

**SSC MTS 2020 Tier I : 12**

**Oct S3**

**Mock Test Questions & Solutions**

## **Mock Test Solutions in English**

## Questions

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

The \_\_\_\_\_ to have multiple plasma banks is a praise-worthy one.

- A. inaction
  - B. initiation
  - C. initiate
  - D. initiative

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

The Singapore government has deported ten Indian students for \_\_\_\_\_ the government rules.

- A. vandalising
  - B. aiding
  - C. verifying
  - D. violating

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

There was enough evidence to convict him of selling adulterated food.



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

## **SYMPTOMATIC**



5. **Direction:** Select the word which means the same as the group of words given.

A large open area of land, water or sky



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

## OBESITY

A. Skinny

C. Paunchy

B. Rude

D. Cute

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

The police warned citizens to be alert when outdoors as gangs has been attacking people on the road.

A. No substitution required

B. was attacking

C. have been attacking

D. was being attacked

8. Select the INCORRECTLY spelt word.

A. Iodine

B. Voilent

C. Enjoin

D. Loiter

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

Get on like a house on fire

A. To be angry and unfriendly

B. To become friends quickly

C. To end a relationship

D. To take an instant dislike

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

STUNNING

A. Impulsive

B. Obedient

C. Unattractive

D. Gorgeous

11. **Direction:** Identify the segment in the sentence which contains a grammatical error.

Tejaswin, the Indian sportsman, is leading the anti-race cause in the US.

A. Tejaswin, the Indian sportsman

B. the anti-race cause

C. in the US

D. is leading

12. **Direction:** Select the word which means the same as the group of words given.

Using high-sounding words but with little meaning

A. Bombastic

B. Eloquent

C. Clever

D. Reserved

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

Can you assembly the television using the manual?

- A. assembling
- B. No substitution required
- C. assembles
- D. assemble

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

RABID

- A. Calm
- B. Extreme
- C. Methodical
- D. Indifferent

15. Select the INCORRECTLY spelt word.

- A. Grieve
- B. Concieve
- C. Deceive
- D. Receive

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

Several foreign students have been asked by the US to leave the university campus and \_\_\_\_\_ home.

- A. returned
- B. returning
- C. return
- D. returns

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

The CBSE has decided on a \_\_\_\_\_ to assign marks for the examinations not taken by Class 12 students.

- A. formulae
- B. equation
- C. formula
- D. formation

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

Have your heart set on something

- A. To not want something at all
- B. To want something very much
- C. To be always in a nervous state
- D. To be in control of one's feelings

19. **Direction:** Identify the segment in the sentence which contains a grammatical error.

Google has set on an India fund and announced an investment of ten billion dollars.

- A. and announced an investment
- B. Google has set on
- C. of ten billion dollars
- D. an India fund

20. **Direction:** Identify the segment in the sentence which contains a grammatical error.

Sitab, my gardener, have been cut the hedge the whole morning.



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.

The first thousand days can determine the trajectory (1) \_\_\_\_ a child's life. After food for the body (2) \_\_\_\_ taken care of we should provide food for (3) \_\_\_\_ mind. Early stimulation of children's mind can (4) \_\_\_\_ them to become good learners. Parents should be (5) \_\_\_\_ in doing this.

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

- A. from
  - B. at
  - C. of
  - D. About

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



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

- A. a
  - B. the
  - C. some
  - D. That

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

- A. led
  - B. Lead
  - C. Leads
  - D. Leading

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

- |              |               |
|--------------|---------------|
| A. adjusted  | B. restricted |
| C. allocated | D. orientated |

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

## Statements:

## 1. Some phones are instruments.

2. All instruments are devices.

Conclusions:

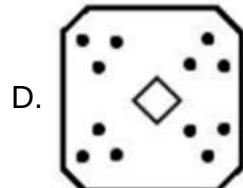
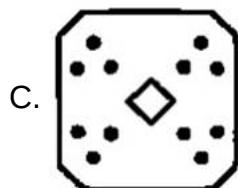
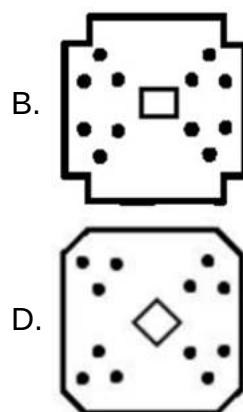
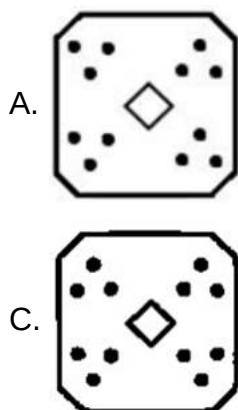
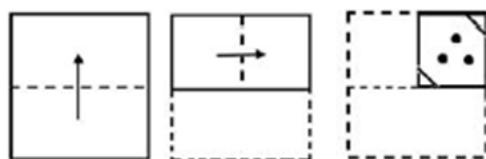
I. All devices are instruments.

II. Some devices are phones.

- A. Only conclusion I follows.
- C. Both conclusions I and II follow.

- B. Only conclusion II follows.
- D. Neither conclusion I nor conclusion II follows.

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



28. If MATERIAL is coded as SZLREKZH, then how would EQUATION be coded?

- A. TPATDMNH
- C. TPDTAMNH
- B. PDTAMTNH
- D. SRFTAOPJ

29. Eight houses A, B, C, D, E, F, G and H are in two rows with four houses in each row.

The houses in one row face the houses in the other.

- i. C is facing F.

- ii. G and A are diagonally opposite.
- iii. E is facing H, but is not in the same row as that of A
- iv. H is between D and C

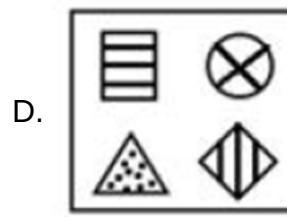
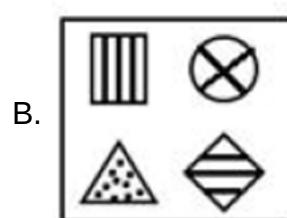
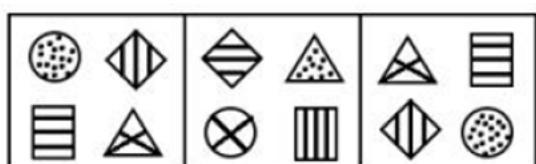
Which house is B facing?

- A. D
- B. G
- C. F
- D. A

30. If VEAL is coded as 4483 and LOWER is coded as 33549, then how would TECHNO be coded?

- A. 253911
- B. 205393
- C. 756946
- D. 243853

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



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

- {25, 19, 36}
- A. {9, 49, 16}
  - B. {20, 28, 32}
  - C. {30, 25, 35}
  - D. {36, 23, 48}

33. Seven persons visited a doctor for consultation, one after another.

- i. Mahesh visited immediately after Amit but sometime before Virat.
- ii. Ashok visited just after Virat and just before Naman.
- iii. Neither Anup nor Naman was the last to visit.
- iv. There were as many visitors between Ashok and Suraj as there were between Anup and Ashok.

Who were the first and the last persons to have visited the doctor, respectively?

- A. Mahesh and Suraj
- B. Naman and Ashok
- C. Amit and Ashok
- D. Amit and Suraj

34. Which letter-cluster will replace the question mark (?) in the following series?

QUESTION, USINETO, SNTIEO, NIOTE, ?

- A. ITEO
- B. TEOI
- C. ITOE
- D. OEIT

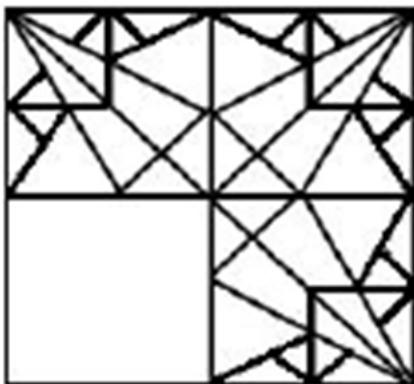
35. Three statements are followed by three conclusions numbered I, II and III. Assuming the statements to be true even if they do not conform to real-world knowledge, decide which of the conclusions logically follows/follow from the statements.

Statements:

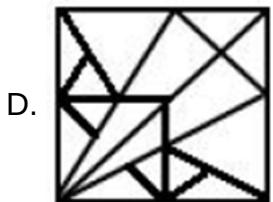
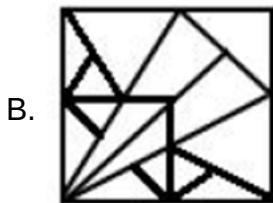
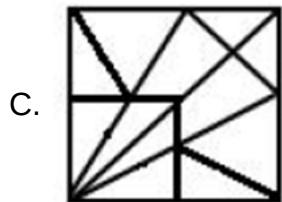
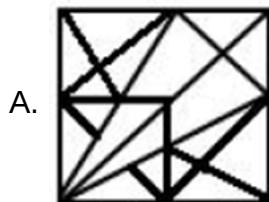
- 1). All watches are clocks.
- 2). Some clocks are machines.
- 3). Some machines are gadgets.

Conclusions:

- I. Some watches are machines.
  - II. Some machines are clocks.
  - III. Some gadgets being clocks is a possibility.
- A. Only conclusion II follows.
  - B. All conclusions I, II and III follow.
  - C. Only conclusion III follows.
  - D. Only conclusions II and III follow.



(X)



39. 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.

FJNRVZ : KLEWXQ : WTQNKH : ?

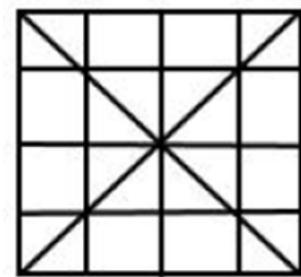
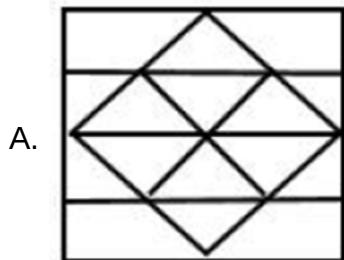
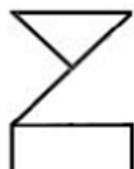
A. VTNMME

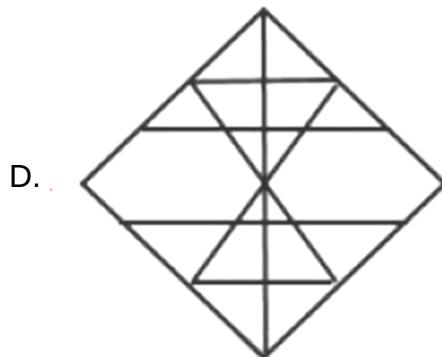
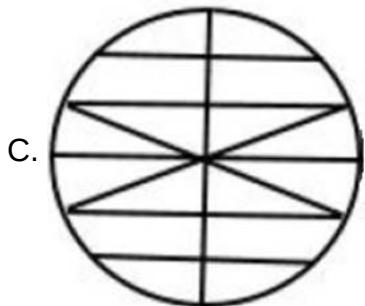
C. USMENM

B. NVVEMM

D. XRTMNE

40. Select the option in which the given figure is embedded (rotation is NOT allowed).





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

Germany : Euro :: Myanmar : ?



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

17, 20, 30, 45, 71, 106, ?



43. If DEAF is coded as 123 and CAN is coded as 45, then how would BEAK be coded?

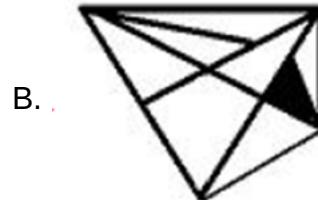
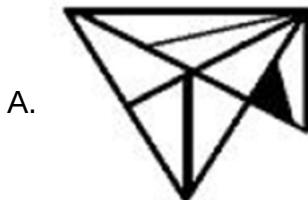


44. If the signs + and  $\div$  are interchanged, then which of the following equations would be correct?

- A.  $8 + 12 \times 3 \div 1 = 4$       B.  $15 - 12 + 6 \div 2 = 15$   
C.  $9 + 6 \times 4 \div 2 = 8$       D.  $4 \div 8 + 12 \times 6 = 10$

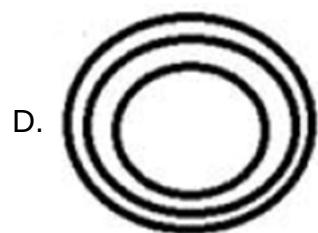
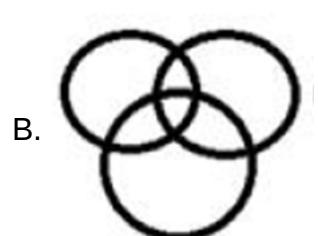
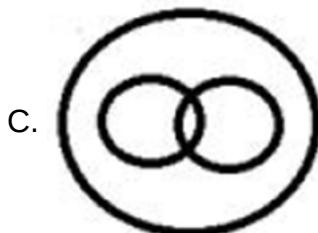
45. Select the mirror image of the figure marked 'X', when the mirror is placed on the right side of the figure.








Select the Venn diagram that best illustrates:



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

$$15 + 15 \div 15 - 15 \times 15 = 15$$

- A. + and  $\times$   
B.  $\div$  and +  
C. + and –  
D.  $\div$  and  $\times$

50. Select the number that can replace the question mark (?) in the following series.

13, 16, 23, 36, 57, 88, ?, 188

- A. 145  
B. 119  
C. 131  
D. 127

51. A man ordered 10 physics books and some chemistry books. The price of a chemistry book is twice the price of a Physics book. While preparing the bill, the clerk interchanged the number of physics and chemistry books by mistake,

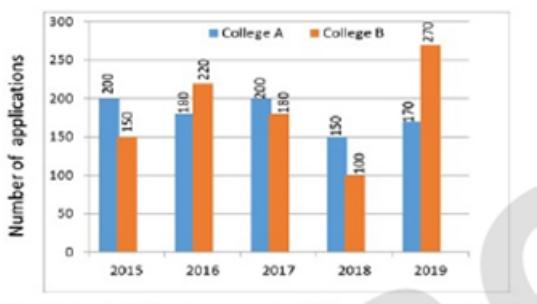
which decreased the bill by  $12\frac{1}{2}\%$ . The ratio of the number of physics books to the number of chemistry books in the original order is:

52. The average of seven consecutive even natural numbers is 36. The value of the first number is:

53. An aeroplane covers a certain distance at a speed of 320 km/h in  $5\frac{1}{2}$  hours. To cover the same distance in 4 hours, it must travel at a speed of:

54. **Direction:** Study the following bar graph and answer the question given below,

The given bar graph represents the total number of applications received for the B. Com course by two different colleges A and B in five different years.



The number of applications received by college A in 2016 is what percentage of the total number of applications received by college A from 2015 to 2019?

55. The difference between the average number of applications received by college A from 2015 to 2019 and the average number of applications received by college B from 2015 to 2019 is:
56. The ratio of the total number of applications received by college A in 2016 and 2017 together to the total number of applications received by college B in 2016 and 2017 together is:
57. The area of the four walls of a room is  $1152 \text{ m}^2$  and its length is  $\frac{5}{3}$  times its breadth. If the height of the room is 12 m. Then the area of its floor is:
58. A person has left a sum of Rs. 1,45,600 to be divided among his two sons aged 15 years and 13 years now. Both of them invested their shares on simple interest at 10% per annum. If both of them gets equal amounts when they attain 18 years of age, then the original share received by younger son is:
59. If Rs. 12,500 is invested at 12% p.a. on compound interest for one year and 4 months. Compounded annually, then the amount received is:
60. Three numbers are in the ratio  $\frac{1}{4} : \frac{1}{5} : \frac{1}{3}$ , The difference between the greatest and the smallest number is 800. The sum of the three numbers is:
61. The ratio of the monthly income and expenditure of Dinesh is 17:14, and his monthly saving are Rs. 12,000. If his monthly income is increased by Rs. 10,000 and expenditure is decreased by Rs. 2,000, then the new ratio of his income and expenditure is:
62. 'A' alone can complete a piece of work for Rs. 4,800 in 16 days, but by engaging an assistant, the work is completed in 12 days. Find the share to be received by the assistant.
63. A man sold a radio and a TV set together for Rs. 30,400, thereby making a profit of 25% on the radio and 10% on the TV set. By selling them together for Rs 30,700, he would have made a 10% profit on the radio and 25% on the TV set. The cost price of the radio is:
64. 55% of the candidates in an examination were boys. 60% of the boys and 75% of the girls passed, and 315 girls failed. The number of boys who failed were:
65. The numbers 25, 34, 46, 48,  $2x+1$ ,  $4x+3$ , 105, 110, 114, 122 are written in ascending order and their median is 77. The value of x is:





Empress of India?

- A. Lord Lytton
- B. Lord Ripon
- C. Lord Minto
- D. Lord Dufferin

89. In 1972, the West Bengal Forest Department recognised its failures in reviving the degraded \_\_\_\_\_ forests in South-Western districts of the State.

- A. Palash
- B. Sal
- C. Piyal
- D. Segun

90. Who among the following is the author of the book 'Kanthapura'?

- A. Nirad Choudhuri
- B. Sitakanta Mohapatra
- C. Raja Rao
- D. Kamala Das

91. Which of the following forts was built by the Kakatiya dynasty?

- A. Panhala
- B. Raigad
- C. Neemrana
- D. Golconda

92. How many oxygen atoms are there in a molecule of ozone?

- A. One
- B. Four
- C. Two
- D. Three

93. Which of the following is NOT a town of Karnataka?

- A. Chikmagalur
- B. Bijapur
- C. Chitradurga
- D. Bhusawal

94. The name of Guru Kelu Charan Mohapatra is primarily associated with which of the following dances?

- A. Mohiniattam
- B. Sattariya
- C. Kathak
- D. Odissi

95. An asset that has remained in the substandard category for a period of 12 months is classified as a \_\_\_\_\_ asset by a bank.

