(14)O(15)S(19) = 59141519$$

इसी प्रकार,

DORMANT=ADMNORT(अक्षरों को वर्णानुक्रम में व्यवस्थित किया जाता है)

$$= A(1)D(4)M(13)N(14)O(15)R(18)T(20)$$

$$= 141314151820$$

इसलिए, विकल्प D सही उत्तर है।

32. A

Sol.

as,

P	R	I	C	K
+1	+2	+3	+4	+5
↓	↓	↓	↓	↓
Q	T	L	G	P

and

D	O	U	B	L	E
+1	+2	+3	+4	+5	+6
↓	↓	↓	↓	↓	↓
E	Q	X	F	Q	K

similarly,

A	C	E	G	A	R	D
+1	+2	+3	+4	+5	+6	+7
↓	↓	↓	↓	↓	↓	↓
B	E	H	K	F	X	K

इसलिए, विकल्प A सही उत्तर है।

33. D

Sol. पंक्ति 1:

$$[(7+12)*3]-7=[19*3]-7=57-7=50$$

पंक्ति 2:

$$[(10+11)*3]-10=[21*3]-10=63-10=53$$

पंक्ति 3:

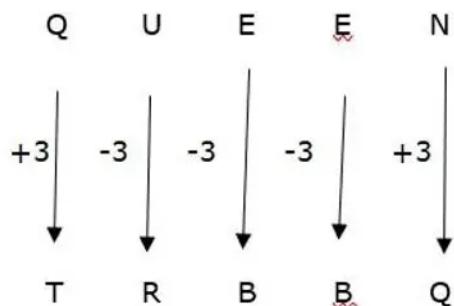
$$[(12+15)*3]-12=[27*3]-12=81-12=69$$

इसलिए, विकल्प D सही उत्तर है।

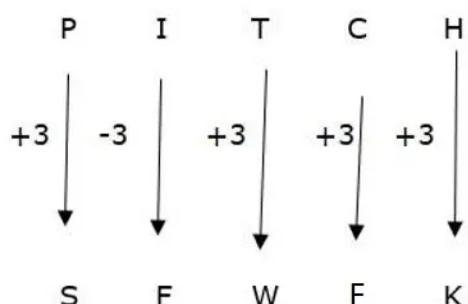
34. D

Sol. तर्कः प्रत्येक व्यंजन को तीन कदम आगे ले जाया जाता है और प्रत्येक स्वर को तीन कदम पीछे ले जाया जाता है।

as,



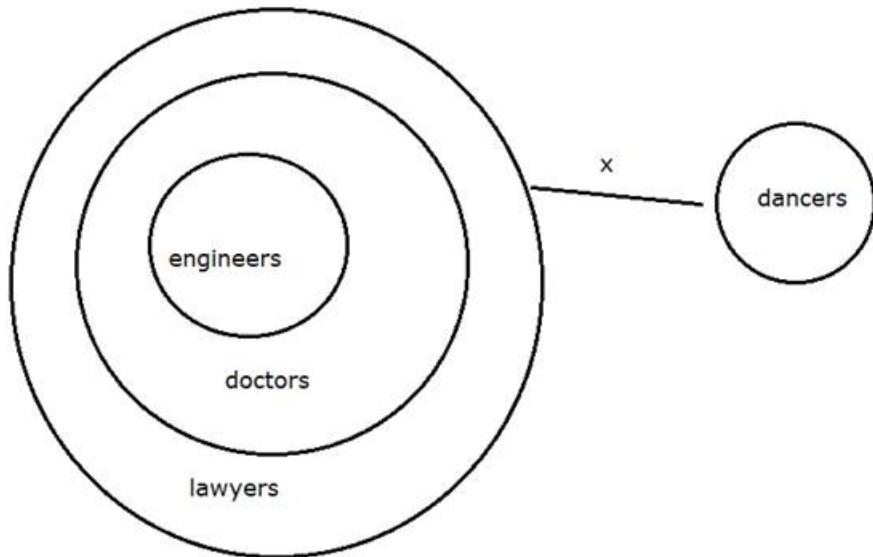
similarly,



इसलिए, विकल्प D सही उत्तर है।

35. C

Sol. न्यूनतम संभावित आरेख होगा -



निष्कर्षः

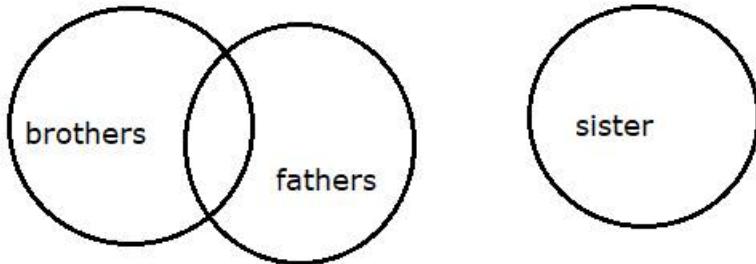
- I. कोई डॉक्टर, डॉसर नहीं है। (यह अनुसरण करता है क्योंकि सभी डॉक्टर, वकील हैं तथा कोई वकील, डॉसर नहीं है।)
- II. कोई इंजीनियर, डॉसर नहीं है। (यह भी अनुसरण करता है क्योंकि सभी इंजीनियर, डॉक्टर हैं, सभी डॉक्टर, वकील हैं तथा कोई वकील, डॉसर नहीं है।)
- III. कुछ वकील, इंजीनियर हैं। (यह भी अनुसरण करता है क्योंकि सभी इंजीनियर, डॉक्टर हैं तथा सभी डॉक्टर, वकील हैं।)
तो, सभी निष्कर्ष अनुसरण करते हैं।

इसलिए, विकल्प C सही उत्तर है।

36. D

Sol. भाई, पिता हो सकते हैं और इसके विपरीत। बहनें, महिलाएं हैं जबकि भाई और पिता पुरुष हैं।

तो, सबसे अच्छा प्रतिनिधित्व है:



इसलिए, विकल्प D सही उत्तर है।

37. D

Sol. पैटर्न इस प्रकार है:

$$40 \times 1 = 40$$

$$40 + 2 = 42$$

$$42 \times 3 = 126$$

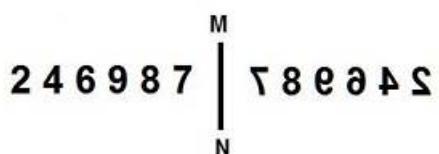
$$126 + 4 = 130$$

$$130 \times 5 = 650$$

इसलिए, विकल्प D सही उत्तर है।

38. C

Sol. एक समतल दर्पण में, एक दर्पण छवि किसी वस्तु का परावर्तित प्रतिबिम्ब होती है जो लगभग समान दिखाई देती है, लेकिन यह दर्पण की सतह की लंबवत दिशा में उलटी होती है। एक ऑप्टिकल प्रभाव के रूप में यह दर्पण या पानी जैसे पदार्थों के प्रतिबिंब के परिणामस्वरूप उत्पन्न होती है।



इसलिए, विकल्प C सही उत्तर है।

39. A

Sol. तर्क यह है कि प्रत्येक वर्णमाला को उसकी विपरीत स्थिति में वर्णमाला के साथ कूटबद्ध किया जाता है।

जैसाकि,

PLAN=KOZM

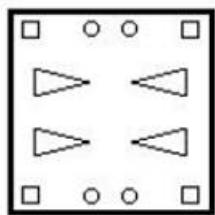
इसी प्रकार,

FLICK=UORXP

इसलिए, विकल्प A सही उत्तर है।

40. B

Sol. जैसा कि आकृति में दिया गया है, हमें इसे दिए गए (रुमाल की तय) तरीके से मोड़ने की जरूरत है और इसे खोले जाने पर विकल्प B दिखाई देगा।



इसलिए, विकल्प B सही उत्तर है।

41. A

Sol. माना A=1, B=2, C=3,.....Z=26

चूंकि,

CLOT= C(3)L(12)O(15)T(20)

= C(3*2)L(12*2)O(15*2)T(20*2)

= C(6)L(24)O(30)T(40)=6243040

इसी प्रकार,

MOSAIC= M(13)O(15)S(19)A(1)I(9)C(3)

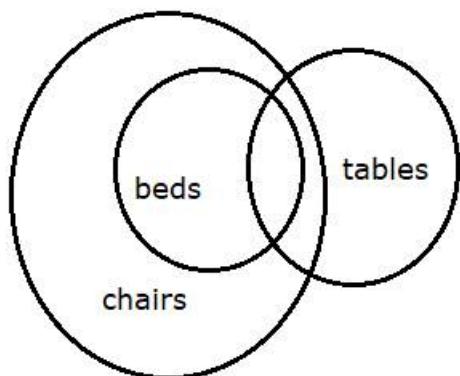
= M(13*2)O(15*2)S(19*2)A(1*2)I(9*2)C(3*2)

= M(26)O(30)S(38)A(2)I(18)C(6) =2630382186

इसलिए, विकल्प A सही उत्तर है।

42. D

Sol. न्यूनतम संभावित आरेख होगा -



निष्कर्षः

I. कुछ चेयर, टेबल हैं। (यह अनुसरण करता है, क्योंकि कुछ बेड, टेबल हैं और सभी बेड, चेयर हैं।)

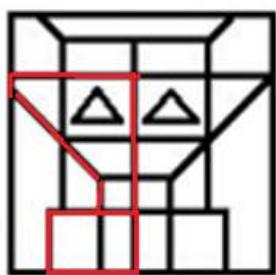
II. कोई चेयर, टेबल नहीं है। (यह अनुसरण नहीं करता है क्योंकि कुछ बेड, टेबल हैं और सभी बेड, चेयर हैं।)

तो, केवल निष्कर्ष I अनुसरण करता है।

इसलिए, विकल्प D सही उत्तर है।

43. B

Sol. प्रश्न और उत्तर में दी गई आकृतियों को ध्यान से देखने के बाद, यह बहुत स्पष्ट है कि उत्तर आकृति B दी गई प्रश्न आकृति में अंतर्निहित है। इसे नीचे दिए गए अनुसार दिखाया गया है:



इसलिए, विकल्प B सही उत्तर है।

44. D

Sol. पैटर्न इस प्रकार है:

$$35+15=50$$

$$50+30=80$$

$$80+45=125$$

$$125+60=185$$

$$185+75=260$$

इसलिए, विकल्प D सही उत्तर है।

45. C

Sol. O, K की बाईं ओर से तीसरे स्थान पर है।

O _ _ K

N, L की दाईं ओर से तीसरे स्थान पर है।

L _ _ N

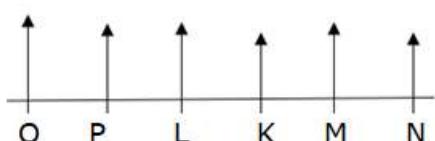
K, M की ठीक बाईं ओर है।

K M

M, K और N के मध्य में है

L K M N

तो, अंतिम व्यवस्था है:



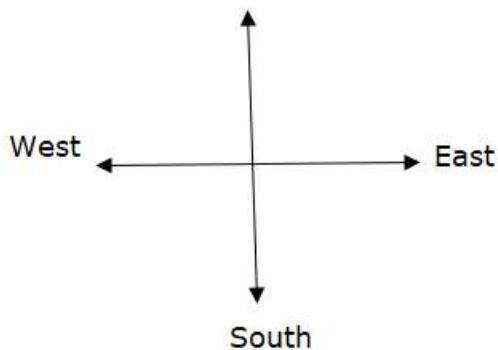
अतः, P, O और L के मध्य में बैठा है।

इसलिए, विकल्प C सही उत्तर है।

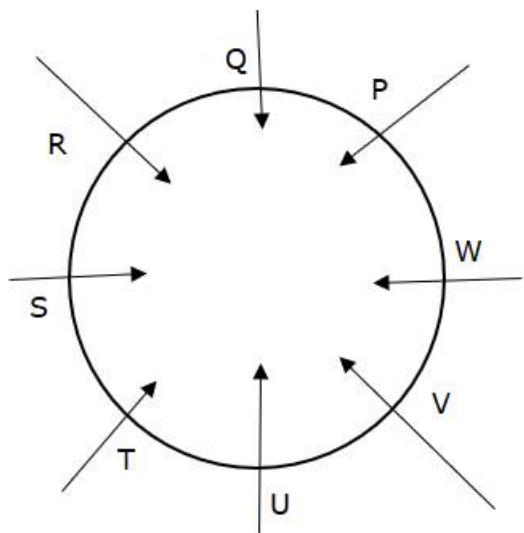
46. D

Sol.

North



T उत्तर-पूर्व दिशा में बैठा है। तो, अंतिम व्यवस्था है:



इसलिए, W पश्चिम दिशा में बैठा है।

इसलिए, विकल्प D सही उत्तर है।

47. A

Sol. जैसाकि,

$$5 \times (5 + 5 + 2) + 1 = 61$$

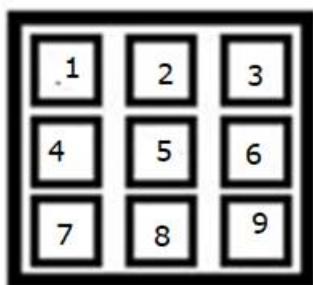
इसी प्रकार,

$$8 \times (8 + 8 + 2) + 1 = 145$$

इसलिए, विकल्प A सही उत्तर है।

48. D

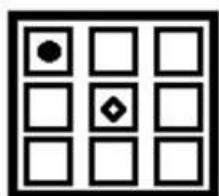
Sol.



● का गतिमान क्रम है: 1 3 9 7 1

◆ का गतिमान क्रम है: 2 5 8 2 5

तो, अगली आकृति होगी -



इसलिए, विकल्प D सही उत्तर है।

49. D

Sol. जैसाकि,

$$1000 \text{ मिलीमीटर} = 1 \text{ मीटर}$$

इसी तरह,

$$1000 \text{ ग्राम} = 1 \text{ किलोग्राम}$$

इसलिए, विकल्प D सही उत्तर है।

50. B

Sol. विकल्प A की जांच करने पर:

$$64 - 24 \div 3 + 32 \times 12 = 158$$

परस्पर बदलाव के बाद:

$$64 - 24 \div 3 + 12 \times 32 = 158$$

या, $64 - 8 + 384 = 158$

या, $440=158$

तो, यह सही विकल्प नहीं है।

विकल्प B की जांच करने पर:

$$64 - 24 \div 3 + 32 \times 12 = 158$$

परस्पर बदलाव के बाद:

$$64 - 24 \div 12 + 32 \times 3 = 158$$

या, $64 - 2 + 96 = 158$

या, $158=158$

तो, यह सही विकल्प है।

जैसा कि, हमें सही उत्तर प्राप्त हो गया है, इसलिए अधिक विकल्पों की जांच करने की आवश्यकता नहीं है।

इसलिए, विकल्प B सही उत्तर है।

51. A

Sol. ठोस धातु के बेलन की आधार त्रिज्या (R) = 3 सेमी

ठोस धातु के बेलन (H) की ऊँचाई = 120 सेमी

रूपांतरण में 10% धातु की हानि होती है।

$$\Rightarrow \pi R^2 H - \frac{10}{100} (\pi R^2 H) = \frac{4}{3} \pi r^3$$

$$\Rightarrow R^2 H - \frac{1}{10} (R^2 H) = \frac{4}{3} r^3$$

$$\Rightarrow \frac{9}{10} (R^2 H) = \frac{4}{3} r^3$$

$$\Rightarrow \frac{9}{10} [(3)^2 (120)] = \frac{4}{3} r^3$$

$$\Rightarrow 9[(3)^3 (3)] = r^3$$

$$\Rightarrow r = 9 \text{ cm}$$

52. C

Sol.