- A. Liquid
- B. non-performing
- C. doubtful
- D. Loss

96. Which of the following Harappan sites is located in Afghanistan?

- A. Shortughai
- B. Balakot
- C. Nageswar
- D. Kalibangan

97. India hosted the Commonwealth Games in:

- A. 2012
- B. 2018

C. 2006

D. 2010

98. Which of the following is a form of devotional poetry sung in praise of God Vithoba?

A. Shabad

B. Abhang

C. Tevaram

D. Bhatiali

99. Who among the following was the first recipient of Padma Vibhushan?

A. JRD Tata

B. Satyendra Nath Bose

C. Hargobind Khorana

D. John Matthai

100. As per the Consumer Protection Act, 1986 a complaint can be filed in the District Consumer Disputes Redressal Forum if the value of the claim is up to:

A. Rs 5 lakh

B. Rs 15 lakh

C. Rs 20 lakh

D. Rs 10 lakh

### Solutions

1. D

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

- *Inaction* = (noun) lack of action; the state of doing nothing about a situation or a problem
- *Initiation* = (noun) the act of someone becoming a member of a group
- *Initiate* = (noun) a person who has been allowed to join a particular group.
- *Initiative* = (noun) a new plan for dealing with a particular problem or for achieving a particular purpose.

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

- “*Inaction*” is used in context of “lack of action”. Thus, option A is incorrect.
- “*Initiation*” is used in context of “act of becoming a member”. Thus, option B is incorrect.
- “*Initiate*” is used in context of “someone who is allowed to join the group”. Thus, option C is incorrect.
- “*Initiative*” is used in context of “a new plan for achieving some purpose”.
- Here in the given sentence, it is used to talk about a new plan for achieving the purpose of “having multiple plasma banks”.

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

The correct sentence will be: **The initiative to have multiple plasma banks is a praiseworthy one.**

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

2. D

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

- *Vandalising* = (verb) to damage something especially public property, deliberately and for no good reason.
- *Aiding* = (noun) the sport of climbing steep rock surfaces with a lot equipment to help you
- *Verifying* = (verb) to check that something is true or accurate
- *Violating* = (verb) to go against or refuse to obey a law, an agreement etc.

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

- “*Vandalising*” is used in context of “damaging something”. Thus, option A is incorrect.
- “*Aiding*” is used in context of “climbing steep rock surfaces”. Thus, option B is incorrect.
- “*Verifying*” is used in context of “checking something”. Thus, option C is incorrect.
- “*Violating*” is used in context of “going against a law”.
- Here in the given sentence, it is used to show that Indian students have gone against the rules framed by the Singapore government and hence they were deported.

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

The correct sentence will be: **The Singapore government has deported ten Indian students for violating the government rules.**

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

3. C

Sol. The underlined part of the sentence is grammatically correct.

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

4. B

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

Symptomatic= being a sign of an illness or a problem.

E.g.: These disagreements are **symptomatic** of the tensions within the party.

Optimistic = expecting good things to happen or something to be successful; showing this feeling

Characteristic = very typical of something or of someone's character.

E.g.: This is just one example of the rudeness that was so **characteristic** of him.

Strange =unusual or surprising

Atypical = not typical or usual.

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

5. D

Sol. Front: the side of something that faces forward.

Margin: the empty space at the side of a written or printed page.

Enclosure: a piece of land that is surrounded by a fence or wall and is used for a particular purpose

Expanse: a wide and open area of something especially land or water.

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

6. A

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

Obese= very fat, in a way that is not healthy.

E.g.: **Obese** patients are given dietary advice.

Skinny = very thin, especially in a way that you find unpleasant or ugly.

E.g.: He had wild hair and long **skinny** arms.

Rude = having or showing lack of respect for other people and their feelings.

Paunchy = a fat stomach on a man.

Cute = pretty and attractive.

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

7. C

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

- Underlined part needs correction in subject verb agreement.
- As per the Subject Verb agreement, verb should be in accordance with the subject. Singular verb should be used with singular subject. Plural verb should be used with plural subject.

**For example:**

**Children are** sensitive to family attitudes and adjust their attitudes accordingly.

**The child was** found abandoned but unharmed.

“Child” is a singular noun and “Children” is a plural noun.

- In the underlined sentence we have erroneously used singular helping verb “has” for the plural subject “gangs”. Thus, plural helping verb “have” should be used in place of “has”.
- Hence, “**have been attacking**” is the correct substitution.

Thus, the correct sentence will be: **The police warned citizens to be alert when outdoors as gangs have been attacking people on the road.**

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

8. B

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

“Violent” is the correct spelling of the incorrect word “Voilent”. It means involving or caused by physical force that is intended to hurt or kill someone.

The meaning of other words are:

Iodine: a chemical element. It is a substance found in seawater.

Enjoin: to order or strongly advise someone to do something

Loiter: to stand or wait somewhere especially with no obvious reason.

9. B

Sol. The idiom “**get on like a house on fire**” means to become friends quickly and have a very friendly relationship.

Example :- Sam and John met a month ago, but they **got on like a house on fire**.

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

10. C

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

Stunning= extremely attractive or impressive

E.g.: His performance was simply **stunning**.

Impulsive = acting suddenly without thinking carefully about what might happen because of what you are doing.

Obedient = doing what you are told to do; willing to obey

Unattractive = not attractive or pleasant to look at.

E.g.: His face creased into an **unattractive** smile.

Gorgeous = very beautiful and attractive; giving great pleasure.

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

11. B

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

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

**For example:**

I got **an antibiotic** for my ear infection.

- “The” as a definite article is used before the nouns that are specific or has already been mentioned in the sentence.

**For example:**

There were three questions. **The** first two were relatively easy but **the** third one was hard.

- “Racism” as a noun means the unfair treatment of people who belong to different race; violent behavior towards them.

**For example:**

She was wearing **an anti-racism** wristband.

- “Race” as a noun means one of the main groups that humans can be divided into according to their physical differences.

**For example:**

This custom is found in people of all **races** throughout the world.

- In the given sentence, we need a noun that conveys the meaning of “discrimination” but we have used a noun “race” that simply talks about the categorisation of people based on physical differences.
- Thus, it is better to use noun “Racism” in place of noun “Race”.
- Also, we have erroneously used definite article “the” because “anti-racism” has a vowel sound. Thus, indefinite article “an” should be used in place of definite article “the”.
- Hence, **“an anti-racism cause”** is the correct substitution.

The correct sentence will be: **Tejaswin, the Indian sportsman, is leading an anti-racism cause in the US.**

12. A

Sol. Bombastic: (of someone's words) sounding important but having little meaning and used to impress people.

Eloquent: able to use language and express your opinions well, especially when you are speaking in public.

Clever: quick at learning and understanding things.

Reserved: slow or unwilling to show feelings or express opinions.

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

13. D

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

- Underlined part needs correction in verb in interrogative sentence.
- Correct structure of an Interrogative sentence is: Question word + Subject + Verb

**For example:**

**Could you ascertain** whether she will be coming to the meeting?

- “Assembly” as noun means a group of who have been elected to meet together regularly and make decisions or laws for a particular region or country.

**For example:**

Power has been handed over to provincial and regional **assemblies**.

- “Assemble” as verb means to come together as a group; to bring people or things together as a group.

**For example:**

All the students were asked to **assemble** in the main hall.

- In the underlined sentence we have erroneously used noun “Assembly” after the subject “you”. In an interrogative structure we use verb after the subject. Thus, verb “Assemble” should be used in place of noun “Assembly”.
- Thus, “**Assemble**” is the correct substitution.

The correct sentence will be: **Can you assemble the television using the manual?**

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

14. B

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

Rabid= violent and extreme

E.g.: This is a film that millions of **rabid** fans have waited years to see.

Calm = not excited

Extreme = serious or severe

E.g.: Children will be removed from their parents only in **extreme** circumstances.

Methodical = done in a careful and logical way

Indifferent = having or showing no interest in someone/something

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

15. B

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

“Conceive” is the correct spelling of the incorrect word “Concieve”. It means to form an idea, a plant etc. in your mind.

The meaning of other words are:

Grieve: to feel very sad, especially because someone has died.

Deceive: to make someone believe something that is not true

Receive: to get or accept something that is sent or given to you.

16. C

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

- *Returned* = is the third form of verb “return”.
- *Returning* = is the continuous form of verb “return”
- *Return* = is the base form of verb. It means to come or go back from one place to another.
- *Returns* = is the singular form of verb “return”.

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

- “*Returned*” is the third form of verb “return”. Thus, option A is incorrect.
- “*Returning*” is the continuous form of verb “return”. Thus, option B is incorrect.
- “*Returns*” is the singular form of verb “return” but we need base form of verb i.e. without “s/es” after the infinitive. Thus, option D is incorrect.
- “*Return*” is a verb form without “s/es” in the end.
- It can be used after the infinitive i.e. “to”. It means to come or go back from one place to another.
- Here in the given sentence, it is used in context of asking “foreign students” “to return home” by the United States of America.

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

The correct sentence will be: **Several foreign students have been asked by the US to leave the university campus and return home.**

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

17. C

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

- *Formulae* = (noun) plural form of noun “formula”
- *Equation* = (noun) a statement showing that two amounts are equal
- *Formula* = (noun) a series of letters, numbers or symbols that represent a rule or law
- *Formation* = (noun) the action of forming something.

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

- “*Formulae*” is the plural form of noun “formula”. Thus, option A is incorrect.
- “*Equation*” is used in context of “two amounts being equal”. Thus, option B is incorrect.
- “*Formation*” is used in context of “an act of forming”. Thus, option D is incorrect.
- “*Formula*” is used in context of “letters or numbers representing a rule”.
- Here in the given sentence, it is used to show that CBSE has devised a formula i.e. “a rule having some number and letters”.
- This will take care of assigning marks for exams not taken by the students of Class 12.

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

The correct sentence will be: **The CBSE has decided on a formula to assign marks for the examinations not taken by Class 12 students.**

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

18. B

Sol. The idiom "**have your heart set on something**" means to want something very much.

Example: They **have set their heart on** a house in the country.

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

19. B

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

- "Set something up" as a phrasal verb means to create something or start it.

**For example:**

A fund will be **set up** for the dead men's families.

- "Set someone/something on someone" as a phrasal verb means to make a person or an animal attack someone suddenly.

**For example:**

The farmer threatened to **set** his dogs **on** us.

- In the given sentence, we need a phrasal verb that gives the meaning of "creating an India fund" by the Google.
- This is only possible with the usage of preposition "up" after the verb "set". Thus, preposition "up" should be used in place of preposition "on".
- Thus, "**Google has set up**" is the correct substitution.

The correct sentence will be : **Google has set up an India fund and announced an investment of ten billion dollars.**

20. A

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

- Correct structure of Present Perfect continuous tense is: Has/Have + been + Active participle.
- It is used for an action over a period of time up to now, the period leading up to the present.

**For example:**

We **have been playing** cards all evening.

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

**For example:**

The boy **was** drinking milk out of a bowl.

- In the given sentence, we have not used “active participle” after “have been”. This can be corrected by using active participle “cutting” as per the present perfect continuous tense structure. Thus, “cutting” should be used in place of a “cut”.

**Note:** Don't get confused with the usage of “present perfect” tense here. Because we use “perfect aspect” of tense only when focus is on the “result of an action”. But when we have focus on the “action going on” then we use “perfect continuous” aspect of tense.

- Also, we have erroneously used plural helping verb “have” for the singular subject “Sitab”.
- Thus, singular helping verb “has” should be used in place of “have”.
- Thus, “**has been cutting**” is the correct substitution.

The correct sentence will be: **Sitab, my gardener, has been cutting the hedge the whole morning.**

21. C

Sol. The given passage is about “**Parenting tips in shaping child’s life**”.

“From” as a preposition is used to show where someone/something starts. Thus, option A is wrong.

“At” as a preposition is used to show the location which is relatively small or unknown or not so popular. Thus, option B is wrong.

“About” as a preposition is used to describe the purpose or an aspect of something. Thus, option D is wrong.

“Of” as a preposition is used for showing belonging to someone; relating to someone.

Here in the given sentence, it is used to mention the relation/connection of “trajectory” with “child’s life”.

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

22. D

Sol. The given passage is about “**Parenting tips in shaping child’s life**”.

“Am” is the “be” verb form that is used when “I” is the subject. Thus, option A is wrong.

“Are” is a plural helping verb and it is used in present tense. Thus, option B is wrong.

“Has” is a singular helping verb and it is used in present perfect tense. It is used to show possession (when used as a main verb). Thus, option C is wrong.

“Is” is a singular helping verb and it is used in simple present tense.

Here in the given sentence, it is used for singular subject “body”.

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

23. B

Sol. The given passage is about “**Parenting tips in shaping child’s life**”.

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

“Some” as a determiner is used with uncountable nouns or plural countable nouns to mean “an amount of” or “a number of” when the amount is not given. Thus, option C is wrong.

“That” as a relative pronoun is used for nouns that are specified. Thus, option D is wrong.

“The” as a definite article is used before singular countable nouns, plural countable nouns and uncountable nouns. Here in the given sentence, noun “mind” is used as an uncountable noun and it means the part of a person that makes them able to be aware of things, to think and to feel.

**Note:** “Mind” is also used as a countable noun and it means “ability to think and reason”.

Here, given passage is not talking about the “ability”.

Thus, its usage in the passage is like an uncountable noun.

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

24. B

Sol. The given passage is about **“Parenting tips in shaping child’s life”**.

“Led” is the second form of verb “lead”. Thus, option A is wrong.

“Leads” is the first form of verb (singular). Thus, option C is wrong.

“Leading” is the continuous form of verb. Thus, option D is wrong.

“Lead” is the base form of verb i.e. without s/es.

Here in the given sentence, it is used after the modal verb “can”. It means “to have something as a result”.

Here, it means “early stimulation” of children’s mind can help children in becoming “good learners” as a result.

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

25. D

Sol. The given passage is about “**Parenting tips in shaping child’s life**”.

“Adjusted” means to change something slightly to make it more suitable for a new set of conditions. Thus, option A is wrong.

“Restricted” means limited or small in size or amount. Thus, option B is wrong.

“Allocated” means to give something officially to someone/something for a particular purpose. Thus, option C is wrong.

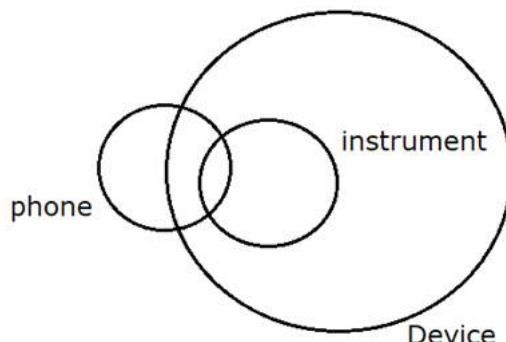
“Orientated” means to direct someone towards something.

In the given sentence, it is used in context of “directing parents” to do “early stimulation of children’s mind” during their first thousand days of life.

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

26. B

Sol. Minimum Possible diagram is-



Conclusions:

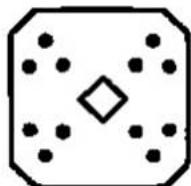
- I. All devices are instruments. (It does not follow as it is just a possibility, but not surely.)
- II. Some devices are phones. (It follows because Some phones are instruments and All instruments are devices.)

So, only conclusion II follows.

Hence, option B is the correct answer.

27. C

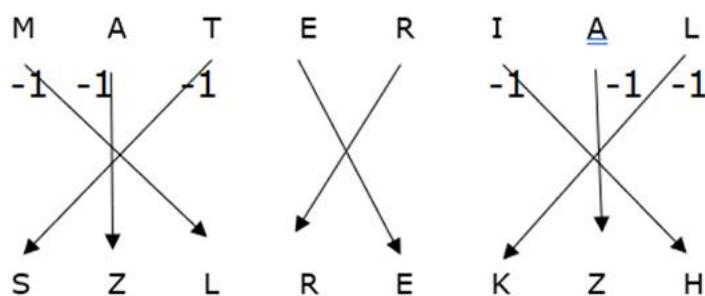
Sol. As given in the figure, we need to fold it in the given (book folding) manner and Option C would appear when unfolded.



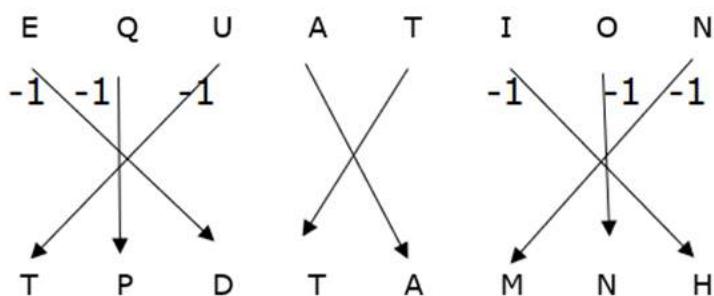
Hence, option C is the correct answer.

28. C

Sol. as,



similarly,



Hence, option C is the correct answer.

29. D

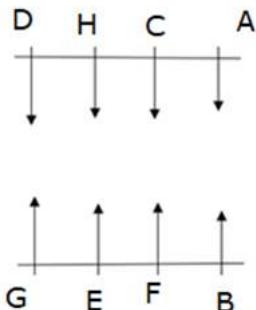
Sol. \* C is facing F.

\* G and A are diagonally opposite.

\* H is between D and C.

\* E is facing H, but is not in the same row as that of A.

So, the final arrangement is:



Therefore, B is facing A.

Hence, option D is the correct answer.

30. D

Sol. as,

VEAL = 4483

and

LOWER = 33549

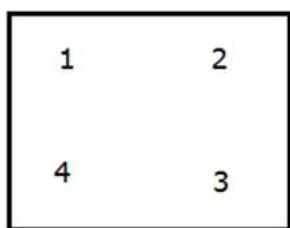
similarly,

TECHNO = 243853

Hence, option D is the correct answer.