$$\frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5} \right)} \cdot \left(2\frac{1}{3} \text{ of } 1\frac{1}{2} \right)$$

BODMAS का प्रयोग करने पर:

$$\Rightarrow \frac{\frac{13}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{\frac{13}{3} \div \frac{1}{5} - \left(\frac{3}{10} + \frac{106}{5} \right)} - \left(\frac{7}{3} \times \frac{3}{2} \right)$$

$$\Rightarrow \frac{\frac{13}{4} - \frac{2}{3}}{\frac{13}{3} \div \frac{1}{5} - \left(\frac{215}{10} \right)} - \left(\frac{7}{2} \right)$$

$$\Rightarrow \frac{\frac{13}{4} - \frac{2}{3}}{\frac{65}{3} - \left(\frac{215}{10} \right)} - \left(\frac{7}{2} \right)$$

$$\Rightarrow \frac{\frac{39-8}{12}}{\frac{650-645}{30}} - \left(\frac{7}{2}\right)$$

$$\Rightarrow \frac{\frac{31}{12}}{\frac{5}{30}} - \left(\frac{7}{2}\right)$$

$$\Rightarrow \frac{\frac{31}{12}}{\frac{1}{6}} - \left(\frac{7}{2}\right)$$

$$\Rightarrow \frac{186}{12} - \left(\frac{7}{2}\right) = \frac{186}{12} - \left(\frac{42}{12}\right) = \frac{144}{12} = 12$$

53. A

Sol. विकल्प A पर विचार करने पर:

सभी पांच कार्यालयों में महिला कर्मचारियों की औसत संख्या =

$$\frac{180 + 220 + 400 + 450 + 350}{5} = \frac{1600}{5} = 320$$

कंपनी D में पुरुष कर्मचारियों की संख्या = 400

वह प्रतिशत जिसमें कंपनी D में पुरुष कर्मचारियों की संख्या सभी पांच कार्यालयों में महिला कर्मचारियों की औसत संख्या से अधिक है =

$$\frac{400 - 320}{320} \times 100 = 25\%$$

अतः विकल्प A सही है।

54. B

Sol. कार्यालय E में पुरुष कर्मचारियों की संख्या = 450

कार्यालय C में महिला कर्मचारियों की संख्या = 400

कार्यालय C में 45% महिला कर्मचारियों को कार्यालय B में स्थानांतरित किया जाता है।

कार्यालय B में महिला कर्मचारियों की संख्या =

$$220 + \frac{45}{100} \times 400 = 220 + 180 = 400$$

वह प्रतिशत जिसमें कार्यालय E में पुरुष कर्मचारियों की संख्या, कार्यालय B में महिला कर्मचारियों की संख्या से अधिक है =

$$\frac{450 - 400}{400} \times 100 = 12.5\%$$

55. A

Sol. कार्यालय B, D और E में कंपनी की महिला कर्मचारियों की कुल संख्या = $220 + 450 + 350 = 1020$

कार्यालयों A, B, C और E में पुरुष कर्मचारियों की कुल संख्या = $230 + 320 + 350 + 450 = 1350$

$$\text{आवश्यक प्रतिशत} = \frac{1350 - 1020}{1350} \times 100 = \frac{330}{1350} \times 100 = 24.4\%$$

56. D

Sol. पाइप A, B और C एक टैंक को क्रमशः 30 घंटे, 36 घंटे और 28 घंटे में भर सकते हैं।

मान लीजिए टैंक की कुल क्षमता = (30, 36, 28) ल.स. = 1260 इकाई

$$\text{पाइप A की दक्षता} = \frac{1260}{30} = 42 \text{ unit/hour}$$

$$\text{पाइप B की दक्षता} = \frac{1260}{36} = 35 \text{ unit/hour}$$

$$\text{पाइप C की दक्षता} = \frac{1260}{28} = 45 \text{ unit/hour}$$

माना टैंक x घंटे में भरता है।

टैंक के पूरी तरह से भरने से पहले A और C को क्रमशः 5 घंटे और 8 घंटे पहले बंद कर दिया गया था।

$$\Rightarrow (x - 5) \times 42 + (x) \times 35 + (x - 8) \times 45 = 1260$$

$$\Rightarrow 42x - 210 + 35x + 45x - 360 = 1260$$

$$\Rightarrow 122x = 1830$$

$$\Rightarrow x = 15$$

अतः टैंक 15 घंटे में भर जाएगा।

57. C

Sol.

वर्ग	मध्य बिंदु (x_i)	आवृत्ति (f_i)	$(f_i) \cdot (x_i)$
0-10	5	6	30
10-20	15	12	180
20-30	25	15	375
30-40	35	x	35x
40-50	45	5	225
		38+x	810+35x

$$\text{माध्य} = \frac{\sum f_i \cdot x_i}{\sum f_i} = \frac{810 + 35x}{38 + x}$$

$$\Rightarrow \frac{810 + 35x}{38 + x} = 24.6$$

$$\Rightarrow 810 + 35x = 934.8 + 24.6x$$

$$\Rightarrow 10.4x = 124.8$$

$$\Rightarrow x = 12$$

58. B

Sol. A और B एक निश्चित कार्य को क्रमशः 12 और 18 दिनों में कर सकते हैं।

$$\text{माना कुल काम} = (12, 18) \text{ ल.स.} = 36 \text{ इकाई}$$

$$A \text{ की दक्षता} = \frac{36}{12} = 3 \text{ unit/day}$$

$$B \text{ की दक्षता} = \frac{36}{18} = 2 \text{ unit/day}$$

वे 5 दिनों तक एक साथ काम करते हैं।

$$A \text{ और } B \text{ द्वारा एक साथ } 5 \text{ दिनों में किया गया कार्य} = (3 + 2) \times 5 = 25 \text{ unit}$$

शेष कार्य = 36 इकाई - 25 इकाई = 11 इकाई

शेष कार्य अकेले C द्वारा $27 \frac{1}{2}$ दिनों में पूरा किया जाता है।

$$C \text{ की दक्षता} = \frac{\frac{11}{55}}{\frac{2}{5}} = \frac{2}{5} \text{ unit/day}$$

$$A + B + C \text{ की दक्षता} = 3 + 2 + \frac{2}{5} = \frac{27}{5} \text{ unit/day}$$

$$A, B \text{ और } C \text{ द्वारा मिलकर } 6 \text{ दिनों में किया गया कार्य} = \frac{27}{5} \times 6 = \frac{162}{5} \text{ unit}$$

A, B और C द्वारा मिलकर 6 दिनों में पूरा किए गए कार्य का भाग =

$$\frac{162}{5 \times 36} = \frac{45}{50} = \frac{9}{10}$$

59. D

Sol. 4,000 रुपये की राशि 10% प्रति वर्ष की दर से उधार दी जाती है, ब्याज वार्षिक रूप से संयोजित होता है।

$$\text{एक वर्ष के बाद राशि} = 4000 \left(1 + \frac{10}{100}\right) = 4000 \times \frac{11}{10} = \text{Rs.} 4400$$

$$\text{दो वर्षों के बाद राशि} = 4000 \left(1 + \frac{10}{100}\right)^2 = 4000 \times \frac{11}{10} \times \frac{11}{10} = \text{Rs.} 4840$$

दूसरे वर्ष का चक्रवृद्धि ब्याज = 4840 रुपये - 4400 रुपये = 440 रुपये

तीन वर्षों के बाद राशि =

$$4000 \left(1 + \frac{10}{100}\right)^3 = 4000 \times \frac{11}{10} \times \frac{11}{10} \times \frac{11}{10} = \text{Rs.} 5324$$