31. B

Sol.



Pattern:

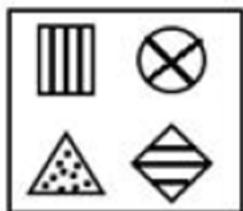
Moving order of bunch of bubbles in different shapes: 1 2 3 4

Moving order of bunch of vertical lines in different shapes: 2 3 4 1

Moving order of bunch of inclined lines in different shapes: 3 4 1 2

Moving order of bunch of horizontal lines in different shapes: 4 1 2 3

so, the next figure is-



Hence, Option B is the correct answer.

32. B

Sol. As,

$$25+19+36=80$$

Similarly,

$$20+28+32=80$$

Hence, Option B is the correct answer.

33. D

Sol. Mahesh visited immediately after Amit but sometime before Virat.

Amit

Mahesh

Ashok visited just after Virat and just before Naman.

Virat

Ashok

Naman

- \* There were as many visitors between Ashok and Suraj as there were between Anup and Ashok.
- \* Neither Anup nor Naman was the last to visit.
- \* There were as many visitors between Ashok and Suraj as there were between Anup and Ashok.

So, the final arrangement is:

Order	Persons
1	Amit
2	Mahesh
3	Anup
4	Virat
5	Ashok
6	Naman
7	Suraj

So, Amit and Suraj were the first and the last persons to have visited the doctor, respectively.

Hence, Option D is the correct answer.

34. C

Sol. pattern is:

QUESTION

on removing first letter and writing the letters in alternate order we get,  
USINETO

on removing first letter and writing the letters in alternate order we get,  
SNTIEO

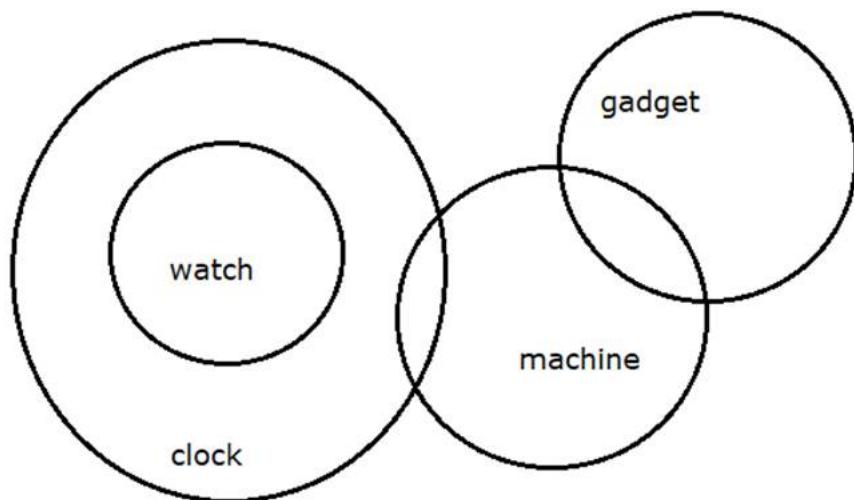
on removing first letter and writing the letters in alternate order we get,  
NIOTE

on removing first letter and writing the letters in alternate order we get,  
ITOE

Hence, option C is the correct answer.

35. D

Sol. Minimum Possible diagram is-



Conclusions:

- I. Some watches are machines. (It does not follow as it is just a possibility, but not surely.)
- II. Some machines are clocks. (It follows because Some clocks are machines.)
- III. Some gadgets being clocks is a possibility. (It follows as no negative statement given.)

So, only conclusions II and III follow.

Hence, option D is the correct answer.

36. B

Sol. There is one person between A and F.

A/F \_ A/F

B and E have two persons between them.

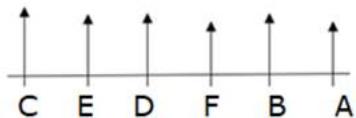
B/E \_ \_ B/E

F is between B and D.

B/D F B/D

C is on the extreme left.

So, the final arrangement is:



Therefore, A is on the extreme right.

Hence, option B is the correct answer.

37. C

Sol. as,

$$61+36=97$$

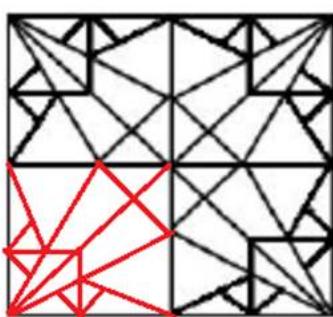
similarly,

$$46+36=82$$

Hence, option C is the correct answer.

38. D

Sol. Complete figure is:

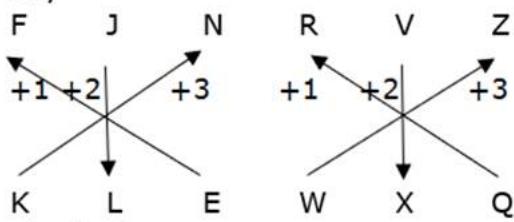


Hence, option D is the correct answer.

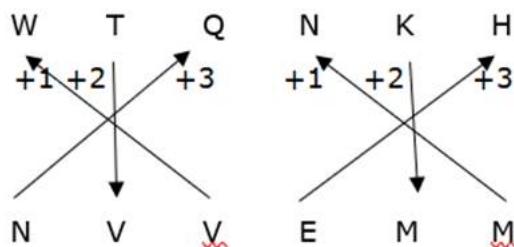
39. B

Sol.

as,



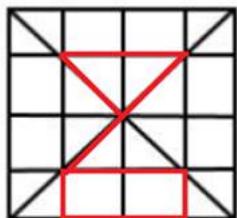
similarly,



Hence, option B is the correct answer.

40. B

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



Hence, option B is the correct answer.

41. B

Sol. as,

Euro is the currency used in Germany.

similarly,

Kyat is the currency used in Myanmar.

Hence, option B is the correct answer.

42. D

Sol. pattern is:

$$20-17=3+1=4=2^2$$

$$30-20=10-1=9=3^2$$

$$45-30=15+1=16=4^2$$

$$71-45=26-1=25=5^2$$

$$106-71=35+1=36=6^2$$

$$156-106=50-1=49=7^2$$

Hence, option D is the correct answer.

43. D

Sol. as,

$$\text{DEAF}=4\times 5 \times 1 \times 6 = 120, 120+3=123$$

and

$$\text{CAN} = 3 \times 1 \times 14 = 42, 42+3=45$$

similarly,

$$\text{BEAK} = 2 \times 5 \times 1 \times 11 = 90, 90+3=93$$

Hence, option D is the correct answer.

44. B

Sol. **By checking option A:**

$$8 + 12 \times 3 \div 1 = 4$$

After interchanging:

$$8 \div 12 \times 3 + 1 = 4$$

here, 8 is perfectly not divisible by 12. So, it will result in decimal.

so, its not correct option.

**By checking option B:**

$$15 - 12 + 6 \div 2 = 15$$

After interchanging:

$$15 - 12 \div 6 + 2 = 15$$

$$\text{or, } 15 - 2 + 2 = 15$$

$$\text{or, } 13+2=15$$

$$\text{or, } 15=15$$

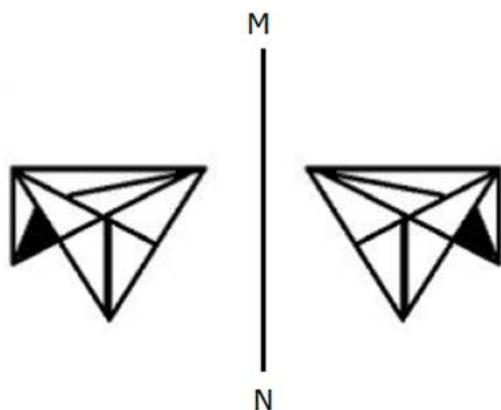
so, its correct option.

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

Hence, option B is the correct answer.

45. 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.

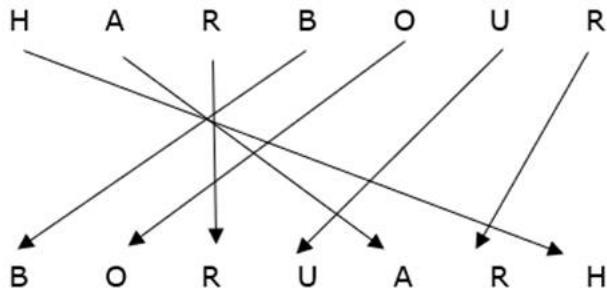


Hence, option C is the correct answer.

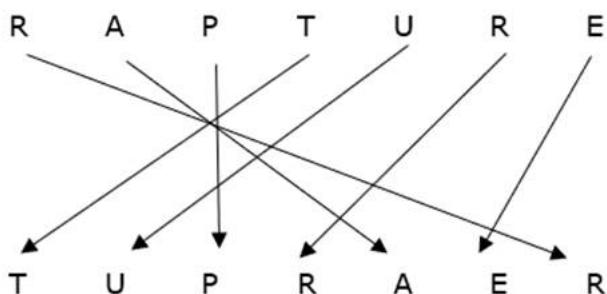
46. D

Sol.

as,



similarly,



Hence, option D is the correct answer.

47. C

Sol. as,

Sour and Sweet are antonym words.

similarly,

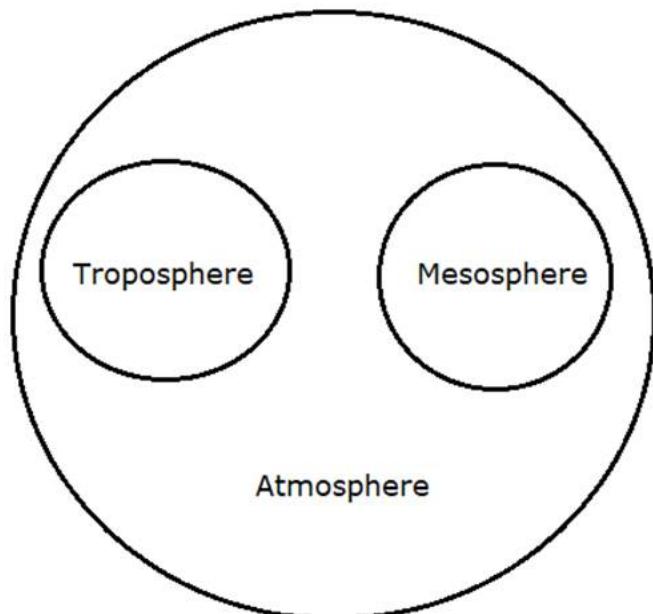
Wild and tame are antonym words.

Hence, option C is the correct answer.

48. A

Sol. Troposphere and Mesosphere are two different layers in Atmosphere.

So, the best representation is:



Hence, option A is the correct answer.

49. A

Sol. **By checking option A:**

$$15 + 15 \div 15 - 15 \times 15 = 15$$

After interchanging:

$$15 \times 15 \div 15 - 15 + 15 = 15$$

or,  $15 \times 1 = 15$

or,  $15=15$

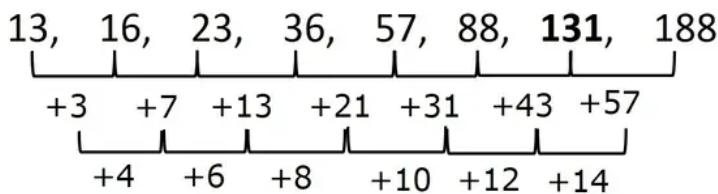
so, its correct option.

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

Hence, option A is the correct answer.

50. C

Sol. The pattern is as follows -



Hence, option C is the correct answer.

51. D

Sol. Number of physics books = 10

Number of chemistry books =  $x$

Let price of chemistry book = Rs.  $y$

Price of physics book = Rs.  $2y$

Original bill for physics books = Rs.  $10y$

Original bill for chemistry books = Rs.  $2xy$

Original bill for all books = Rs.  $(10y + 2xy)$

While preparing the bill, the clerk interchanged the number of physics and chemistry books by mistake, which decreased the bill by  $12\frac{1}{2}\%$ .

Bill made by clerk for physics books = Rs.  $xy$

Bill made by clerk for chemistry books = Rs.  $20y$

Total bill made by clerk for all books = Rs.  $(xy + 20y)$

We know that  $12\frac{1}{2}\% = \frac{1}{8}$

Let original bill for all books =  $8x$

Total bill made by clerk for all books =  $8x - 8x \times \frac{1}{8} = 7x$

$$\Rightarrow \frac{10y + 2xy}{xy + 20y} = \frac{8}{7}$$

$$\Rightarrow \frac{10 + 2x}{x + 20} = \frac{8}{7}$$

$$\Rightarrow 70 + 14x = 8x + 160$$

$$\Rightarrow 6x = 90$$

$$\Rightarrow x = 15$$

Ratio of the number of physics books to the number of chemistry books in the original order =  
 $10 : 15 = 2 : 3$

52. B

Sol. Let seven consecutive even natural numbers are  $(x - 6), (x - 4), (x - 2), x, (x + 2), (x + 4)$  and  $(x + 6)$

The average of seven consecutive even natural numbers is 36.

$$\frac{(x-6)+(x-4)+(x-2)+x+(x+2)+(x+4)+(x+6)}{7} = 36$$

$\Rightarrow$

$$\Rightarrow \frac{7x}{7} = 36$$

$$\Rightarrow x = 36$$

Hence, First number =  $36 - 6 = 30$

53. B

Sol.

An aeroplane covers a certain distance at a speed of 320 km/h in  $5\frac{1}{2}$  hours.

$$\text{Distance covered by aeroplane} = 320 \times \frac{11}{2} = 1760 \text{ km}$$

$$\text{If aeroplane travels this distance in 4 hours then speed of aeroplane} = \frac{1760}{4} = 440 \text{ km/hr}$$

54. A

Sol. Number of applications received by college A in 2016 = 180

Total number of applications received by college A from 2015 to 2019 =  $200 + 180 + 200 + 150 + 170 = 900$

$$\text{Required percentage} = \frac{180}{900} \times 100 = 20\%$$

55. D

Sol. Average number of application received by college A from 2015 to 2019 =

$$\frac{200+180+200+150+170}{5} = \frac{900}{5} = 180$$

Average number of applications received by college B from 2015 to 2019 =

$$\frac{150+220+180+100+270}{5} = \frac{920}{5} = 184$$

Required difference =  $184 - 180 = 4$

56. C

Sol. Total number of applications received by college A in 2016 and 2017 together =  $(180 + 200) = 380$

Total number of applications received by college B in 2016 and 2017 together =  $(220 + 180) = 400$

Required ratio =  $380 : 400 = 19 : 20$

57. C

Sol. The area of the four walls of a room is  $1152 \text{ m}^2$  and its length is  $\frac{5}{3}$  times its breadth.

Let breadth of room be  $x$  meter

Length of room =  $\left(\frac{5}{3}x\right)$  meter

Height of the room = 12 meter

According to question:

$$\Rightarrow 2h(l+b) = 1152$$

$$\Rightarrow 2h\left(\frac{5}{3}x + x\right) = 1152$$

$$\Rightarrow 24\left(\frac{5}{3}x + x\right) = 1152$$

$$\Rightarrow 24\left(\frac{8}{3}x\right) = 1152$$

$$\Rightarrow \frac{8x}{3} = 48$$

$$\Rightarrow x = 18 \text{ meter}$$

Breadth of room = 18 meter

$$\text{Length of room} = \left(\frac{5}{3} \times 18\right) \text{ meter} = 30 \text{ meter}$$

$$\text{Area of its floor} = 18 \times 30 = 540 \text{ m}^2$$

58. B

Sol. A person has left a sum of Rs. 1,45,600 to be divided among his two sons aged 15 years and 13 years now.

Both of them invested their shares on simple interest at 10% per annum. If both of them gets equal amounts when they attain 18 years of age.

Let original share received by younger son = Rs. x

Original share received by elder son = Rs.  $(145600 - x)$

According to question:

$$\Rightarrow x + \frac{x \times 10 \times 5}{100} = (145600 - x) + \frac{(145600 - x) \times 10 \times 3}{100}$$

$$\Rightarrow \frac{3x}{2} = (145600 - x) + 43680 - \frac{3x}{10}$$

$$\Rightarrow 2.8x = 189280$$

$$\Rightarrow x = 67600$$

Hence, original share received by younger son = Rs. 67600

59. B

Sol. Rs. 12,500 is invested at 12% p.a. on compound interest for one year and 4 months.

$$\text{Amount after one year} = 12500 \left(1 + \frac{12}{100}\right) = 12500 \times \frac{112}{100} = \text{Rs. } 14000$$

Principal after one year = Rs. 14000

Time = 4 months

$$\text{Interest of 4 months} = \frac{14000 \times 12 \times 4}{12 \times 100} = \text{Rs. } 560$$

Amount received after one year and 4 months = Rs. 14000 + Rs. 560 = Rs. 14560

60. D

Sol. Three numbers are in the ratio  $\frac{1}{4} : \frac{1}{5} : \frac{1}{3}$ .

$$\Rightarrow \frac{1}{4} : \frac{1}{5} : \frac{1}{3} = \frac{60}{4} : \frac{60}{5} : \frac{60}{3} = 15 : 12 : 20$$

Hence, three numbers are in the ratio 15:12:20

Let greatest number = 20x

Smallest number = 12x

$$\Rightarrow 20x - 12x = 800$$

$$\Rightarrow 8x = 800$$

$$\Rightarrow x = 100$$

Sum of three numbers =  $15x + 12x + 20x = 47x = 4700$

61. B

Sol. The ratio of the monthly income and expenditure of Dinesh is 17:14.