तीसरे वर्ष का चक्रवृद्धि ब्याज = 5324 रुपये - 4840 रुपये = 484 रुपये

आवश्यक अंतर = 484 रुपये - 440 रुपये = 44 रुपये

60. A

Sol. बिना रुके एक बस की गति 40 किमी/घंटा है और रुकते हुए इस बस की गति 32 किमी/घंटा है।

बिना रुके बस द्वारा 60 मिनट में तय की गई दूरी = 40 किमी

रुकते हुए बस द्वारा 60 मिनट में तय की गई दूरी = 32 किमी

$$\text{बस की प्रति घंटे रुके की मिनटों की संख्या} = \frac{(40 - 32)}{40} \times 60 = \frac{48}{4} = 12 \text{ minute}$$

61. A

Sol. एक वस्तु को 25% के लाभ पर बेचा जाता है।

माना वस्तु का क्रय मूल्य = $100x$

$$\text{वस्तु का विक्रय मूल्य} = 100x + 100x \times \frac{25}{100} = 125x$$

यदि वस्तु के क्रय मूल्य और विक्रय मूल्य दोनों में 200 रुपये की वृद्धि की जाती है, तो लाभ प्रतिशत 20% होता है।

वस्तु का नया क्रय मूल्य = $100x + 200$

वस्तु का नया विक्रय मूल्य = $125x + 200$

प्रश्नानुसार:

$$\Rightarrow 100x + 200 + [100x + 200] \times \frac{20}{100} = 125x + 200$$

$$\Rightarrow 100x + 200 + 20x + 40 = 125x + 200$$

$$\Rightarrow 120x + 40 = 125x$$

$$\Rightarrow 5x = 40$$

$$\Rightarrow x = 8$$

अब, वस्तु का मूल क्रय मूल्य = 800 रुपये

62. A

Sol. माना वस्तु का अंकित मूल्य = $100x$ इकाई

छूट = 20%

$$\text{वस्तु का विक्रय मूल्य} = 100x - 100x \times \frac{20}{100} = 80x \text{ unit}$$

लाभ = 12%

$$\text{वस्तु का क्रय मूल्य} = 80x \times \frac{100}{(100 + 12)} \text{ इकाई}$$

प्रश्नानुसार :

$$\Rightarrow 80x \times \frac{100}{(100 + 12)} = 750$$

$$\Rightarrow 80x \times \frac{100}{(112)} = 750$$

$$\Rightarrow x = 750 \times \frac{112}{100} \times \frac{1}{80} = 10.5$$

अब, वस्तु का अंकित मूल्य = $10.5 \times 100 = \text{Rs.}1050$

63. A

Sol. एक वस्तु के मूल्य में प्रति वर्ष 20% की वृद्धि होती है।

माना वस्तु का प्रारंभिक मूल्य = x रुपये

तीसरे वर्ष के अंत में और चौथे वर्ष के अंत में वस्तु की कीमत के बीच का अंतर 324 रुपये है

$$\Rightarrow x \left(1 + \frac{20}{100}\right)^4 - x \left(1 + \frac{20}{100}\right)^3 = 324$$

$$\Rightarrow \frac{1296}{625}x - \frac{216}{125}x = 324$$

$$\Rightarrow \frac{1296x - 1080x}{625} = 324$$

$$\Rightarrow 216x = 324 \times 625$$

$$\Rightarrow x = 937.5$$

दूसरे वर्ष के अंत में वस्तु का मूल्य =

$$x \left(1 + \frac{20}{100}\right)^2 = 937.5 \times \frac{36}{25} = \text{Rs. } 1350$$

64. A

Sol. माना समय = 72 सेकण्ड

व्यक्ति $8\frac{1}{3}$ मीटर/सेकण्ड की गति से चलता है

$$72 \text{ सेकंड में तय की गई दूरी} = \frac{25}{3} \times 72 = 600 \text{ m}$$

वह इस यात्रा के $\frac{2}{3}$ भाग को समय के $5/8$ भाग में पूरा करता है

$$\text{यात्रा का } \frac{2}{3} \text{ भाग} = \frac{2}{3} \times 600 = 400 \text{ m}$$

$$\text{यात्रा का } \frac{5}{8} \text{ भाग} = \frac{5}{8} \times 72 = 45 \text{ sec}$$

$$\text{शेष दूरी} = 600 \text{ मीटर} - 400 \text{ मीटर} = 200 \text{ मीटर}$$

$$\text{शेष समय} = 72 - 45 = 27 \text{ सेकण्ड}$$

$$\text{आवश्यक गति} = \frac{200}{27} \times \frac{18}{5} = \frac{80}{3} = 26\frac{2}{3} \text{ km/hr}$$

65. B

Sol. $120 \div [13 + \{47 - (36 - 36 \div 2 \text{ का } 9 \times 3)\}]$

BODMAS का प्रयोग करने पर:

$$\Rightarrow 120 \div [13 + \{47 - (36 - 36 \div 18 \times 3)\}]$$

$$\Rightarrow 120 \div [13 + \{47 - (36 - 2 \times 3)\}]$$

$$\Rightarrow 120 \div [13 + \{47 - (30)\}]$$

$$\Rightarrow 120 \div [13 + 17]$$

$$\Rightarrow 120 \div 30$$

$$\Rightarrow 4$$

66. C

Sol. 12,384 रुपये की राशि को A, B, C और D के बीच इस प्रकार विभाजित किया जाता है कि A और B के हिस्सों का अनुपात 3:4 है, B और C के हिस्सों का अनुपात 5:6 है, और C और D के हिस्सों का अनुपात 8:9 है।

$$A : B = 3 : 4$$

40 से गुणा करने पर

$$\Rightarrow A : B = 120 : 160 \dots\dots\dots(1)$$

$$B : C = 5 : 6$$

32 से गुणा करने पर

$$\Rightarrow B : C = 160 : 192 \dots\dots\dots(2)$$

$$C : D = 8 : 9$$

24 से गुणा करने पर

$$\Rightarrow C : D = 192 : 216 \dots\dots\dots(3)$$

सभी समीकरणों को मिलाने पर:

$$A : B : C : D = 120 : 160 : 192 : 216 = 15 : 20 : 24 : 27$$

प्रश्नानुसार :

$$\Rightarrow (15 + 20 + 24 + 27) \text{ इकाई} = 12384 \text{ रुपये}$$

$\Rightarrow 86 \text{ इकाई} = 12384 \text{ रुपये}$

$$\Rightarrow 1 \text{ इकाई} = 144$$

$\Rightarrow 24 \text{ इकाई} = 3456 \text{ रुपये}$

अतः C का हिस्सा = 3456 रुपये

67. D

$$\text{Sol. } (a + b) : (b + c) : (c + a) = 15 : 14 : 11$$

$$\text{माना } a + b = 15k \dots\dots\dots(1)$$

$$b + c = 14k \dots\dots\dots(2)$$

$$c + a = 11k \dots\dots\dots(3)$$

(1), (2) और (3) को जोड़ने पर

$$2(a + b + c) = 40k$$

$$\Rightarrow (a + b + c) = 20k$$

साथ ही, $a + b + c = 40$

$$\Rightarrow 20k = 40$$

→ k = 2

$$\text{अब, } a+b = 30 \dots\dots\dots(4)$$

$$b + c = 28 \dots\dots\dots(5)$$

$$c + a = 22 \dots\dots\dots(6)$$

$$a + b + c = 40 \dots\dots\dots(7)$$

(7) से (4) को घटाने पर

$$\Rightarrow c \equiv 40 - 30 \equiv 10$$

C का मान करमशः (5) और (6) में रखने पर

$$\Rightarrow b = 18$$

$$\text{और } a = 12$$

$$\text{अब, } 3a + b - 4c = 36 + 18 - 40 = 14$$

68. B

Sol. दो संकेंद्रित वृत्तों के क्षेत्रफलों के बीच का अंतर 88 वर्ग सेमी है।

आंतरिक वृत्त की तिरज्या 6 सेमी है

$$\text{आंतरिक वृत्त का क्षेत्रफल} = \pi(6)^2 = \frac{22}{7} \times 36 = 113.1 \text{ cm}^2$$

$$\text{बाहरी वृत्त का क्षेत्रफल} = 113.1 + 88 = 201.1 \approx 201 \text{ cm}^2$$