Let monthly income of Dinesh = Rs.  $17x$

Expenditure of Dinesh =  $14x$

Saving of Dinesh =  $17x - 14x = 3x$

$$\Rightarrow 3x = \text{Rs. } 12000$$

$$\Rightarrow x = \text{Rs. } 4000$$

Monthly income of Dinesh = Rs. 68000

Expenditure of Dinesh = Rs. 56000

His monthly income is increased by Rs. 10,000 and expenditure is decreased by Rs. 2,000.

New monthly income of Dinesh =  $\text{Rs. } 68000 + 10000 = \text{Rs. } 78000$

New expenditure of Dinesh =  $\text{Rs. } 56000 - 2000 = \text{Rs. } 54000$

New ratio of his income and expenditure =  $78000 : 54000 = 13 : 9$

62. D

Sol. 'A' alone can complete a piece of work for Rs. 4,800 in 16 days, but by engaging an assistant, the work is completed in 12 days.

Let total work = LCM (16,12) = 48 unit

$$\text{Efficiency of A} = \frac{48}{16} = 3 \text{ unit/day}$$

$$\text{Efficiency of A and assistant together} = \frac{48}{12} = 4 \text{ unit/day}$$

$$\text{Efficiency of assistant} = 4 - 3 = 1 \text{ unit/day}$$

$$\text{Now, share to be received by the assistant} = \frac{1}{4} \times 4800 = \text{Rs.} 1200$$

63. B

Sol. Let cost price of radio = Rs. x

Cost price of TV set = Rs. y

A man sold a radio and a TV set together for Rs. 30,400, thereby making a profit of 25% on the radio and 10% on the TV set.

$$\Rightarrow \frac{125x}{100} + \frac{110y}{100} = 30400$$

$$\Rightarrow \frac{5x}{4} + \frac{11y}{10} = 30400$$

$$\Rightarrow y = \frac{10}{11} \times \left( 30400 - \frac{5x}{4} \right) \dots\dots(1)$$

By selling them together for Rs 30,700, he would have made a 10% profit on the radio and 25% on the TV set.

$$\Rightarrow \frac{110x}{100} + \frac{125y}{100} = 30700$$

$$\Rightarrow \frac{11x}{10} + \frac{5y}{4} = 30700$$

Put the value of y from (1)

$$\Rightarrow \frac{11x}{10} + \frac{5}{4} \left[ \frac{10}{11} \times \left( 30400 - \frac{5x}{4} \right) \right] = 30700$$

$$\Rightarrow \frac{11x}{10} + \frac{25}{22} \left[ \left( 30400 - \frac{5x}{4} \right) \right] = 30700$$

$$\Rightarrow \frac{11x}{10} + \frac{25}{22} \times 30400 - \frac{125}{88} x = 30700$$

$$\Rightarrow \frac{11x}{10} - \frac{125}{88} x = 30700 - \frac{25}{22} \times 30400$$

$$\Rightarrow \frac{968x - 1250x}{880} = \frac{675400 - 760000}{22}$$

$$\Rightarrow -\frac{282x}{880} = -\frac{84600}{22}$$

$$\Rightarrow x = \text{Rs. } 12000$$

Hence, cost price of radio = Rs. 12000

64. C

Sol. Let total number of candidates in examination =  $100x$

$$\text{Number of boys appeared in examination} = \frac{55}{100} \times 100x = 55x$$

$$\text{Number of girls appeared in examination} = \frac{45}{100} \times 100x = 45x$$

Percentage of boys passed in examination = 60%

Percentage of boys failed in examination =  $100\% - 60\% = 40\%$

Percentage of girls passed in examination = 75%

Percentage of girls failed in examination =  $100\% - 75\% = 25\%$

According to question:

$$\Rightarrow \frac{25}{100} \times 45x = 315$$

$$\Rightarrow 11.25x = 315$$

$$\Rightarrow x = 28$$

$$\text{Number of boys who failed} = \frac{40}{100} \times 55x = \frac{40}{100} \times 55 \times 28 = 616$$

65. D

Sol. The numbers 25, 34, 46, 48,  $2x+1$ ,  $4x+3$ , 105, 110, 114, 122 are written in ascending order and their median is 77.

Total number of observations = 10

if number of observations is even then median =

$$\frac{\left(\frac{n}{2}\right)^{\text{th}} \text{ term} + \left(\frac{n}{2}+1\right)^{\text{th}} \text{ term}}{2} = \frac{\left(\frac{10}{2}\right)^{\text{th}} \text{ term} + \left(\frac{10}{2}+1\right)^{\text{th}} \text{ term}}{2} = \frac{(5)^{\text{th}} \text{ term} + (6)^{\text{th}} \text{ term}}{2} = \frac{2x+1+4x+3}{2}$$

According to question:

$$\begin{aligned} & \frac{2x+1+4x+3}{2} = 77 \\ \Rightarrow & 6x+4 = 154 \\ \Rightarrow & 6x = 150 \\ \Rightarrow & x = 25 \end{aligned}$$

66. A

Sol. Two workers A and B are engaged to do a piece of work. A working alone would take 14 hours more to complete the work than when A and B work together. B working alone would take  $\frac{1}{3\frac{1}{2}}$  hours more than when A and B work together.

Let time taken by A and B together to complete the work =  $x$  hours

Time taken by A to complete the work =  $(x+14)$  hours

Time taken by B to complete the work =  $\left(x + \frac{7}{2}\right)$  hours

Now,

$$\Rightarrow \frac{1}{x+14} + \frac{1}{x + \frac{7}{2}} = \frac{1}{x}$$

$$\Rightarrow \frac{\left(x + \frac{7}{2}\right) + (x+14)}{(x+14)\left(x + \frac{7}{2}\right)} = \frac{1}{x}$$

$$\Rightarrow x\left(2x + \frac{35}{2}\right) = x^2 + \frac{7}{2}x + 14x + 49$$

$$\Rightarrow 2x^2 + \frac{35x}{2} = x^2 + \frac{35x}{2} + 49$$

$$\Rightarrow x^2 = 49$$

$$\Rightarrow x = 7$$

Hence, time required to finish the work together = 7 hours

67. C

Sol. Let marked price of article = Rs. 100x

$$100x - 100x \times \frac{18}{100} = \text{Rs. } 82x$$

Selling price of an article when sold at 18% discount =

$$100x - 100x \times \frac{10.5}{100} = \text{Rs. } 89.5x$$

Selling price of an article when sold at 10.5% discount =

According to question:

$$\Rightarrow 89.5x - 82x = 192$$

$$\Rightarrow 7.5x = 192$$

$$\Rightarrow x = 25.6$$

Marked price of the article =  $100x = 100 \times 25.6 = \text{Rs. } 2560$

68. B

Sol. The average of 40% of a number and 33% of the same number is 73.

Let number = x

$$\Rightarrow \frac{\frac{40x}{100} + \frac{33x}{100}}{2} = 73$$

$$\Rightarrow \frac{40x}{100} + \frac{33x}{100} = 146$$

$$\Rightarrow 73x = 14600$$

$$\Rightarrow x = 200$$

$$\frac{\frac{1}{5} \times 200 + \frac{1}{4} \times 200}{2} = \frac{40 + 50}{2} = 45$$

Average of  $\frac{1}{5}$  th and  $\frac{1}{4}$  th of that number =

69. C

Sol. The radius of the base of a cone and also that of a hemisphere each is 14 cm.

Also, the volumes of these two solids are equal.

$$\Rightarrow \frac{2}{3}\pi r^3 = \frac{1}{3}\pi \times (r)^2 h$$

$$\Rightarrow \frac{2}{3}\pi \times (14)^3 = \frac{1}{3}\pi \times (14)^2 h$$

$$\Rightarrow 2 \times (14) = h$$

$$\Rightarrow h = 28 \text{ cm}$$

Hence, height of cone = 28 cm

$$\text{Slant height of cone} = \sqrt{(14)^2 + (28)^2} = \sqrt{196 + 784} = \sqrt{980} \text{ cm}$$

$$\text{Curved surface area of the cone} = \pi r l = \frac{22}{7} \times 14 \times \sqrt{980} = 616\sqrt{5} \text{ cm}^2$$

70. C

Sol. The slant height and the diameter of the base of a right circular cone are 34 cm and 32 cm.

Radius of the base of a right circular cone = 16 cm

$$\text{Height of a right circular cone} = \sqrt{(34)^2 - (16)^2} = \sqrt{1156 - 256} = \sqrt{900} = 30 \text{ cm}$$

$$\text{Volume of a right circular cone} = \frac{1}{3}\pi r^2 h = \frac{1}{3}\pi \times (16)^2 \times 30 = 2560\pi \text{ cm}^3$$

71. B

Sol. Volume of a cube =  $375\sqrt{3}$  cm<sup>3</sup>

Let side of cube = x cm

$$\Rightarrow x^3 = 375\sqrt{3}$$

$$\Rightarrow x = 5\sqrt{3} \text{ cm}$$

$$\text{Diagonal of cube} = \sqrt{3}x = \sqrt{3} \times 5\sqrt{3} = 15 \text{ cm}$$

72. C

Sol. Let x and y are two numbers.

Sum of two numbers is 60 and their product is 875.

$$\Rightarrow x + y = 60 \dots\dots\dots(1)$$

$$\Rightarrow xy = 875 \dots\dots\dots(2)$$

$$(x-y) = \sqrt{(x+y)^2 - 4xy} = \sqrt{(60)^2 - 4(875)} = \sqrt{3600 - 3500} = 10 \dots\dots\dots(3)$$

Adding (1) and (2)

$$\Rightarrow 2x = 70$$

$$\Rightarrow x = 35$$

Put the value of x in (1)

$$\Rightarrow y = 60 - 35 = 25$$

HCF of two numbers = HCF (35,25) = 5

73. B

Sol. Vaishnav left from place A at 11 a.m. for place B, and Suman left from place B at 2 p.m. for place A. The distance between them is 516km.

Vaishnav's speed is 44 km/h and Suman's speed is 52 km/h.

Distance travelled by Vaishnav in 3 hours =  $44 \times 3 = 132$  km

Remaining distance between Vaishnav and Suman =  $516 - 132 = 384$  km

After 2 P.M. they move towards each other.

Let Distance travelled by Vaishnav after 2 P.M. = x km

Distance travelled by Suman after 2 P.M. = (384-x) km

Now, Time to cover  $x$  km distance by Vaishnav = Time to cover  $(384-x)$  km distance by Suman

$$\Rightarrow \frac{x}{44} = \frac{384-x}{52}$$

$$\Rightarrow 52x = 16896 - 44x$$

$$\Rightarrow 96x = 16896$$

$$\Rightarrow x = 176$$

Distance travelled by Vaishnav after 2 P.M. = 176 km

$$\text{Time to cover 176 km distance by Vaishnav} = \frac{176}{44} = 4 \text{ hour}$$

Therefore, they meet each other after 4 hours post 2 P.M.

Time of their meeting = 2 P.M. + 4 hours = 6 P.M.

74. D

Sol. Prasad bought 12 TV sets at Rs. 18,000 each and sold all of them at a total price of Rs. 2,59,200.

Cost price of 12 TV sets =  $12 \times 18000 = \text{Rs. } 216000$

Selling price of 12 TV sets = Rs. 259200

Profit = Rs. 259200 – Rs. 216000 = Rs. 43200

$$\text{Profit \%} = \frac{43200}{216000} \times 100 = 20\%$$

75. A

Sol.  $21 \times [(9 - 4) \div \{(8 \div 8 \text{ of } 4) + (4 \div 4 \text{ of } 2)\}]$

Using BODMAS:

$$\Rightarrow 21 \times \left[ 5 \div \left( \frac{1}{4} + \frac{1}{2} \right) \right]$$

$$\Rightarrow 21 \times \left[ 5 \div \left( \frac{3}{4} \right) \right]$$

$$\Rightarrow 21 \times \left[ 5 \times \frac{4}{3} \right] = 140$$

76. C

- Sol. • Nitin Gadkari was the Union Minister of Road Transport and Highways as of July 2020.
- He is the longest-serving Minister for Road Transport & Highways currently running his tenure for over 7 years.
  - He is also known for his work as the Public Works Department Minister of the State of Maharashtra.
  - Thawar Chand Gehlot is the first person serving as the Governor of Karnataka from Madhya Pradesh.
  - Kiren Rijiju is currently serving as the Minister of Law and Justice in the Government of India.
  - Piyush Goyal is the current Minister of Textiles and Minister of Consumer Affairs, Food and Public Distribution.

77. D

- Sol. • The gymnast Dipa Karmakar belongs to the state of Tripura.

- She won a **bronze medal at the 2014 Commonwealth Games** and became the **first Indian female gymnast to do so in the history of the Games**.
- She became the **first Indian gymnast to win a gold medal at a global event in July 2018**.
- **Tripura** is known for its **handicraft, particularly hand-woven cotton fabric, wood carvings and bamboo products**.
- It is the **third-smallest state in the country** and one of the most literate states in India.
- **Maharashtra** is one of the most industrialised in India and the **third-largest state by area in India**.

78. C

- Sol. ● **Kolleru lake is located in the state of Andhra Pradesh.**
- It is **one of the largest freshwater lakes in India located in the state of Andhra Pradesh and forms the largest shallow freshwater lake in Asia.**
  - It is **fed directly by water from the seasonal Budameru and Tammileru streams.**
  - It was an **important habitat for an estimated 20 million residents and migratory birds.**
  - It is **one of the most important wetlands of India** and It lies **between the Godavari and Krishna river deltas near the city of Eluru.**

79. B

- Sol. ● **Akira Yoshino was NOT a co-recipient of the Nobel Prize in Physics in 2019.**
- He created the **first safe, production-viable lithium-ion battery which became used widely in cellular phones and notebook computers.**
  - He was **awarded the Nobel Prize in Chemistry in 2019.**
  - **Nobel Prizes are widely regarded as the most prestigious awards available in their respective fields.**
  - They are **awarded in the fields of Physics, Chemistry, Physiology or Medicine, Literature and Peace.**
  - They were **first awarded in 1901** and the **prize ceremonies take place annually.**

80. B

- Sol. • As of September 2020, in order to be a member of the Rajya Sabha one must not be less than 30 years of age.
- Rajya Sabha is the upper house of the bicameral Parliament of India and is termed as the House of Elders in the Indian Parliament.
  - It has a maximum membership of 245 and 233 are elected by the legislatures of the states.
  - It is a permanent House and its first sitting was held on 13 May 1952.
  - There are three types of representation in the Rajya Sabha:
    - a) Representation of States in Rajya Sabha
    - b) Representation of Union Territories in Rajya Sabha
    - c) Representation of Nominated Members in Rajya Sabha

81. C

- Sol. • Obstetrics is the field of study concentrated on pregnancy, childbirth and the postpartum period.
- It is the field of study concentrated on pregnancy, childbirth and the postpartum period.
  - Oncology is the study of cancer and also deals with the prevention, diagnosis and treatment of cancer.
  - Ophthalmology is a branch of medicine that deals with the diagnosis and treatment of eye disorders.
  - Orthopedics is the branch of surgery concerned with conditions involving the musculoskeletal system.

82. C

- Sol. • Vishwanath Pratap Singh is not a former President of India.

- He was the **7th Prime Minister of India from 1989 to 1990** and the **41st Raja Bahadur of Manda**.
- He is **India's only prime minister to have been a former Zamindar**.
- **Shankar Dayal Sharma** was the **ninth president of India** and the **eighth vice president of India**.
- **Giani Zail Singh** was the **first Sikh president of India serving from 1982 to 1987**.
- **KR Narayanan** served as the **tenth President of India** and **ninth vice president of India**.
- He is regarded as an independent and assertive president.

83. A

- Sol.
- **Amartya Sen received the Nobel Prize for Economics in 1998**.
  - He has **made contributions to welfare economics, social choice theory, economic and social justice**.
  - He was awarded the **2020 Peace Prize of the German Book Trade** for his pioneering scholarship addressing issues of global justice and combating social inequality in education & healthcare.
  - Nobel Prizes are widely regarded as the most prestigious awards available in their respective fields.
  - They are awarded in the fields of **Physics, Chemistry, Physiology or Medicine, Literature and Peace**.
  - They were **first awarded in 1901** and the **prize ceremonies take place annually**.

84. A

- Sol.
- **Dudhsagar waterfall is in the state of Goa**.
  - It is a **four-tiered waterfall located on the Mandovi River**.
  - It is **amongst India's tallest waterfalls with a height of 310 m and an average width of 30 metres**.
  - It is also known as **Tambdi Surla to some of the local people**.

- **Duduma Waterfall** is situated on the **border of the Koraput and Visakhapatnam districts of India**.
- **Shivanasamudra Falls** is a **waterfall in Karnataka** and It is **situated along the river Kaveri**.
- It is a **segmented waterfall** and the **maximum recorded volume is 18,887 cubic metres per second**.

85. A

Sol. • **Badami was the earliest capital of the Chalukyas.**

- It was the **regal capital of the Badami Chalukyas from CE 540 to 757**.
- It is **located in a ravine at the foot of a rugged, red sandstone outcrop that surrounds Agastya lake**.
- The **Chalukyas dynasty** marks an **important milestone in the history of South India** and a **golden age in the history of Karnataka**.
- The **Pallava dynasty** was an **Indian dynasty that existed from 275 CE to 897 CE**.
- The **Mauryan Empire** was the **first pan-Indian empire** and It was **formed around 321 B.C.E. and ended in 185 B.C.E.**

86. B

Sol. • **Cm is the chemical symbol of Curium.**

- It is a **transuranic, radioactive chemical element** and **one of the elements from the actinoid series**.
- It is **known to be the 3rd transuranium element discovered yet**.
- Cr is the **chemical symbol of Chromium** and it is the first element in group 6.
- It is a **steely-grey, lustrous, hard and brittle transition metal**.
- Cu is the **chemical symbol of Copper** and it is found in the free metallic state in nature.
- It is a **soft, malleable and ductile metal with very high thermal & electrical conductivity**.

87. A

- Sol. • Goal Number One is No poverty with reference to the Sustainable Development Goals of the United Nations.
- Its main aim is to End poverty in all its forms, everywhere.
- Goal Number Two is to End hunger, achieve food security and improve nutrition, and promote sustainable agriculture.
- Reducing inequality within and among countries is Goal Number Ten.
- Industry, Innovation and Infrastructure is Goal Number Nine.
- It helps to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

88. A

- Sol. • Lord Lytton organised a durbar to acknowledge Queen Victoria as the Empress of India in 1877.
- He is commonly regarded as a ruthless viceroy due to his handling of the Great Indian Famine of 1876-1878.
- Lord Ripon was known as the Father of Local self-government and He had introduced local self-governance in the year 1882.
- He was one of British India's most liberal and popular viceroys.
- Lord Minto served as Governor-General and Viceroy of India from 1905 to 1910.
- Lord Dufferin is now best known as one of the most successful diplomats of his time.

89. B

- Sol. • The West Bengal Forest Department recognised its failures in reviving the degraded Sal forests in the South-Western districts of the State.
- Sal tree is a species of tree in the family Dipterocarpaceae.
- It is believed to be the House of Tribal Goddess and is valued as a holy tree.
- It is generally used to prevent diarrhoea and dysentery due to its astringent property.
- It has religious, medicinal as well as commercial significance.
- Palash is a small-sized dry-season deciduous tree, growing to 15 m tall.

90. C

- Sol. • **Raja Rao** is the author of the book '**Kanthapura**'.
- He was **one of the founding pillars of Indian writing in English** who tried to incorporate **Indian metaphysics and philosophy** into his fictional work.
  - **Sitakant Mahapatra** is an eminent Indian poet & literary critic in Odia as well as English.
  - **Nirad C. Chaudhuri** was **one of the best known Indian fiction authors of the 20th century**.
  - He is the **only Indian ever to be awarded the prestigious Duff Cooper Memorial Award**.
  - **Kamala Das** is noted **for the poems** and **explicit autobiography**.
  - She was **noted for her many Malayalam short stories and poems written in English**.

91. D

- Sol. • **Golconda fort** was built by the **Kakatiya dynasty**.
- It is a **fortified citadel** built by the **Qutb Shahi dynasty** and located in **Hyderabad, Telangana**.
  - **Neemrana Fort** has gained popularity due to its magnificent fort palace which has been converted into a luxury hotel.
  - **Raigad** is a **hill fort** situated in **Mahad, Raigad district of Maharashtra, India**.
  - It is **one of the strongest fortresses on the Deccan Plateau** and It was **built by Chhatrapati Shivaji Maharaj**.
  - **Panhala fort** is also called the **Fort of Snakes** as it is **zigzagged in shape**.

92. D

- Sol. • **Three oxygen atoms** are there in a molecule of ozone.
- It is an **inorganic molecule** with the **chemical formula O<sub>3</sub>**.
  - It is **formed from dioxygen** by the action of ultraviolet light and **electrical discharges** within the Earth's atmosphere.

- It can also be produced from oxygen at the anode of an electrochemical cell.
- Oxygen is Earth's most abundant element and it is the third-most abundant element in the universe.
- It is a colourless, odourless, tasteless gas essential to living organisms.

93. D

Sol. • Bhusawal is not the town of Karnataka.

- It is a city as well as a municipal council in the Jalgaon district in the Indian state of Maharashtra.
- It is situated on the banks of the Tapi river and has an average elevation of 209 metres.
- Chitradurga is a major tourist hub in Karnataka.
- It is famous for its fort which is locally known as Kallina Kote or Stone Fortress.
- Bijapur city is well known for its historical monuments of architectural importance built during the rule of the Adil Shahi dynasty.

94. D

Sol. • The name of Guru Kelu Charan Mohapatra is primarily associated with Odissi.

- Odissi is a major ancient Indian classical dance that originated in the Hindu temples of Odisha.
- It was the only Indian dance form present in Michael Jackson's 1991 hit single Black or White.
- Mohiniyattam is an Indian classical dance form that evolved in the state of Kerala, India.
- Sattriya is a classical dance of India, tracing its roots to ancient drama and music texts of India.
- Kathak is one of the eight major forms of Indian classical dance and It is the only Indian classical dance form to feature Islamic elements.

95. C

- Sol. • An asset that has remained in the substandard category for a period of 12 months is classified as a doubtful asset by a bank.
- A loss asset is one where loss has been identified by the bank or internal or external auditors or the RBI inspection but the amount has not been written off wholly.
- A non-performing asset refers to a classification for loans or advances that are in default or in arrears.
- It is a loan or advance for which the principal or interest payment remains overdue for a period of 90 days.
- A liquid asset is an asset that can easily be converted into cash in a short amount of time.

96. A

- Sol. • Shortughai is the Harappan site located in Afghanistan.
- It was a trading colony of the Indus Valley Civilization established around 2000 BC.
- It is considered to be the northernmost settlement of the Indus Valley Civilization.
- Nageshwar is argued to be the first Harappan shell-working site in India.
- Kalibangan is an ancient site of the Indus valley civilization in northern Rajasthan state, northwestern India.
- Balakot is one of four known ancient coastal sites in Pakistan.

97. D

- Sol. • India hosted the Commonwealth Games in 2010.
- It was also the largest international multi-sport event to be staged in Delhi and India.
- It was an international multi-sport event that was held from 3 to 14 October 2010.
- Commonwealth Games is an international multi-sport event involving athletes from the Commonwealth of Nations.
- They were the first fully inclusive international multi-sport event.
- They became the first global multi-sport event to feature an equal number of men's and women's medal events.

- The next Commonwealth Games are due to be held in Birmingham from 28 July to 8 August 2022.

98. B

- Sol.
- Abhang is a form of devotional poetry sung in praise of the god Vithoba.
  - They are more exuberant expressions of the communitarian experience.
  - They are sung during a pilgrimage to the temples of Pandharpur, by the devotees.
  - Tevaram denotes the first seven volumes of the twelve-volume collection Tirumurai.
  - Bhatiali is a form of folk music in both Bangladesh and West Bengal.
  - It is mostly sung in several parts of the greater riparian Bengal delta.

99. B

- Sol.
- Satyendra Nath Bose was the first recipient of Padma Vibhushan.
  - He is best known for his work on quantum mechanics in the early 1920s.
  - Har Gobind Khorana made important contributions to this field by building different RNA chains with the help of enzymes.
  - He was one of the first scientists to demonstrate the role of nucleotides in protein synthesis and helped crack the genetic code.
  - John Matthai served as India's first Railway Minister.
  - JRD Tata became the first licensed pilot in India and he is also best known for being the founder of several industries under the Tata Group.

100. C

- Sol.
- A complaint can be filed in the District Consumer Disputes Redressal Forum if the value of the claim is up to Rs 20 lakhs as per the Consumer Protection Act, 1986.
  - The Consumer Protection Act, 1986 was passed by the Indian parliament and came into force in December 1986.
  - It was passed to protect the consumers' interest as well as to establish state bodies to deal with consumer problems.

- They deal with **consumer disputes, conflicts and grievances**.
- **State Consumer Dispute Redressal Commission** takes on **any consumer dispute where the appellants' claim for compensation exceeds the amount of 20 lakhs but does not exceed 1 crore rupees**.
- **National Consumer Dispute Redressal Commission** takes on **any consumer dispute where the appellants' claim for compensation exceeds the amount of 1 crore rupees**.

# Mock Test Solutions in Hindi

## Questions

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

The \_\_\_\_\_ to have multiple plasma banks is a praise-worthy one.

- A. inaction
  - B. initiation
  - C. initiate
  - D. initiative

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

The Singapore government has deported ten Indian students for \_\_\_\_\_ the government rules.

- A. vandalising
  - B. aiding
  - C. verifying
  - D. violating

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

There was enough evidence to convict him of selling adulterated food.



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

## SYMPTOMATIC

- |               |                   |
|---------------|-------------------|
| A. Optimistic | B. Characteristic |
| C. Strange    | D. Atypical       |

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

A large open area of land, water or sky

- |              |            |
|--------------|------------|
| A. Front     | B. Margin  |
| C. Enclosure | D. Expanse |

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

## OBESITY

A. Skinny

C. Paunchy

B. Rude

D. Cute

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

The police warned citizens to be alert when outdoors as gangs has been attacking people on the road.

A. No substitution required

B. was attacking

C. have been attacking

D. was being attacked

8. Select the INCORRECTLY spelt word.

A. Iodine

B. Voilent

C. Enjoin

D. Loiter

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

Get on like a house on fire

A. To be angry and unfriendly

B. To become friends quickly

C. To end a relationship

D. To take an instant dislike

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

STUNNING

A. Impulsive

B. Obedient

C. Unattractive

D. Gorgeous

11. **Direction:** Identify the segment in the sentence which contains a grammatical error.

Tejaswin, the Indian sportsman, is leading the anti-race cause in the US.

A. Tejaswin, the Indian sportsman

B. the anti-race cause

C. in the US

D. is leading

12. **Direction:** Select the word which means the same as the group of words given.

Using high-sounding words but with little meaning

A. Bombastic

B. Eloquent

C. Clever

D. Reserved

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

Can you assembly the television using the manual?

- A. assembling
- B. No substitution required
- C. assembles
- D. assemble

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

RABID

- A. Calm
- B. Extreme
- C. Methodical
- D. Indifferent

15. Select the INCORRECTLY spelt word.

- A. Grieve
- B. Concieve
- C. Deceive
- D. Receive

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

Several foreign students have been asked by the US to leave the university campus and \_\_\_\_\_ home.

- A. returned
- B. returning
- C. return
- D. returns

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

The CBSE has decided on a \_\_\_\_\_ to assign marks for the examinations not taken by Class 12 students.

- A. formulae
- B. equation
- C. formula
- D. formation

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

Have your heart set on something

- A. To not want something at all
- B. To want something very much
- C. To be always in a nervous state
- D. To be in control of one's feelings

19. **Direction:** Identify the segment in the sentence which contains a grammatical error.

Google has set on an India fund and announced an investment of ten billion dollars.

- A. and announced an investment
- B. Google has set on
- C. of ten billion dollars
- D. an India fund

20. **Direction:** Identify the segment in the sentence which contains a grammatical error.

Sitab, my gardener, have been cut the hedge the whole morning.



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.

The first thousand days can determine the trajectory (1) \_\_\_\_\_ a child's life. After food for the body (2) \_\_\_\_\_ taken care of we should provide food for (3) \_\_\_\_\_ mind. Early stimulation of children's mind can (4) \_\_\_\_\_ them to become good learners. Parents should be (5) \_\_\_\_\_ in doing this.

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

- A. from
  - B. at
  - C. of
  - D. About

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



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



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

- A. led
  - B. Lead
  - C. Leads
  - D. Leading

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

- |              |               |
|--------------|---------------|
| A. adjusted  | B. restricted |
| C. allocated | D. orientated |

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

## कथनः

- 1). कुछ फोन, इंस्ट्रमेंट्स हैं।
  - 2). सभी इंस्ट्रमेंट्स, डिवाइस हैं।

निष्कर्षः

I. सभी डिवाइस, इंस्ट्रमेंट्स हैं।

II. कुछ डिवाइस, फोन हैं।

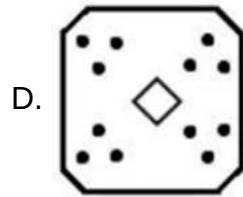
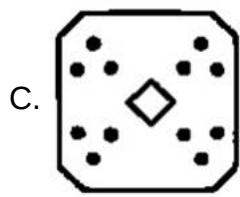
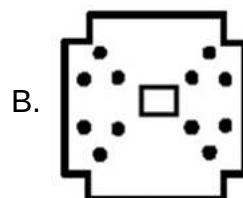
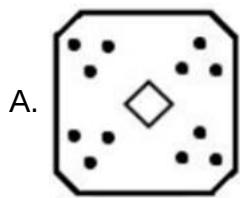
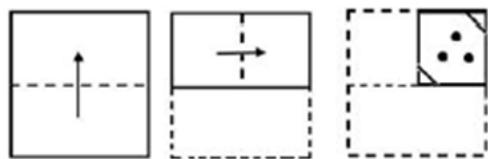
A. केवल निष्कर्ष I अनुसरण करता है

C. दोनों निष्कर्ष I और II अनुसरण करते हैं

B. केवल निष्कर्ष II अनुसरण करता है

D. न तो निष्कर्ष I न ही निष्कर्ष II अनुसरण करता है

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



28. यदि MATERIAL को SZLREKZH के रूप में कूटबद्ध किया जाता है, तो EQUATION को किस प्रकार कूटबद्ध किया जाएगा?

A. TPATDMNH

B. PDTAMTNH

C. TPDTAMNH

D. SRFTAOPJ

29. आठ घर अर्थात् A, B, C, D, E, F, G और H दो पंक्तियों में हैं तथा प्रत्येक पंक्ति में चार घर हैं।

एक पंक्ति में घर दूसरी पंक्ति के घरों के सामने हैं।

i. C का मुख F की ओर है।

ii. G और A विकर्णतः विपरीत हैं।

iii. E का मुख H की ओर है, लेकिन A की समान पंक्ति में नहीं है।

iv. H, D और C के मध्य है।

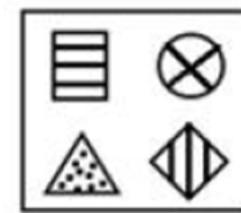
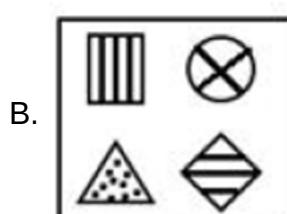
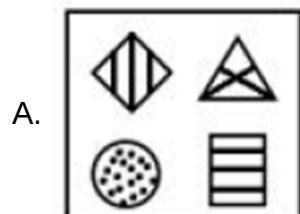
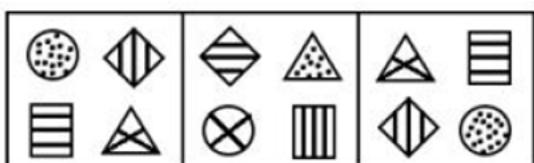
B का मुख किस घर की ओर है?



30. यदि VEAL को 4483 के रूप में कूटबद्ध किया जाता है तथा LOWER को 33549 के रूप में कूटबद्ध किया जाता है, तो TECHNO को किस प्रकार कूटबद्ध किया जाएगा?



31. निम्नलिखित आकृति शरंखला में कौन सी विकल्प आकृति आगे आएगी?



32. संख्याओं के उस समुच्चय का चयन करें जो निम्नलिखित समुच्चय के समान हो।

25, 19, 36

- A. {9, 49, 16}      B. {20, 28, 32}  
C. {30, 25, 35}      D. {36, 23, 48}

33. एक के बाद एक सात लोग डॉक्टर के पास परामर्श के लिए गए।

- i. महेश, अमित के ठीक बाद लेकिन विराट से कुछ समय पहले दौरा करता है।
- ii. अशोक ने विराट के ठीक बाद और नमन से ठीक पहले दौरा किया।
- iii. न तो अनूप और न ही नमन अंतिम दौरा करने वाले थे।
- iv. अशोक और सूरज के मध्य उतने ही आगंतुक थे जितने अनूप और अशोक के मध्य थे।

डॉक्टर के पास जाने वाले क्रमशः पहले और अंतिम व्यक्ति कौन थे?

- |                 |                 |
|-----------------|-----------------|
| A. महेश और सूरज | B. नमन और अशोक  |
| C. अमित और अशोक | D. अमित और सूरज |

34. निम्नलिखित शब्दों में कौन सा अक्षर समूह प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित करेगा?

QUESTION, USINETO, SNTIEO, NIOTE, ?

- |         |         |
|---------|---------|
| A. ITEO | B. TEOI |
| C. ITOE | D. OEIT |

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

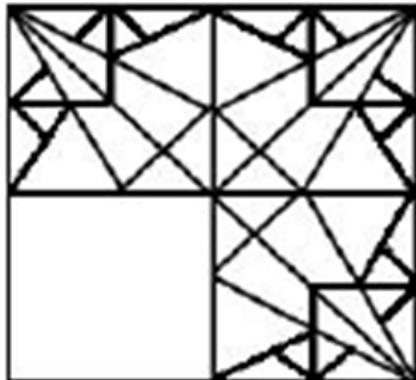
कथन:

- 1). सभी वॉच, क्लॉक हैं।
- 2). कुछ क्लॉक, मशीन हैं।
- 3). कुछ मशीन, गैजेट हैं।

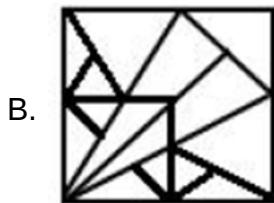
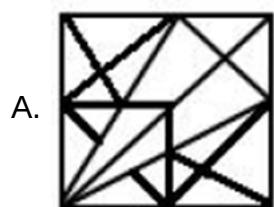
निष्कर्ष:

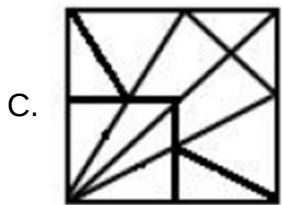
- I. कुछ वॉच, मशीन हैं।
  - II. कछ मशीन, क्लॉक हैं।
  - III. कुछ गैजेट के क्लॉक होने की संभावना है।
- |                                      |   |
|--------------------------------------|---|
| A. केवल निष्कर्ष II अनुसरण करता है।  | B. सभी निष्कर्ष I, II और III अनुसरण करते हैं। |
| C. केवल निष्कर्ष III अनुसरण करता है। | D. केवल निष्कर्ष II और III अनुसरण करते हैं।   |

36. छह मित्र अर्थात् A, B, C, D, E और F एक पंक्ति में उत्तर की ओर मुख करके खड़े हैं।



(X)





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

FJNRVZ : KLEWXQ : WTQNKH : ?