69. A

Sol. जब एक वस्तु को 531 रुपये में बेचा जाता है, तो 18% का लाभ होता है।

$$\text{वस्तु का लागत मूल्य} = 531 \times \frac{100}{(100+18)} = 531 \times \frac{100}{(118)} = \text{Rs. } 450$$

लेकिन अगर विक्रय मूल्य 486 रुपये है तो

$$\text{लाभ} = 486 \text{ रुपये} - 450 \text{ रुपये} = 36 \text{ रुपये}$$

$$\text{लाभ \%} = \frac{36}{450} \times 100 = 8\%$$

70. C

Sol. एक निश्चित राशि प्रति वर्ष के साधारण ब्याज की समान दर पर 5 वर्षों के बाद 4,600 रुपये और 8 वर्षों के बाद 6,000 रुपये हो जाती है।

$$3 \text{ वर्षों का साधारण ब्याज} = 6000 \text{ रुपये} - 4600 \text{ रुपये} = 1400 \text{ रुपये}$$

$$5 \text{ वर्षों का साधारण ब्याज} = \left(\frac{7000}{3} \right) \text{रुपये}$$

$$\text{मूलधन} = 4600 - \left(\frac{7000}{3} \right) = \text{Rs. } \left(\frac{6800}{3} \right)$$

अब, साधारण ब्याज = मूलधन × दर × समय / 100

$$\Rightarrow (1400) = \frac{\left(\frac{6800}{3} \right) \times R \times 3}{100}$$

$$\Rightarrow R = \frac{1400}{68} \%$$

अब, हम 8,500 रुपये की राशि पर 6 1/2 वर्षों का $\frac{1400}{68}$ % की दर पर साधारण ब्याज ज्ञात करेंगे।

$$\text{साधारण ब्याज} = \frac{(8500) \times \frac{1400}{68} \times \frac{13}{2}}{100} = \text{Rs. } 11375$$

71. D

$$\text{Sol. } \frac{2}{3} \div \left(\frac{4}{5} - \frac{1}{2} \right) \times \frac{18}{25} - \left(\frac{4}{5} \div \frac{5}{6} \text{ of } 2\frac{2}{3} \right) + 3\frac{1}{5} \div \frac{8}{5} \times \frac{2}{5}$$

BODMAS का प्रयोग करने पर:

$$\Rightarrow \frac{2}{3} \div \left(\frac{3}{10} \right) \times \frac{18}{25} - \left(\frac{4}{5} \div \frac{5}{6} \text{ of } \frac{8}{3} \right) + \frac{16}{5} \div \frac{8}{5} \times \frac{2}{5}$$

$$\Rightarrow \frac{2}{3} \div \left(\frac{3}{10} \right) \times \frac{18}{25} - \left(\frac{4}{5} \div \frac{20}{9} \right) + \frac{16}{5} \div \frac{8}{5} \times \frac{2}{5}$$

$$\Rightarrow \left(\frac{20}{9} \right) \times \frac{18}{25} - \left(\frac{36}{100} \right) + 2 \times \frac{2}{5}$$

$$\Rightarrow \frac{8}{5} - \frac{9}{25} + \frac{4}{5} = \frac{40 - 9 + 20}{25} = \frac{51}{25} = 2\frac{1}{25}$$

72. A

Sol. x 56,000 और 60,000 के बीच की सबसे छोटी संख्या है जिसे 40, 45, 50 और 55 से विभाजित करने पर प्रत्येक स्थिति में 23 शेष

बचता है।

$$x = (40, 45, 50 \text{ और } 55) \text{ ल.स.} \times K + 23$$

$$x = 19800 \times K + 23$$

अब, हम K का वह मान ज्ञात करेंगे जिसके लिए x 56,000 और 60,000 के बीच निहित होगा।

निरीक्षण करके, $K = 3$ रखें

$$\Rightarrow x = 19800 \times 3 + 23 = 59400 + 23 = 59423$$

$$x \text{ के अंकों का योग} = 5 + 9 + 4 + 2 + 3 = 23$$

73. A

Sol. 40% छात्र लड़के हैं और शेष लड़कियाँ हैं

कक्षा में लड़कों और लड़कियों का अनुपात = $40\% : 60\% = 2 : 3$

लड़कों और लड़कियों के औसत वजन का अनुपात $5:4$ है।

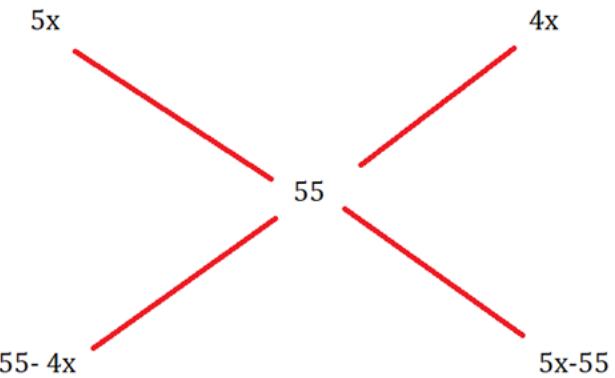
माना लड़कों का औसत वजन = $5x$

लड़कियों का औसत वजन = $4x$

एक कक्षा में सभी विद्यार्थियों का औसत वजन = 55 किलोग्राम

एलीगेशन विधि का उपयोग करने पर:

Average weight of Boys



Average weight of Girls

$$\Rightarrow \frac{55 - 4x}{5x - 55} = \frac{2}{3}$$

$$\Rightarrow 165 - 12x = 10x - 110$$

$$\Rightarrow 22x = 275$$

$$\Rightarrow x = \frac{275}{22} = \frac{25}{2}$$

$$\text{अतः लड़कों का औसत वजन} = 5x = \frac{25}{2} \times 5 = \frac{125}{2} = 62.5 \text{ kg}$$

74. A

Sol. यदि 3 अंकों की संख्या 524, 466, 3x4 और x52 का औसत 529 है।

$$3 \text{ अंकों की संख्याओं } 524, 466, 3x4 \text{ और } x52 \text{ का योग} = 4 \times 529 = 2116$$

$$\Rightarrow 990 + 3x4 + x52 = 2116$$

$$\Rightarrow 3x4 + x52 = 1126$$

$$\text{स्पष्टतः, } 374 + 752 = 1126$$

$$\text{अतः, } x = 7$$

$$(10x + 7) \text{ और } (14x - 9) \text{ का औसत} =$$

$$\frac{10x + 7 + 14x - 9}{2} = \frac{77 + 89}{2} = \frac{166}{2} = 83$$

75. A

Sol. मिश्र धातु A में तांबा और जिंक का अनुपात = 5 : 7(1) { 5 + 7 = 12 }

मिश्र धातु B में तांबा और जिंक का अनुपात = 4 : 5(2) { 4 + 5 = 9 }

हमें बराबर मात्रा बनानी है और मिश्र धातु A और B को 1:2 में लेना है।

समीकरण (1) में 3×1 से और समीकरण (2) में 4×2 से गुणा करने पर

मिश्र धातु A में तांबा और जिंक का अनुपात = 15 : 21

मिश्र धातु B में तांबा और जिंक का अनुपात = 32 : 40

$$\text{अब, C का वह भाग जो ताँबा है} = \frac{15 + 32}{15 + 32 + 21 + 40} = \frac{47}{108}$$

76. A

Sol. • पतेती या पश्चाताप का दिन पारसी कैलेंडर में एक महत्वपूर्ण दिन है।

- यह पारसियों का त्योहार है और यह पारसी कैलेंडर के नए साल की पूर्व संध्या पर मनाया जाता है।
- पारसी कैलेंडर की शुरुआत करने वाले फारस के महान राजा जमशेद के नाम पर इसे जमशेदी नवरोज के नाम से भी जाना जाता है।
- पारसी भारतीय उपमहाद्वीप का एक जातीय धार्मिक समूह है जिसका धर्म पारसी धर्म है।
- पारसी समुदाय दुनिया के सबसे सफल अल्पसंख्यकों और प्रवासी समूहों में से एक है।
- ईसाई वह हैं जो यीशु मसीह की शिक्षाओं का पालन करते हैं।

77. D

Sol. • गर्ल, वुमन, अदर नामक पुस्तक को बर्नार्डिन एवरिस्टो द्वारा लिखा गया था।

- यह बर्नार्डिन एवरिस्टो द्वारा लिखित आठवां उपन्यास है, जिसे हामिश हैमिल्टन द्वारा 2019 में प्रकाशित किया गया था।
- बर्नार्डिन एवरिस्टो रंग के लेखकों और कलाकारों को शामिल करने के लिए लंबे समय से पैरोकार हैं।
- वह पहली अश्वेत महिला थीं और बुकर जीतने वाली पहली अश्वेत बिरटिश महिला थीं।

- उन्होंने बरूनल इंटरनेशनल अफरीकन पोएट्री पराइज की स्थापना की।
- एन ऑर्केस्ट्रा ऑफ माइनॉरिटीज चिगोजी ओबिओमा का 2019 का उपन्यास है।
- डक्स, न्यूबरीपोर्ट ब्रिटिश लेखक लुसी एलमैन का 2019 का उपन्यास है।

78. B

Sol. • 1998 में भारत में राष्ट्रीय सुरक्षा सलाहकार का पद सुरित किया गया था।

- राष्ट्रीय सुरक्षा सलाहकार भारतीय राष्ट्रीय सुरक्षा परिषद का वरिष्ठ अधिकारी होता है।
- वह राष्ट्रीय सुरक्षा नीति और अंतर्राष्ट्रीय मामलों पर भारत के प्रधान मंत्री के मुख्य सलाहकार हैं।
- वह सभी खुफिया रिपोर्ट प्राप्त करता है और प्रधान मंत्री के समक्ष पेश करने के लिए उनका समन्वय करता है।
- यह भारत सरकार में एक अत्यधिक प्रमुख और शक्तिशाली कार्यालय है।
- ब्रजेश मिश्रा को भारत के पहले राष्ट्रीय सुरक्षा सलाहकार के रूप में नियुक्त किया गया था।

79. D

Sol. • तेलंगाना ने 'हरिता हरम' नाम से वृक्षारोपण के लिए एक कार्यक्रम लागू किया है।

- हरिता हरम एक बड़े पैमाने पर वृक्षारोपण कार्यक्रम है और इसे तेलंगाना 'कू हरिता हरम' के नाम से भी जाना जाता है।
- इसे राज्य में वृक्षों के आच्छादन की मात्रा को 24% से बढ़ाकर 33% करने के लिए लागू किया गया था।
- यह कार्यक्रम 3 जुलाई 2015 को तेलंगाना के मुख्यमंत्री चंद्रशेखर राव द्वारा शुरू किया गया था।
- यह अवकरमित वर्णों को फिर से जीवंत करने के लिए तेलंगाना के प्रमुख कार्यकर्मों में से एक है।
- इसने जलसंभर वृष्टिकोण के आधार पर सघन मृदा और नमी संरक्षण उपायों को अपनाया।

80. B

Sol. • फोलिक अम्ल का दूसरा नाम पटरॉयलग्लुटेमिक अम्ल (Pteroylglutamic acid) है।

- फोलिक अम्ल विटामिन B का एक प्रकार है और यह शरीर को स्वस्थ नई कोशिकाओं को बनाने में मदद करता है।
- यह एक सिंथेटिक, पानी में घुलनशील विटामिन है जिसका उपयोग पूरक और गरिष्ठ खाद्य पदार्थों में किया जाता है।
- एस्कॉर्बिक अम्ल एक प्राकृतिक पानी में घुलनशील विटामिन है और यह एंटीऑक्सिडेंट नामक दवाओं के एक वर्ग में है।

- लैकिटक अम्ल एक कार्बनिक अम्ल है और यह मुख्य रूप से मांसपेशियों की कोशिकाओं और लाल रक्त कोशिकाओं में उत्पन्न होता है।

- ग्लाइकोलिक अम्ल गन्ने से बना पानी में घुलनशील अल्फा हाइड्रॉक्सी एसिड है।

81. C

Sol. • सतलुज नदी की सहायक के रूप में स्पीति नदी है।

- यह सिंधु नदी की सबसे पूर्वी सहायक नदी है और इसे सतदरी के नाम से भी जाना जाता है।

- स्पीति नदी हिमाचल प्रदेश के लाहौल-स्पीति जिले की खूबसूरत घाटियों का पोषण करती है।

- चिनाब नदी एक प्रमुख नदी है जो भारत और पाकिस्तान में बहती है।

- ब्यास नदी उत्तर भारत की एक नदी है और यह मध्य हिमाचल प्रदेश में हिमालय से निकलती है।

- रावी नदी उत्तर-पश्चिमी भारत और पूर्वी पाकिस्तान को पार करने वाली एक सीमा पार नदी है।

82. A

Sol. • वित्त वर्ष 2019-20 में मॉरीशस भारत में प्रत्यक्ष विदेशी निवेश का दूसरा सबसे बड़ा स्रोत था।

- वित्त वर्ष 2019-20 में सिंगापुर भारत में प्रत्यक्ष विदेशी निवेश का सबसे बड़ा स्रोत था।

- प्रत्यक्ष विदेशी निवेश एक देश में किसी अन्य देश में स्थित एक संस्था द्वारा किसी व्यवसाय में स्वामित्व को नियंत्रित करने के रूप में किया गया निवेश है।

- यह इक्विटी पूँजी, लंबी अवधि की पूँजी और अल्पकालिक पूँजी का योग है जैसा कि भुगतान संतुलन में दिखाया गया है।

- भारत में प्रत्यक्ष विदेशी निवेश भारत में आर्थिक विकास के लिए एक प्रमुख मौद्रिक स्रोत है।

- भारत को FDI प्राप्त करने के दो मार्ग हैं:

a) स्वचालित मार्ग

b) सरकारी मार्ग

83. D

Sol. • के शरीकांत, जिन्हें जून 2020 में खेल रत्न पुरस्कार के लिए अनुशंसित किया गया था, एक पेशेवर बैडमिंटन खिलाड़ी हैं।

- वह भारतीय क्रिकेट टीम के पूर्व कप्तान और चयन समिति के पूर्व अध्यक्ष हैं।

- वह अपनी आक्रामक बल्लेबाजी शैली के लिए जाने जाते हैं।

- खेल रत्न पुरस्कार भारत का सर्वोच्च खेल सम्मान है।
- यह युवा मामले और खेल मंत्रालय द्वारा प्रतिवर्ष प्रदान किया जाता है।
- पुरस्कार के पहले प्राप्तकर्ता शतरंज ग्रैंडमास्टर विश्वनाथन आनंद थे।

84. D

Sol. • 'कजली पेंटिंग्स', जिसमें किसी ब्रश का इस्तेमाल नहीं होता, पारंपरिक रूप से राजस्थान से संबंधित है।