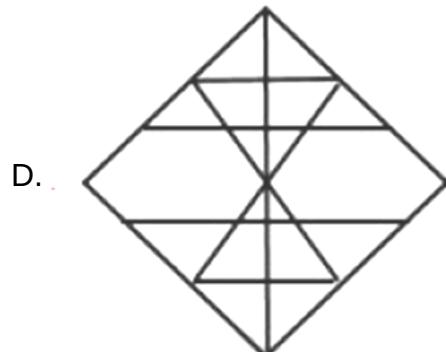
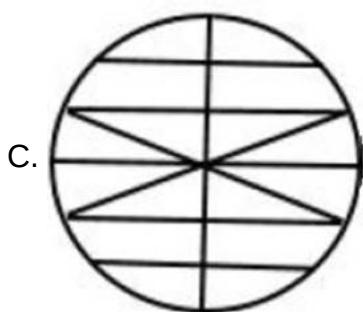
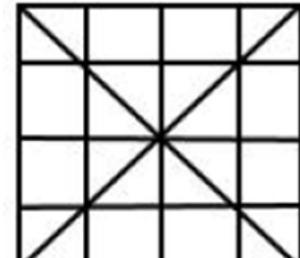
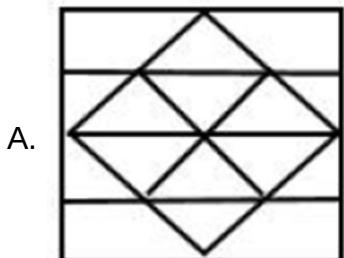
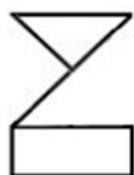
A. VTNMME

B. NVVEMM

C. USMENM

D. XRTMNE

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



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

जर्मनी : यूरो :: म्यांमार : ?



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

17, 20, 30, 45, 71, 106, ?



43. यदि DEAF को 123 के रूप में कूटबद्ध किया जाता है तथा CAN को 45 के रूप में कूटबद्ध किया जाता है, तो BEAK को किस प्रकार कूटबद्ध किया जाएगा?



44. यदि प्रतीक  $+$  और  $\div$  को आपस में बदल दिया जाए, तो निम्नलिखित में से कौन सा समीकरण सही होगा?

- A.  $8 + 12 \times 3 \div 1 = 4$       B.  $15 - 12 + 6 \div 2 = 15$   
C.  $9 + 6 \times 4 \div 2 = 8$       D.  $4 \div 8 + 12 \times 6 = 10$

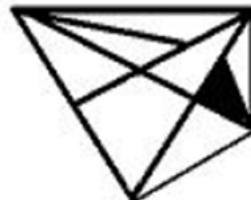
45. 'X' के रूप में चिन्हित आकृति के दर्पण प्रतिबिम्ब का चयन करें, जब दर्पण को आकृति की दाईं ओर स्थापित किया जाता है।



10



A.



B.



C.



D.

46. यदि HARBOUR को BORUARH के रूप कृटबद्ध किया जाता है, तो RAPTURE को किस प्रकार कृटबद्ध किया जाएगा?

- A. TPURARE B. PTAURRE

C. TUPARER

D. TUPRAER

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

Sour : Sweet :: Wild : ?

A. Forest

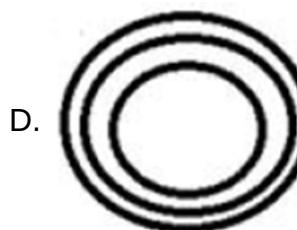
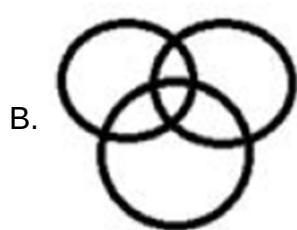
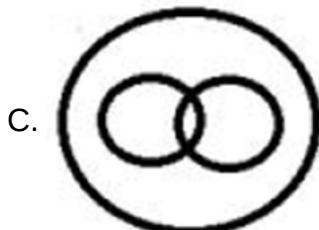
B. Lame

C. Tame

D. Salty

48. उस वेन आरेख का चयन करें जो निम्नलिखित वर्गों के बीच के संबंध को सबसे अच्छी तरह से दर्शाता है।

क्षोभमंडल, वायुमंडल, मध्यमंडल



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

$$15 + 15 \div 15 - 15 \times 15 = 15$$

A. + और ×

B. ÷ और +

C. + और –

D. ÷ और ×

50. उस संख्या का चयन करें जो निम्नलिखित शरूंखला में प्रश्नवाचक चिन्ह (?) को प्रतिस्थापित कर सकती है।

13, 16, 23, 36, 57, 88, ?, 188

A. 145

B. 119

C. 131

D. 127

51. A man ordered 10 physics books and some chemistry books. The price of a chemistry book is twice the price of a Physics book. While preparing the bill, the clerk interchanged the number of physics and chemistry books by mistake,

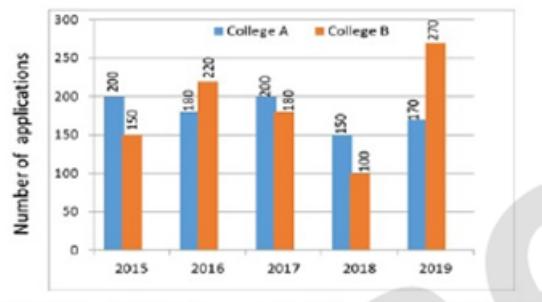
which decreased the bill by  $12\frac{1}{2}\%$ . The ratio of the number of physics books to the number of chemistry books in the original order is:

52. The average of seven consecutive even natural numbers is 36. The value of the first number is:

53. An aeroplane covers a certain distance at a speed of 320 km/h in  $5\frac{1}{2}$  hours. To cover the same distance in 4 hours, it must travel at a speed of:

54. **Direction:** Study the following bar graph and answer the question given below,

The give bar graph represents the total number of applications received for the B. Com course by two different colleges A and B in five different years.



The number of applications received by college A in 2016 is what percentage of the total number of applications received by college A from 2015 to 2019?

55. The difference between the average number of applications received by college A from 2015 to 2019 and the average number of applications received by college B from 2015 to 2019 is:
56. The ratio of the total number of applications received by college A in 2016 and 2017 together to the total number of applications received by college B in 2016 and 2017 together is:
57. The area of the four walls of a room is  $1152 \text{ m}^2$  and its length is  $5\frac{5}{3}$  times its breadth. If the height of the room is 12 m. Then the area of its floor is:
58. A person has left a sum of Rs. 1,45,600 to be divided among his two sons aged 15 years and 13 years now. Both of them invested their shares on simple interest at 10% per annum. If both of them gets equal amounts when they attain 18 years of age, then the original share received by younger son is:
59. If Rs. 12,500 is invested at 12% p.a. on compound interest for one year and 4 months. Compounded

annually, then the amount received is:

60. Three numbers are in the ratio  $\frac{1}{4} : \frac{1}{5} : \frac{1}{3}$ , The difference between the greatest and the smallest number is 800. The sum of the three numbers is:
61. The ratio of the monthly income and expenditure of Dinesh is 17:14, and his monthly saving are Rs. 12,000. If his monthly income is increased by Rs. 10,000 and expenditure is decreased by Rs. 2,000, then the new ratio of his income and expenditure is:
62. 'A' alone can complete a piece of work for Rs. 4,800 in 16 days, but by engaging an assistant, the work is completed in 12 days. Find the share to be received by the assistant.
63. A man sold a radio and a TV set together for Rs. 30,400, thereby making a profit of 25% on the radio and 10% on the TV set. By selling them together for Rs 30,700, he would have made a 10% profit on the radio and 25% on the TV set. The cost price of the radio is:
64. 55% of the candidates in an examination were boys. 60% of the boys and 75% of the girls passed, and 315 girls failed. The number of boys who failed were:
65. The numbers 25, 34, 46, 48,  $2x+1$ ,  $4x+3$ , 105, 110, 114, 122 are written in ascending order and their median is 77. The value of x is:
66. Two workers A and B are engaged to do a piece of work. A working alone would take 14 hours more to complete the work than when A and B work together. B working alone would take  $\frac{1}{32}$  hours more than when A and B work together. The time required to finish the work together is:
67. If the difference between the selling price of an article when sold at 18% discount and at 10.5% discount is Rs.192, then the marked price of the article is:
68. The average of 40% of a number and 33% of the same number is 73. The average of  $\frac{1}{5}$  th and  $\frac{1}{4}$  th of that number is:
69. The radius of the base of a cone and also that of a hemisphere each is 14 cm. also, the volumes of these two solids are equal. The curved surface area of the cone is:
70. The slant height and the diameter of the base of a right circular cone are 34 cm and 32 cm, respectively, its volume (in  $\text{cm}^2$ ) is:



83. अमर्त्य सेन को अर्थशास्त्र का नोबेल पुरस्कार किस वर्ष मिला था?  
A. 1998 B. 2004  
C. 1997 D. 1999

84. निम्नलिखित में से कौन सा जलप्रपात गोवा राज्य में है?  
A. दूधसागर B. दुडुमा  
C. गोकाक D. शिवसमुद्रम

85. बादामी किसकी प्रारंभिक राजधानी थी?  
A. चालुक्य B. सुंग  
C. पल्लव D. मौर्य

86. निम्नलिखित में से कौन-सा क्यूरियम का रासायनिक प्रतीक है?  
A. Cr B. Cm  
C. Ci D. Cu

87. संयुक्त राष्ट्र के सतत विकास लक्ष्यों के संदर्भ में, निम्नलिखित में से कौन सा पहला लक्ष्य है?  
A. कोई गरीबी नहीं B. उद्योग, नवाचार और आधारभूत संरचना  
C. असमानताओं में कमी D. जीरो हंगर

88. 1877 में, निम्न में से किस वायसराय ने महारानी विक्टोरिया को भारत की महारानी के रूप में स्वीकार करने के लिए एक दरबार का आयोजन किया था?  
A. लॉर्ड लिटन B. लॉर्ड रिपन  
C. लॉर्ड मिंटो D. लॉर्ड डफरिन

89. 1972 में, पश्चिम बंगाल वन विभाग ने राज्य के दक्षिण-पश्चिमी जिलों में निम्नीकृत \_\_\_\_\_ वनों को पुनर्जीवित करने में अपनी विफलताओं को मान्यता दी।  
A. पलाश B. साल  
C. पियाल D. सेगुन

90. निम्नलिखित में से कौन 'कंठपुरा' पुस्तक के लेखक हैं?  
A. नीरद चौधरी B. सीताकांत महापात्र  
C. राजा राव D. कमला दास

91. निम्नलिखित में से किस किले का निर्माण काकतीय वंश ने करवाया था?  
A. पन्हाला B. रायगढ़  
C. नीमराना D. गोलकुंडा

92. ओजोन के एक अणु में ऑक्सीजन के कितने परमाणु होते हैं?  
A. एक B. चार

C. दो

D. तीन

93. निम्नलिखित में से कौन-सा कर्नाटक का एक शहर नहीं है?

- A. चिकमगलूर
- C. चित्रदुर्ग

- B. बीजापुर
- D. भुसावल

94. गुरु केलू चरण महापात्र का नाम मुख्यतः किस नृत्य से जुड़ा है?

- A. मोहिनीअट्टम
- C. कथक

- B. सत्तारिया
- D. ओडिसी

95. एक परिसंपत्ति जो 12 महीने की अवधि के लिए घटिया श्रेणी में बनी हुई है, उसे बैंक द्वारा \_\_\_\_\_ संपत्ति के रूप में वर्गीकृत किया जाता है।

- A. तरल
- C. संदिग्ध

- B. गैर-निष्पादित
- D. हानि

96. निम्नलिखित में से कौन सा हड्ड्या स्थल अफगानिस्तान में स्थित है?

- A. शॉटुर्घई
- C. नागेश्वर

- B. बालाकोट
- D. कालीबंगा

97. भारत ने राष्ट्रमंडल खेलों की मेजबानी की:

- A. 2012
- C. 2006

- B. 2018
- D. 2010

98. निम्नलिखित में से कौन-सा भगवान विठोबा की स्तुति में गाए जाने वाले भवित्व काव्य का एक रूप है?

- A. शबद
- C. तेवरम

- B. अभंग
- D. भटियाली

99. निम्नलिखित में से कौन पहले पद्म विभूषण प्राप्तकर्ता थे?

- A. जेआरडी टाटा
- C. हरगोबिंद खुराना

- B. सत्येन्द्र नाथ बोस
- D. जॉन मथाई

100. उपभोक्ता संरक्षण अधिनियम, 1986 के अनुसार जिला उपभोक्ता विवाद निवारण फोरम में शिकायत दर्ज की जा सकती है यदि दावे का मूल्य हो:

- A. 5 लाख रुपये
- C. 20 लाख रुपये

- B. 15 लाख रुपये
- D. 10 लाख रुपये

## Solutions

1. D

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

- *Inaction* = (noun) lack of action; the state of doing nothing about a situation or a problem
- *Initiation* = (noun) the act of someone becoming a member of a group
- *Initiate* = (noun) a person who has been allowed to join a particular group.
- *Initiative* = (noun) a new plan for dealing with a particular problem or for achieving a particular purpose.

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

- “*Inaction*” is used in context of “lack of action”. Thus, option A is incorrect.
- “*Initiation*” is used in context of “act of becoming a member”. Thus, option B is incorrect.
- “*Initiate*” is used in context of “someone who is allowed to join the group”. Thus, option C is incorrect.
- “*Initiative*” is used in context of “a new plan for achieving some purpose”.
- Here in the given sentence, it is used to talk about a new plan for achieving the purpose of “having multiple plasma banks”.

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

The correct sentence will be: **The initiative to have multiple plasma banks is a praiseworthy one.**

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

2. D

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

- *Vandalising* = (verb) to damage something especially public property, deliberately and for no good reason.
- *Aiding* = (noun) the sport of climbing steep rock surfaces with a lot equipment to help you
- *Verifying* = (verb) to check that something is true or accurate
- *Violating* = (verb) to go against or refuse to obey a law, an agreement etc.

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

- “*Vandalising*” is used in context of “damaging something”. Thus, option A is incorrect.
- “*Aiding*” is used in context of “climbing steep rock surfaces”. Thus, option B is incorrect.
- “*Verifying*” is used in context of “checking something”. Thus, option C is incorrect.
- “*Violating*” is used in context of “going against a law”.
- Here in the given sentence, it is used to show that Indian students have gone against the rules framed by the Singapore government and hence they were deported.

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

The correct sentence will be: **The Singapore government has deported ten Indian students for violating the government rules.**

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

3. C

Sol. The underlined part of the sentence is grammatically correct.

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

4. B

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

Symptomatic= being a sign of an illness or a problem.

E.g.: These disagreements are **symptomatic** of the tensions within the party.

Optimistic = expecting good things to happen or something to be successful; showing this feeling

Characteristic = very typical of something or of someone's character.

E.g.: This is just one example of the rudeness that was so **characteristic** of him.

Strange =unusual or surprising

Atypical = not typical or usual.

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

5. D

Sol. Front: the side of something that faces forward.

Margin: the empty space at the side of a written or printed page.

Enclosure: a piece of land that is surrounded by a fence or wall and is used for a particular purpose

Expanse: a wide and open area of something especially land or water.

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

6. A

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

Obese= very fat, in a way that is not healthy.

E.g.: **Obese** patients are given dietary advice.

Skinny = very thin, especially in a way that you find unpleasant or ugly.

E.g.: He had wild hair and long **skinny** arms.

Rude = having or showing lack of respect for other people and their feelings.

Paunchy = a fat stomach on a man.

Cute = pretty and attractive.

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

7. C

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

- Underlined part needs correction in subject verb agreement.
- As per the Subject Verb agreement, verb should be in accordance with the subject. Singular verb should be used with singular subject. Plural verb should be used with plural subject.

**For example:**

**Children are** sensitive to family attitudes and adjust their attitudes accordingly.

**The child was** found abandoned but unharmed.

“Child” is a singular noun and “Children” is a plural noun.

- In the underlined sentence we have erroneously used singular helping verb “has” for the plural subject “gangs”. Thus, plural helping verb “have” should be used in place of “has”.
- Hence, “**have been attacking**” is the correct substitution.

Thus, the correct sentence will be: **The police warned citizens to be alert when outdoors as gangs have been attacking people on the road.**

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

8. B

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

“Violent” is the correct spelling of the incorrect word “Voilent”. It means involving or caused by physical force that is intended to hurt or kill someone.

The meaning of other words are:

Iodine: a chemical element. It is a substance found in seawater.

Enjoin: to order or strongly advise someone to do something

Loiter: to stand or wait somewhere especially with no obvious reason.

9. B

Sol. The idiom “**get on like a house on fire**” means to become friends quickly and have a very friendly relationship.

Example :- Sam and John met a month ago, but they **got on like a house on fire**.

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

10. C

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

Stunning= extremely attractive or impressive

E.g.: His performance was simply **stunning**.

Impulsive = acting suddenly without thinking carefully about what might happen because of what you are doing.

Obedient = doing what you are told to do; willing to obey

Unattractive = not attractive or pleasant to look at.

E.g.: His face creased into an **unattractive** smile.

Gorgeous = very beautiful and attractive; giving great pleasure.

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

11. B

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

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

**For example:**

I got **an antibiotic** for my ear infection.

- “The” as a definite article is used before the nouns that are specific or has already been mentioned in the sentence.

**For example:**

There were three questions. **The** first two were relatively easy but **the** third one was hard.

- “Racism” as a noun means the unfair treatment of people who belong to different race; violent behavior towards them.

**For example:**

She was wearing **an anti-racism** wristband.