- राज्य के पूर्वी भाग में इसका अधिक महत्व है।
- इसे राजस्थान के कुछ क्षेत्रों में बहुत कम आबादी द्वारा निर्मित किया जाता है।
- राजस्थान अपनी शानदार वास्तुकला, जीवंत और रंगीन संस्कृति और सुंदर कला और हस्तशिल्प के लिए जाना जाता है।
- यह चूना पत्थर, चांदी, सोना, तांबा, संगमरमर, बलुआ पत्थर आदि का प्रमुख उत्पादक है।
- यह क्षेत्रफल के हिसाब से सबसे बड़ा भारतीय राज्य है और जनसंख्या के हिसाब से सातवां सबसे बड़ा राज्य है।

85. B

Sol. • 'विच्छोट' पुस्तक के लेखक सलमान रुश्दी हैं।

- विच्छोट सलमान रुश्दी का 2019 का उपन्यास है।
- यह उनका चौदहवां उपन्यास है और यह 29 अगस्त 2019 को प्रकाशित हुआ था।
- इसे यूनाइटेड किंगडम में जोनाथन केप और भारत में पेंगुइन बुक्स इंडिया द्वारा प्रकाशित किया गया था।
- इसे अनुकूल समीक्षा मिली और इसे 2019 के बुकर पुरस्कार के लिए चुना गया।
- सलमान रुश्दी अपने उपन्यासों में सांस्कृतिक और राजनीतिक मुद्दों को उजागर करने के लिए जादुई यथार्थवाद के तीखे उपयोग के लिए जाने जाते हैं।
- विक्रम सेठ सबसे प्रसिद्ध भारतीय उपन्यासकारों और कवियों में से हैं।

86. D

Sol. • चंबल यमुना नदी की एक सहायक नदी है।

- यह एक पौराणिक नदी है और प्राचीन शास्त्रों में इसका उल्लेख मिलता है।
- घाघरा एक बारहमासी नदी है जो मानसरोवर झील के पास तिक्की पठार से निकलती है।

- गंडक नदी काली और तिरसुली नदियों के मिलन से बनती है।
- सोन नदी मध्य भारत में स्थित एक बारहमासी नदी है और यह अमरकंटक पहाड़ी के पास से निकलती है।
- यह गंगा की दूसरी सबसे बड़ी दक्षिणी सहायक नदी है और यह देश भर में अपनी रेत के लिए प्रसिद्ध है।
- यमुना परवाह के हिसाब से गंगा की दूसरी सबसे बड़ी सहायक नदी है और भारत की सबसे लंबी सहायक नदी है।

87. D

Sol. • 15 लाख रुपये से अधिक वार्षिक कर योग्य आय वाला एक निवासी भारतीय व्यक्ति केंद्रीय बजट, 2020-21 के अनुसार 30% की दर से कर का भुगतान करेगा।

- 10 लाख रुपये से 12.5 लाख रुपये के बीच की व्यक्तिगत आय वाले भारतीय व्यक्ति पर 20 प्रतिशत की दर से कर लगाया जाता है।
- 12.5 लाख रुपये से 15 लाख रुपये के बीच की व्यक्तिगत आय वाले भारतीय व्यक्ति पर 25 प्रतिशत कर लगता है।
- 5 लाख रुपये से 7.5 लाख रुपये तक की व्यक्तिगत आय वाले भारतीय व्यक्ति पर 10 प्रतिशत की दर से कर लगाया जाता है।
- 7.5 लाख रुपये से 10 लाख रुपये के बीच आय वाले भारतीय व्यक्ति पर 15 प्रतिशत की दर से कर लगाया जाता है।

88. C

Sol. • ई-नाम (e-NAM) एक अखिल भारतीय इलेक्ट्रॉनिक ट्रेडिंग पोर्टल है जिसका उद्देश्य भारत में कृषि उत्पादों के लिए मौजूदा मॉडियों को एकीकृत करना है।

- यह भारत में कृषि जिंसों के लिए एक ऑनलाइन ट्रेडिंग प्लेटफॉर्म है।
- यह किसानों, व्यापारियों और खरीदारों को वस्तुओं के ऑनलाइन व्यापार की सुविधा प्रदान करता है।
- यह 18 राज्यों और 2 केंद्र शासित प्रदेशों के 1000 बाजारों से जुड़ा हुआ है और 18 राज्यों में 50 लाख से अधिक किसान सदस्यता के साथ जुड़ा हुआ है।
- यह बेहतर मूल्य खोज में मदद करता है और उपज के सुचारू विपणन के लिए सुविधाएं प्रदान करता है।
- इसे भारत सरकार के कृषि मंत्रालय द्वारा लॉन्च किया गया था।

89. B

Sol. • प्रधान मंत्री जीवन ज्योति बीमा योजना बैंक खातों के सभी धारकों को 2 लाख का जीवन बीमा कवर प्रदान करती है।

- यह भारत में एक सरकार समर्थित जीवन बीमा योजना है।

- इसका मूल रूप से वर्ष 2015 के बजट भाषण में वित्त मंत्री अरुण जेटली द्वारा उल्लेख किया गया था।
- इसे औपचारिक रूप से प्रधान मंत्री नरेंद्र मोदी द्वारा 9 मई को कोलकाता में लॉन्च किया गया था।
- इस योजना में शामिल होने के लिए किसी व्यक्ति को स्वास्थ्य रिपोर्ट या प्रमाण पत्र जमा करने की आवश्यकता नहीं है।
- यह 18 से 50 वर्ष की आयु के लोगों के लिए बैंक खातों के साथ उपलब्ध है।

90. B

Sol. • चित्तरंजन दास को 'देशबंधु' के नाम से जाना जाता था।

- वह भारत में ब्रिटिश औपनिवेशिक शासन की अवधि के दौरान बंगाल में स्वराज पार्टी के संस्थापक-नेता थे।
- दादाभाई नौरोजी को भारत के ग्रैंड ओल्ड मैन और भारत के अनौपचारिक राजदूत के रूप में भी जाना जाता था।
- आशुतोष मुखर्जी भारतीय शिक्षा के सबसे प्रभावशाली व्यक्ति थे।
- वह 1906 में बंगाल तकनीकी संस्थान की नींव के लिए जिम्मेदार थे।
- मदन मोहन मालवीय भारत स्काउट्स एंड गाइड्स के संस्थापकों में से एक थे।

91. A

Sol. • विटामिन B-12 पानी में घुलनशील एकमात्र विटामिन है जिसे कई वर्षों तक लीवर में संग्रहित किया जा सकता है।

- यह तंत्रिका तंत्र की सामान्य कार्यप्रणाली में महत्वपूर्ण भूमिका निभाता है और यह सभी विटामिनों में सबसे अधिक रासायनिक रूप से जटिल है।
- विटामिन C पानी में घुलनशील एक विटामिन है जो विभिन्न खाद्य पदार्थों में पाया जाता है और आहार पूरक के रूप में प्रयोग किया जाता है।
- यह कई एंजाइमों की कार्यप्रणाली के लिए आवश्यक है और प्रतिरक्षा प्रणाली के कार्य के लिए महत्वपूर्ण है।
- विटामिन K रक्त के थक्के को बनने में मदद करता है, अत्यधिक रक्तस्राव को रोकता है।
- कैल्शियम होमियोस्टेसिस और चयापचय में विटामिन D की महत्वपूर्ण भूमिका है।

92. A

Sol. • एरोबायोसिस इनोवेशन ने एक वेंटिलेटर के विकास की घोषणा की जिसे अप्रैल 2020 में 'जीवन लाइट' नाम दिया गया।

- 'जीवन लाइट' इंटरनेट ऑफ थिंग्स-सक्षम है और इसे फोन ऐप के माध्यम से संचालित किया जा सकता है।

- इसे बैटरी से भी संचालित किया जा सकता है, जिससे गैर बिजली आपूर्ति वाले क्षेत्रों में इसकी तैनाती सुनिश्चित की जा सकती है।
- यह मोड और सेटिंग्स के व्यापक सेट में इनवेसिव और नॉन-इनवेसिव वेंटिलेशन दोनों प्रदान कर सकता है।
- यह बिना बिजली की आपूर्ति के पांच घंटे तक रिचार्जेबल लिथियम-आयन बैटरी पर काम कर सकता है।
- इसमें ऑक्सीजन सिलेंडर संलग्न करने का प्रावधान है और यह परिवेशी वायु में अपने आप काम कर सकता है।

93. B

Sol. • भारत में मूल्य वर्धित कर 2005 में पेश किया गया था।

- यह एक प्रकार का कर है जिसका मूल्यांकन वृद्धिशील रूप से किया जाता है और यह एक अप्रत्यक्ष कर है।
- इसे आमतौर पर कुल लागत के प्रतिशत के रूप में व्यक्त किया जाता है।
- यह अंतिम उपभोक्ता को उत्पादन, वितरण या बिक्री के प्रत्येक चरण में किसी उत्पाद या सेवा की कीमत पर लगाया जाता है।
- जर्मनी और फ्रांस वैल्यू एडेड टैक्स लागू करने वाले पहले देश थे।
- यह केवल उन सेवाओं और सामानों के शीर्ष पर एक व्यवसाय द्वारा जोड़े गए मूल्य पर कर लगाने के लिए डिज़ाइन किया गया है जिसे वह बाजार से खरीद सकता है।

94. C

Sol. • चन्द्रगुप्त प्रथम ने लिच्छवि कुल की कन्या से विवाह किया।

- वह गुप्त वंश का राजा था और उसने उत्तरी भारत में शासन किया था।
- समुद्रगुप्त को मुख्य रूप से उनके कई सैन्य अभियानों के लिए जाना जाता है और वह सबसे पहले उन्हें भारतीय नेपोलियन के रूप में संबोधित करते थे।
- रामगुप्त को केवल पारंपरिक आख्यानों से ही जाना जाता था और उन्हें समुद्रगुप्त का उत्तराधिकारी माना जाता है।
- श्री गुप्त उत्तर भारत के गुप्त वंश के संस्थापक थे।
- गुप्त साम्राज्य एक प्राचीन भारतीय साम्राज्य था जो चौथी शताब्दी सीई की शुरुआत से छठी शताब्दी सीई के अंत तक अस्तित्व में था।

95. C

Sol. • तमिल भारत में शास्त्रीय भाषा का दर्जा पाने वाली पहली भाषा थी।

- यह भारतीय राज्य तमिलनाडु की आधिकारिक भाषा है।

- यह दुनिया में सबसे लंबे समय तक जीवित रहने वाली शास्त्रीय भाषाओं में से एक है।
- यह समकालीन भारत की एकमात्र भाषा है जो एक शास्त्रीय अतीत के साथ निरंतर पहचानी जाती है।
- इसे दुनिया की महान शास्त्रीय परंपराओं और साहित्य में से एक के रूप में वर्णित किया गया है।
- यह मुद्रित और प्रकाशित होने वाली पहली भारतीय भाषा है।

96. D

Sol. • क्योटो प्रोटोकॉल नियमों के तहत प्रेरफ्लूरोकार्बन छह प्रदूषकों में से एक है।

- वे मानव निर्मित यौगिक हैं जिनमें सिर्फ़ फ्लोरीन और कार्बन होता है।
- वे आम तौर पर पर्यावरण के तापमान पर रंगीन, गंधीन गैर-ज्वलनशील गैसें होती हैं और अधिकांश भाग के लिए रासायनिक रूप से अप्राप्य होती हैं।
- क्योटो प्रोटोकॉल जलवायु परिवर्तन पर संयुक्त राष्ट्र फरेमर्क कन्वेशन से जुड़ा एक अंतर्राष्ट्रीय समझौता है।
- कार्बन मोनोऑक्साइड में एक कार्बन परमाणु और एक ऑक्सीजन परमाणु होता है और यह ऑक्सोकार्बन परिवार का सबसे सरल अणु है।
- फॉसजीन एक अत्यधिक जहरीली गैस है जो क्लोरीनयुक्त हाइड्रोकार्बन के जलने से उत्पन्न होती है।

97. C

Sol. • इसकी स्थापना के तुरंत बाद अहसानाबाद बहमनी सल्तनत की राजधानी बन गया।

- बहमनी सल्तनत दक्षिण भारत में दक्कन का एक फारसी सुन्नी मुस्लिम साम्राज्य था।
- यह दक्कन का पहला स्वतंत्र मुस्लिम राज्य था और विजयनगर के अपने हिंदू प्रतिहंडियों के साथ अपने सतत युद्धों के लिए जाना जाता था।
- इसकी स्थापना 1347 में अलाउद्दीन बहमन शाह ने की थी।
- एहसानाबाद भारतीय राज्य कर्नाटक का एक शहर है और यह उत्तरी कर्नाटक के क्षेत्र का सबसे बड़ा शहर है।

98. A

Sol. • गूगल ने 'टॉकबैक' नाम का एक ब्रेल कीबोर्ड विकसित किया है।

- दृष्टिबाधित लोगों के लिए स्मार्टफोन टाइपिंग को आसान बनाने के लिए ब्रेल कीबोर्ड लॉन्च किया गया था।
- गूगल की स्थापना 4 सितंबर 1998 को लैरी पेज और सर्गेई ब्रिन ने की थी।

- फोर्ब्स द्वारा इसे दूसरे और इंटरब्रांड द्वारा चौथे स्थान पर रखा गया है।
- एपल राजस्व के हिसाब से सबसे बड़ी सूचना प्रौद्योगिकी कंपनी है और दुनिया की सबसे मूल्यवान कंपनी है।
- यह यूनिट बिक्री के हिसाब से चौथा सबसे बड़ा पर्सनल कंप्यूटर विक्रेता और दूसरा सबसे बड़ा मोबाइल फोन निर्माता है।

99. B

Sol. • 'सुल्तान अजलान शाह कप' हॉकी से संबंधित है।

- सुल्तान अजलान शाह कप मलेशिया में आयोजित एक वार्षिक आमंत्रण अंतर्राष्ट्रीय पुरुष फील्ड हॉकी टूर्नामेंट है।
- यह 1983 में द्विवार्षिक प्रतियोगिता के रूप में शुरू हुआ था।
- हॉकी सबसे पुराना ज्ञात गेंद और छड़ी का खेल है।
- भारतीय उपमहाद्वीप में कबड्डी लोकप्रिय है और बांग्लादेश का राष्ट्रीय खेल है।
- निशानेबाजी एक प्रक्षेप्य को एक रंगे हुए हथियार से मुक्त करने की किरण या प्रक्रिया है।
- टेनिस एक ओलंपिक खेल है और यह समाज के सभी स्तरों पर और हर उम्र में खेला जाता है।

100. C

Sol. • गीतांजलि साहित्य पुरस्कार फरांस के सहयोग से प्रदान किया जाता है।

- यह 2012 में स्थापित एक फर्नेको-भारतीय साहित्यिक पुरस्कार है।
- इसकी स्थापना मोहसिन हैचट्रोडी फाउंडेशन और सीएचजी अर्थ ग्रुप ने की थी।
- इसमें गीतांजलि पदक, 15 दिनों का साहित्यिक प्रवास और काम का अनुवाद शामिल है।
- यह उन सभी कार्यों और शैलियों के लिए खुला है जो वर्ष की थीम के अनुरूप हैं।
- इसका नाम रवींद्रनाथ टैगोर की कविताओं के संग्रह गीतांजलि के लिए रखा गया है।