- “Race” as a noun means one of the main groups that humans can be divided into according to their physical differences.

**For example:**

This custom is found in people of all **races** throughout the world.

- In the given sentence, we need a noun that conveys the meaning of “discrimination” but we have used a noun “race” that simply talks about the categorisation of people based on physical differences.
- Thus, it is better to use noun “Racism” in place of noun “Race”.
- Also, we have erroneously used definite article “the” because “anti-racism” has a vowel sound. Thus, indefinite article “an” should be used in place of definite article “the”.
- Hence, **“an anti-racism cause”** is the correct substitution.

The correct sentence will be: **Tejaswin, the Indian sportsman, is leading an anti-racism cause in the US.**

12. A

Sol. Bombastic: (of someone's words) sounding important but having little meaning and used to impress people.

Eloquent: able to use language and express your opinions well, especially when you are speaking in public.

Clever: quick at learning and understanding things.

Reserved: slow or unwilling to show feelings or express opinions.

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

13. D

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

- Underlined part needs correction in verb in interrogative sentence.
- Correct structure of an Interrogative sentence is: Question word + Subject + Verb

**For example:**

**Could you ascertain** whether she will be coming to the meeting?

- “Assembly” as noun means a group of who have been elected to meet together regularly and make decisions or laws for a particular region or country.

**For example:**

Power has been handed over to provincial and regional **assemblies**.

- “Assemble” as verb means to come together as a group; to bring people or things together as a group.

**For example:**

All the students were asked to **assemble** in the main hall.

- In the underlined sentence we have erroneously used noun “Assembly” after the subject “you”. In an interrogative structure we use verb after the subject. Thus, verb “Assemble” should be used in place of noun “Assembly”.
- Thus, “**Assemble**” is the correct substitution.

The correct sentence will be: **Can you assemble the television using the manual?**

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

14. B

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

Rabid= violent and extreme

E.g.: This is a film that millions of **rabid** fans have waited years to see.

Calm = not excited

Extreme = serious or severe

E.g.: Children will be removed from their parents only in **extreme** circumstances.

Methodical = done in a careful and logical way

Indifferent = having or showing no interest in someone/something

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

15. B

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

“Conceive” is the correct spelling of the incorrect word “Concieve”. It means to form an idea, a plant etc. in your mind.

The meaning of other words are:

Grieve: to feel very sad, especially because someone has died.

Deceive: to make someone believe something that is not true

Receive: to get or accept something that is sent or given to you.

16. C

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

- *Returned* = is the third form of verb “return”.
- *Returning* = is the continuous form of verb “return”
- *Return* = is the base form of verb. It means to come or go back from one place to another.
- *Returns* = is the singular form of verb “return”.

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

- “*Returned*” is the third form of verb “return”. Thus, option A is incorrect.
- “*Returning*” is the continuous form of verb “return”. Thus, option B is incorrect.
- “*Returns*” is the singular form of verb “return” but we need base form of verb i.e. without “s/es” after the infinitive. Thus, option D is incorrect.
- “*Return*” is a verb form without “s/es” in the end.
- It can be used after the infinitive i.e. “to”. It means to come or go back from one place to another.
- Here in the given sentence, it is used in context of asking “foreign students” “to return home” by the United States of America.

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

The correct sentence will be: **Several foreign students have been asked by the US to leave the university campus and return home.**

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

17. C

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

- *Formulae* = (noun) plural form of noun “formula”
- *Equation* = (noun) a statement showing that two amounts are equal
- *Formula* = (noun) a series of letters, numbers or symbols that represent a rule or law
- *Formation* = (noun) the action of forming something.

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

- “*Formulae*” is the plural form of noun “formula”. Thus, option A is incorrect.
- “*Equation*” is used in context of “two amounts being equal”. Thus, option B is incorrect.
- “*Formation*” is used in context of “an act of forming”. Thus, option D is incorrect.
- “*Formula*” is used in context of “letters or numbers representing a rule”.
- Here in the given sentence, it is used to show that CBSE has devised a formula i.e. “a rule having some number and letters”.
- This will take care of assigning marks for exams not taken by the students of Class 12.

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

The correct sentence will be: **The CBSE has decided on a formula to assign marks for the examinations not taken by Class 12 students.**

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

18. B

Sol. The idiom “**have your heart set on something**” means to want something very much.

Example: They **have set their heart on** a house in the country.

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

19. B

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

- “Set something up” as a phrasal verb means to create something or start it.

**For example:**

A fund will be **set up** for the dead men’s families.

- “Set someone/something on someone” as a phrasal verb means to make a person or an animal attack someone suddenly.

**For example:**

The farmer threatened to **set** his dogs **on** us.

- In the given sentence, we need a phrasal verb that gives the meaning of “creating an India fund” by the Google.
- This is only possible with the usage of preposition “up” after the verb “set”. Thus, preposition “up” should be used in place of preposition “on”.
- Thus, “**Google has set up**” is the correct substitution.

The correct sentence will be : **Google has set up an India fund and announced an investment of ten billion dollars.**

20. A

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

- Correct structure of Present Perfect continuous tense is: Has/Have + been + Active participle.
- It is used for an action over a period of time up to now, the period leading up to the present.

**For example:**

We **have been playing** cards all evening.

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

**For example:**

The boy **was** drinking milk out of a bowl.

- In the given sentence, we have not used “active participle” after “have been”. This can be corrected by using active participle “cutting” as per the present perfect continuous tense structure. Thus, “cutting” should be used in place of a “cut”.

**Note:** Don't get confused with the usage of “present perfect” tense here. Because we use “perfect aspect” of tense only when focus is on the “result of an action”. But when we have focus on the “action going on” then we use “perfect continuous” aspect of tense.

- Also, we have erroneously used plural helping verb “have” for the singular subject “Sitab”.
- Thus, singular helping verb “has” should be used in place of “have”.
- Thus, “**has been cutting**” is the correct substitution.

The correct sentence will be: **Sitab, my gardener, has been cutting the hedge the whole morning.**

21. C

Sol. The given passage is about “**Parenting tips in shaping child’s life**”.

“From” as a preposition is used to show where someone/something starts. Thus, option A is wrong.

“At” as a preposition is used to show the location which is relatively small or unknown or not so popular. Thus, option B is wrong.

“About” as a preposition is used to describe the purpose or an aspect of something. Thus, option D is wrong.

“Of” as a preposition is used for showing belonging to someone; relating to someone.

Here in the given sentence, it is used to mention the relation/connection of “trajectory” with “child’s life”.

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

22. D

Sol. The given passage is about “**Parenting tips in shaping child’s life**”.

“Am” is the “be” verb form that is used when “I” is the subject. Thus, option A is wrong.

“Are” is a plural helping verb and it is used in present tense. Thus, option B is wrong.

“Has” is a singular helping verb and it is used in present perfect tense. It is used to show possession (when used as a main verb). Thus, option C is wrong.

“Is” is a singular helping verb and it is used in simple present tense.

Here in the given sentence, it is used for singular subject “body”.

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

23. B

Sol. The given passage is about “**Parenting tips in shaping child’s life**”.

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

“Some” as a determiner is used with uncountable nouns or plural countable nouns to mean “an amount of” or “a number of” when the amount is not given. Thus, option C is wrong.

“That” as a relative pronoun is used for nouns that are specified. Thus, option D is wrong.

“The” as a definite article is used before singular countable nouns, plural countable nouns and uncountable nouns. Here in the given sentence, noun “mind” is used as an uncountable noun and it means the part of a person that makes them able to be aware of things, to think and to feel.

**Note:** “Mind” is also used as a countable noun and it means “ability to think and reason”.

Here, given passage is not talking about the “ability”.

Thus, its usage in the passage is like an uncountable noun.

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

24. B

Sol. The given passage is about **“Parenting tips in shaping child’s life”**.

“Led” is the second form of verb “lead”. Thus, option A is wrong.

“Leads” is the first form of verb (singular). Thus, option C is wrong.

“Leading” is the continuous form of verb. Thus, option D is wrong.

“Lead” is the base form of verb i.e. without s/es.

Here in the given sentence, it is used after the modal verb “can”. It means “to have something as a result”.

Here, it means “early stimulation” of children’s mind can help children in becoming “good learners” as a result.

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

25. D

Sol. The given passage is about “**Parenting tips in shaping child's life**”.

“Adjusted” means to change something slightly to make it more suitable for a new set of conditions. Thus, option A is wrong.

“Restricted” means limited or small in size or amount. Thus, option B is wrong.

“Allocated” means to give something officially to someone/something for a particular purpose. Thus, option C is wrong.

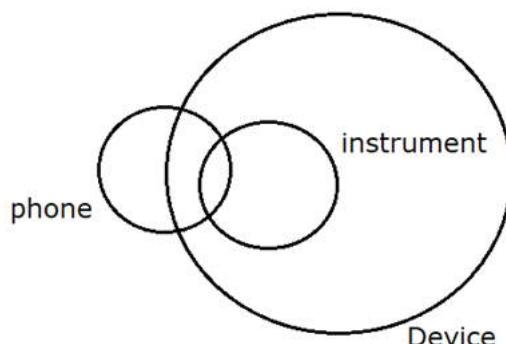
“Orientated” means to direct someone towards something.

In the given sentence, it is used in context of “directing parents” to do “early stimulation of children’s mind” during their first thousand days of life.

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

26. B

Sol. न्यूनतम संभावित आरेख है -



निष्कर्षः

I. सभी डिवाइस, इंस्ट्रुमेंट्स हैं। (यह अनुसरण नहीं करता है क्योंकि यह केवल एक संभावना है, लेकिन सुनिश्चितता नहीं है।)

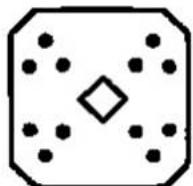
II. कुछ डिवाइस, फोन हैं। (यह अनुसरण करता है क्योंकि कुछ फोन, इंस्ट्रुमेंट्स हैं और सभी इंस्ट्रुमेंट्स, डिवाइस हैं।)

अतः, केवल निष्कर्ष ॥ अनुसरण करता है।

इसलिए, विकल्प B सही उत्तर है।

27. C

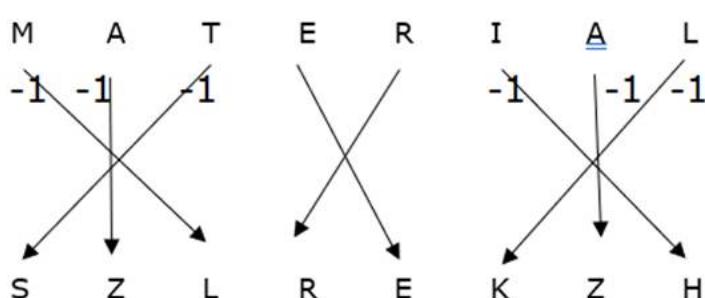
Sol. जैसा कि आकृति में दिया गया है, हमें इसे दिए गए (बुक फोल्डिंग) तरीके से मोड़ने की आवश्यकता है और इसे खोले जाने पर विकल्प C दिखाई देगा।



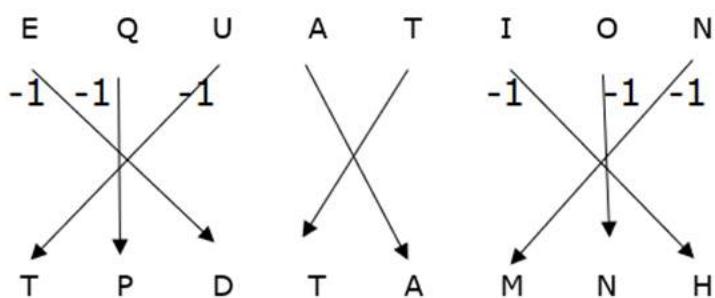
इसलिए, विकल्प C सही उत्तर है।

28. C

Sol. as,



similarly,



इसलिए, विकल्प C सही उत्तर है।

29. D

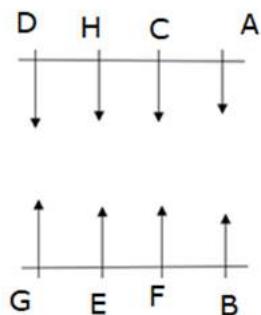
Sol. \* C का मुख F की ओर है।

\* G और A विकर्णतः विपरीत हैं।

\* H, D और C के मध्य है।

\* E का मुख H की ओर है, लेकिन A की समान पंक्ति में नहीं है।

तो, अंतिम व्यवस्था है:



अतः, B का मुख A की ओर है।

इसलिए, विकल्प D सही उत्तर है।

30. D

Sol. जैसाकि,

VEAL = 4483

और

LOWER = 33549

इसी तरह,

TECHNO = 243853

इसलिए, विकल्प D सही उत्तर है।

31. B

Sol.

1	2
4	3

पैटर्न:

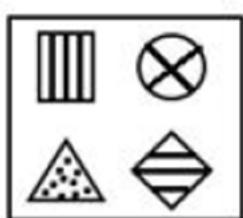
विभिन्न आकृतियों में बबल के गुच्छों का गतिमान क्रम: 1 2 3 4

विभिन्न आकृतियों में लम्बवत रेखाओं के गुच्छों का गतिमान क्रम: 2 3 4 1

विभिन्न आकृतियों में झुकी हुई रेखाओं के गुच्छों का गतिमान क्रम: 3 4 1 2

विभिन्न आकृतियों में क्षैतिज रेखाओं के गुच्छों का गतिमान क्रम: 4 1 2 3

तो, अगली आकृति है -



इसलिए, विकल्प B सही उत्तर है।

32. B

Sol. जैसाकि,

$$25+19+36=80$$

इसी प्रकार,

$$20+28+32=80$$

इसलिए, विकल्प B सही उत्तर है।

33. D

Sol. महेश, अमित के ठीक बाद लेकिन विराट से कुछ समय पहले दौरा करता है।

अमित

महेश

अशोक ने विराट के ठीक बाद और नमन से ठीक पहले दौरा किया।

विराट

अशोक

नमन

\* अशोक और सूरज के मध्य उतने ही आगंतुक थे जितने अनूप और अशोक के मध्य थे ।

\* न तो अनूप और न ही नमन अंतिम दौरा करने वाले थे ।

\* अशोक और सूरज के मध्य उतने ही आगंतुक थे जितने अनूप और अशोक के मध्य थे ।

तो, अंतिम व्यवस्था है:

क्रम	व्यक्ति
1	अमित
2	महेश
3	अनूप
4	विराट
5	अशोक
6	नमन
7	सूरज

तो, अमित और सूरज डॉक्टर के पास जाने वाले क्रमशः पहले और अंतिम व्यक्ति थे ।

इसलिए, विकल्प D सही उत्तर है ।

34. C

Sol. पैटर्न इस प्रकार है:

#### QUESTION

पहले अक्षर को हटाने और अक्षरों को वैकल्पिक क्रम में लिखने पर हमें प्राप्त होता है,

## USINETO

पहले अक्षर को हटाने और अक्षरों को वैकल्पिक क्रम में लिखने पर हमें प्राप्त होता है,

## SNTIEO

पहले अक्षर को हटाने और अक्षरों को वैकल्पिक क्रम में लिखने पर हमें प्राप्त होता है,

## NIOTE

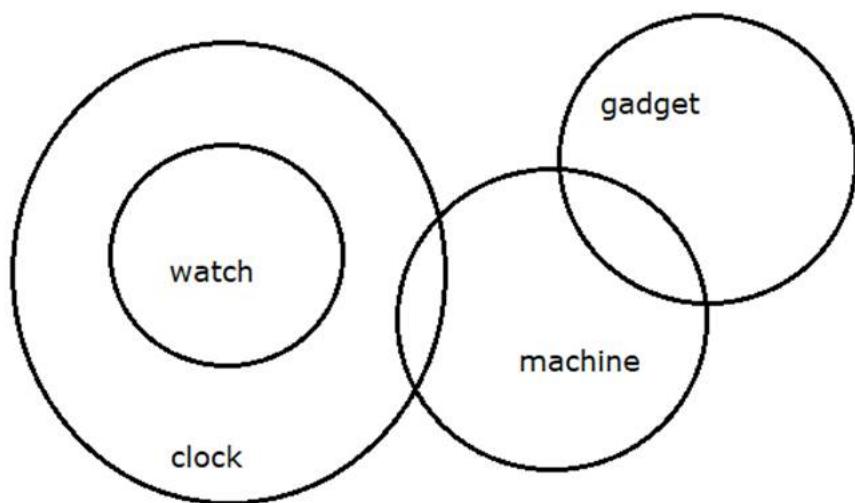
पहले अक्षर को हटाने और अक्षरों को वैकल्पिक क्रम में लिखने पर हमें प्राप्त होता है,

## ITOE

इसलिए, विकल्प C सही उत्तर है।

35. D

Sol. न्यूनतम संभावित आरेख होगा -



निष्कर्षः

- I. कुछ वॉच, मशीन हैं। (यह अनुसरण नहीं करता है क्योंकि यह केवल एक संभावना है, लेकिन सुनिश्चितता नहीं है।)
- II. कुछ मशीन, क्लॉक हैं। (यह अनुसरण करता है क्योंकि कुछ क्लॉक, मशीन हैं।)
- III. कुछ गैजेट के क्लॉक होने की संभावना है। (यह अनुसरण करता है कि कोई नकारात्मक कथन नहीं दिया गया है।)

तो, केवल निष्कर्ष II और III अनुसरण करते हैं।

इसलिए, विकल्प D सही उत्तर है।

36. B

Sol. A और F के मध्य एक व्यक्ति है।

A/F \_ A/F

B और E के मध्य दो व्यक्ति हैं।

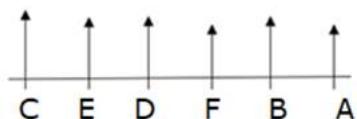
B/E \_ \_ B/E

F, B और D के मध्य में है।

B/D F B/D

C अंतिम दाईं ओर है।

तो, अंतिम व्यवस्था है:



अतः, A अंतिम दाईं ओर है।

इसलिए, विकल्प B सही उत्तर है।

37. C

Sol. जैसाकि,

$61+36=97$

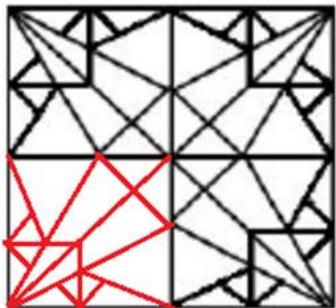
इसी प्रकार,

$46+36=82$

इसलिए, विकल्प C सही उत्तर है।

38. D

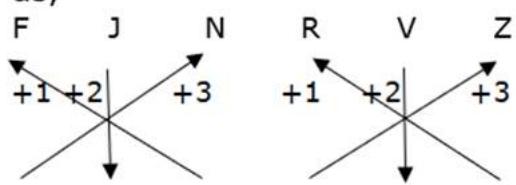
Sol. पूर्ण आकृति है:



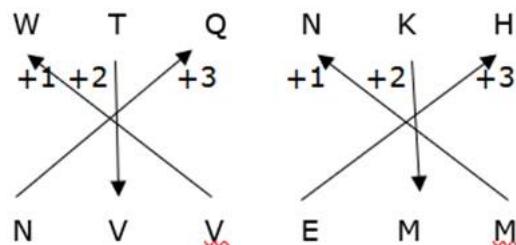
इसलिए, विकल्प D सही उत्तर है।

39. B

Sol. as,



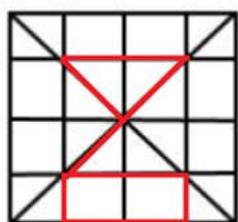
similarly,



इसलिए, विकल्प B सही उत्तर है।

40. B

Sol. प्रश्न और उत्तरों में दी गई आकृतियों को ध्यान से देखने के बाद, यह बहुत स्पष्ट है कि दी गई प्रश्न आकृति उत्तर आकृति B में अंतर्निहित है। इसे नीचे दिए गए अनुसार दर्शाया गया है:



इसलिए, विकल्प B सही उत्तर है।

41. B

Sol. जैसाकि,

यूरो, जर्मनी में उपयोग की जाने वाली मुद्रा है।

इसी प्रकार,

क्यात, म्यांमार में उपयोग की जाने वाली मुद्रा है।

इसलिए, विकल्प B सही उत्तर है।

42. D

Sol. पैटर्न इस प्रकार है:

$$20-17=3+1=4=2^2$$

$$30-20=10-1=9=3^2$$

$$45-30=15+1=16=4^2$$

$$71-45=26-1=25=5^2$$

$$106-71=35+1=36=6^2$$

$$156-106=50-1=49=7^2$$

इसलिए, विकल्प D सही उत्तर है।

43. D

Sol. जैसाकि,

$$DEAF=4\times 5 \times 1 \times 6 = 120, 120+3=123$$

और

$$CAN = 3 \times 1 \times 14 = 42, 42+3=45$$

इसी प्रकार,

$$\text{BEAK} = 2 \times 5 \times 1 \times 11 = 90, 90 + 3 = 93$$

इसलिए, विकल्प D सही उत्तर है।

44. B

Sol. विकल्प A की जांच करने पर:

$$8 + 12 \times 3 \div 1 = 4$$

परस्पर बदलाव के बाद:

$$8 \div 12 \times 3 + 1 = 4$$

यहाँ 8, 12 से पूर्णतः विभाज्य नहीं है। अतः, इसका परिणाम दशमलव में होगा।

तो, यह सही विकल्प नहीं है।

विकल्प B की जांच करने पर:

$$15 - 12 + 6 \div 2 = 15$$

परस्पर बदलाव के बाद:

$$15 - 12 \div 6 + 2 = 15$$

$$\text{या, } 15 - 2 + 2 = 15$$

$$\text{या, } 13 + 2 = 15$$

$$\text{या, } 15 = 15$$

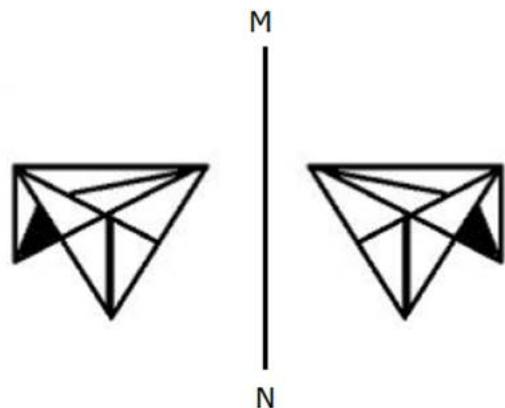
तो, यह सही विकल्प है।

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।

45. C

Sol. एक समतल दर्पण में, एक दर्पण छवि किसी वस्तु का प्रावर्तित प्रतिबिम्ब होती है जो लगभग समान दिखाई देती है, लेकिन यह दर्पण की सतह की लम्बवत दिशा में उलटी होती है। एक ऑप्टिकल प्रभाव के रूप में यह दर्पण या पानी जैसे पदार्थों के प्रतिबिम्ब के परिणामस्वरूप उत्पन्न होती है।

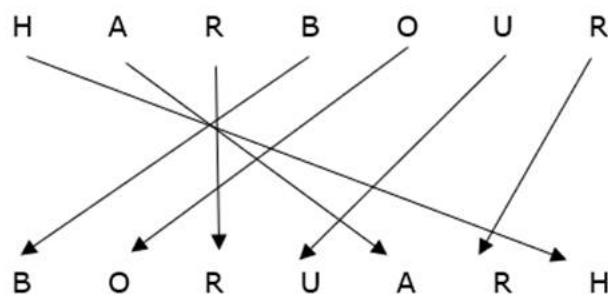


इसलिए, विकल्प C सही उत्तर है।

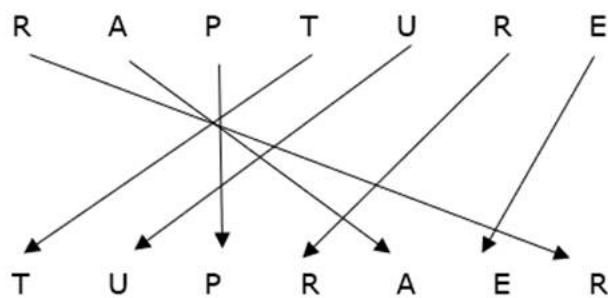
46. D

Sol.

as,



similarly,



इसलिए, विकल्प D सही उत्तर है।

47. C

Sol. जैसाकि,

Sour और Sweet विलोम शब्द हैं।

इसी प्रकार,

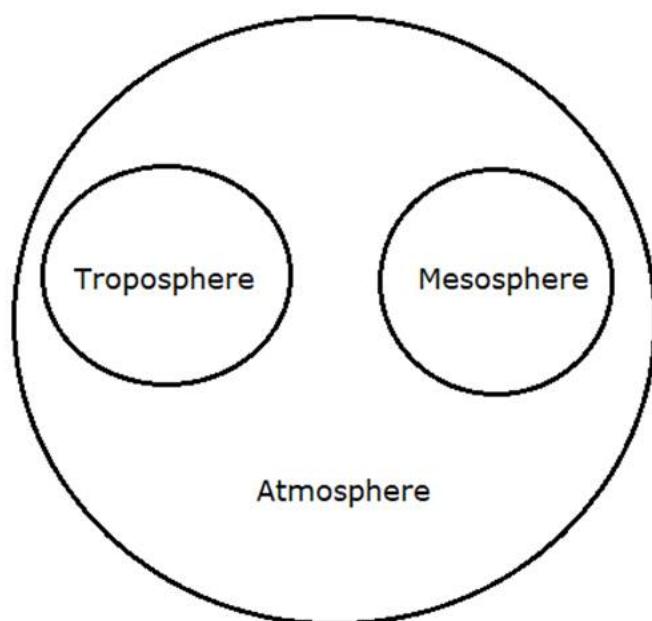
Wild और tame विलोम शब्द हैं।

इसलिए, विकल्प C सही उत्तर है।

48. A

Sol. वायुमंडल में क्षोभमंडल और मध्यमंडल दो अलग-अलग परतें हैं।

तो, सबसे अच्छा प्रतिनिधित्व है:



इसलिए, विकल्प A सही उत्तर है।

49. A

Sol. विकल्प A की जांच करने पर:

$$15 + 15 \div 15 - 15 \times 15 = 15$$

परस्पर बदलाव के बाद:

$$15 \times 15 \div 15 - 15 + 15 = 15$$

या,  $15 \times 1 = 15$

या,  $15 = 15$

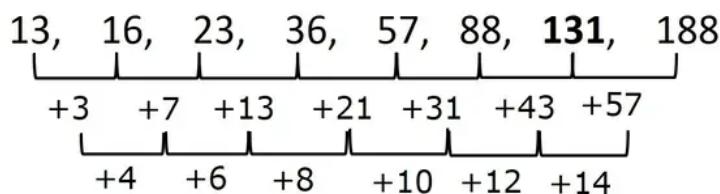
तो, यह सही विकल्प है।

जैसा कि, हमें सही उत्तर प्राप्त हो गया है, इसलिए अधिक विकल्पों की जांच करने की आवश्यकता नहीं है।

इसलिए, विकल्प A सही उत्तर है।

50. C

Sol. पैटर्न है -



इसलिए, विकल्प C सही उत्तर है।

51. D

Sol. Number of physics books = 10

Number of chemistry books = x

Let price of chemistry book = Rs. y

Price of physics book = Rs. 2y

Original bill for physics books = Rs. 10y

Original bill for chemistry books = Rs.  $2xy$

Original bill for all books = Rs.  $(10y + 2xy)$

While preparing the bill, the clerk interchanged the number of physics and chemistry books by mistake, which decreased the bill by  $12\frac{1}{2}\%$ .

Bill made by clerk for physics books = Rs.  $xy$

Bill made by clerk for chemistry books = Rs.  $20y$

Total bill made by clerk for all books = Rs.  $(xy + 20y)$

We know that  $12\frac{1}{2}\% = \frac{1}{8}$

Let original bill for all books =  $8x$

Total bill made by clerk for all books =  $8x - 8x \times \frac{1}{8} = 7x$

$$\Rightarrow \frac{10y + 2xy}{xy + 20y} = \frac{8}{7}$$

$$\Rightarrow \frac{10 + 2x}{x + 20} = \frac{8}{7}$$

$$\Rightarrow 70 + 14x = 8x + 160$$

$$\Rightarrow 6x = 90$$

$$\Rightarrow x = 15$$

Ratio of the number of physics books to the number of chemistry books in the original order =  
 $10 : 15 = 2 : 3$

52. B

Sol. Let seven consecutive even natural numbers are  $(x-6), (x-4), (x-2), x, (x+2), (x+4)$  and  $(x+6)$

The average of seven consecutive even natural numbers is 36.

$$\frac{(x-6)+(x-4)+(x-2)+x+(x+2)+(x+4)+(x+6)}{7} = 36$$

$\Rightarrow$

$$\Rightarrow \frac{7x}{7} = 36$$

$$\Rightarrow x = 36$$

Hence, First number =  $36 - 6 = 30$

53. B

Sol. An aeroplane covers a certain distance at a speed of 320 km/h in  $5\frac{1}{2}$  hours.

$$\text{Distance covered by aeroplane} = 320 \times \frac{11}{2} = 1760 \text{ km}$$

If aeroplane travels this distance in 4 hours then speed of aeroplane =  $\frac{1760}{4} = 440 \text{ km/hr}$

54. A

Sol. Number of applications received by college A in 2016 = 180

Total number of applications received by college A from 2015 to 2019 = 200 + 180 + 200 + 150 + 170 = 900

$$\text{Required percentage} = \frac{180}{900} \times 100 = 20\%$$

55. D

Sol. Average number of application received by college A from 2015 to 2019 =

$$\frac{200+180+200+150+170}{5} = \frac{900}{5} = 180$$

Average number of applications received by college B from 2015 to 2019 =

$$\frac{150+220+180+100+270}{5} = \frac{920}{5} = 184$$

$$\text{Required difference} = 184 - 180 = 4$$

56. C

Sol. Total number of applications received by college A in 2016 and 2017 together = (180 + 200) = 380

Total number of applications received by college B in 2016 and 2017 together = (220 + 180) = 400

$$\text{Required ratio} = 380 : 400 = 19 : 20$$

57. C

Sol.

The area of the four walls of a room is  $1152 \text{ m}^2$  and its length is  $\frac{5}{3}$  times its breadth.

Let breadth of room be  $x$  meter

$$\text{Length of room} = \left(\frac{5}{3}x\right) \text{ meter}$$

Height of the room = 12 meter

According to question:

$$\Rightarrow 2h(l+b) = 1152$$

$$\Rightarrow 2h\left(\frac{5}{3}x + x\right) = 1152$$

$$\Rightarrow 24\left(\frac{5}{3}x + x\right) = 1152$$

$$\Rightarrow 24\left(\frac{8}{3}x\right) = 1152$$

$$\Rightarrow \frac{8x}{3} = 48$$

$$\Rightarrow x = 18 \text{ meter}$$

Breadth of room = 18 meter

$$\text{Length of room} = \left( \frac{5}{3} \times 18 \right) \text{ meter} = 30 \text{ meter}$$

$$\text{Area of its floor} = 18 \times 30 = 540 \text{ m}^2$$

58. B

Sol. A person has left a sum of Rs. 1,45,600 to be divided among his two sons aged 15 years and 13 years now.

Both of them invested their shares on simple interest at 10% per annum. If both of them gets equal amounts when they attain 18 years of age.

Let original share received by younger son = Rs. x

Original share received by elder son = Rs.  $(145600 - x)$

According to question:

$$\Rightarrow x + \frac{x \times 10 \times 5}{100} = (145600 - x) + \frac{(145600 - x) \times 10 \times 3}{100}$$

$$\Rightarrow \frac{3x}{2} = (145600 - x) + 43680 - \frac{3x}{10}$$

$$\Rightarrow 2.8x = 189280$$

$$\Rightarrow x = 67600$$

Hence, original share received by younger son = Rs. 67600

59. B

Sol. Rs. 12,500 is invested at 12% p.a. on compound interest for one year and 4 months.

$$\text{Amount after one year} = 12500 \left(1 + \frac{12}{100}\right) = 12500 \times \frac{112}{100} = \text{Rs. } 14000$$

Principal after one year = Rs. 14000

Time = 4 months

$$\text{Interest of 4 months} = \frac{\frac{14000 \times 12 \times 4}{12 \times 100}}{100} = \text{Rs. } 560$$

Amount received after one year and 4 months = Rs. 14000 + Rs. 560 = Rs. 14560

60. D

Sol. Three numbers are in the ratio  $\frac{1}{4} : \frac{1}{5} : \frac{1}{3}$ .

$$\Rightarrow \frac{1}{4} : \frac{1}{5} : \frac{1}{3} = \frac{60}{4} : \frac{60}{5} : \frac{60}{3} = 15 : 12 : 20$$

Hence, three numbers are in the ratio 15:12:20

Let greatest number = 20x

Smallest number = 12x

$$\Rightarrow 20x - 12x = 800$$

$$\Rightarrow 8x = 800$$

$$\Rightarrow x = 100$$

Sum of three numbers =  $15x + 12x + 20x = 47x = 4700$

61. B

Sol. The ratio of the monthly income and expenditure of Dinesh is 17:14.

Let monthly income of Dinesh = Rs.  $17x$

Expenditure of Dinesh =  $14x$

Saving of Dinesh =  $17x - 14x = 3x$

$$\Rightarrow 3x = \text{Rs. } 12000$$

$$\Rightarrow x = \text{Rs. } 4000$$

Monthly income of Dinesh = Rs. 68000

Expenditure of Dinesh = Rs. 56000

His monthly income is increased by Rs. 10,000 and expenditure is decreased by Rs. 2,000.

New monthly income of Dinesh = Rs. 68000 + 10000 = Rs. 78000

New expenditure of Dinesh = Rs. 56000 – 2000 = Rs. 54000

New ratio of his income and expenditure = 78000 : 54000 = 13 : 9

62. D

Sol. 'A' alone can complete a piece of work for Rs. 4,800 in 16 days, but by engaging an assistant, the work is completed in 12 days.

Let total work = LCM (16,12) = 48 unit

$$\text{Efficiency of A} = \frac{48}{16} = 3 \text{ unit/day}$$

$$\text{Efficiency of A and assistant together} = \frac{48}{12} = 4 \text{ unit/day}$$

$$\text{Efficiency of assistant} = 4 - 3 = 1 \text{ unit/day}$$

$$\frac{1}{4} \times 4800 = \text{Rs.} 1200$$

Now, share to be received by the assistant =

63. B

Sol. Let cost price of radio = Rs. x

Cost price of TV set = Rs. y

A man sold a radio and a TV set together for Rs. 30,400, thereby making a profit of 25% on the radio and 10% on the TV set.

$$\Rightarrow \frac{125x}{100} + \frac{110y}{100} = 30400$$

$$\Rightarrow \frac{5x}{4} + \frac{11y}{10} = 30400$$

$$\Rightarrow y = \frac{10}{11} \times \left( 30400 - \frac{5x}{4} \right) \dots\dots(1)$$

By selling them together for Rs 30,700, he would have made a 10% profit on the radio and 25% on the TV set.

$$\Rightarrow \frac{110x}{100} + \frac{125y}{100} = 30700$$

$$\Rightarrow \frac{11x}{10} + \frac{5y}{4} = 30700$$

Put the value of y from (1)

$$\Rightarrow \frac{11x}{10} + \frac{5}{4} \left[ \frac{10}{11} \times \left( 30400 - \frac{5x}{4} \right) \right] = 30700$$

$$\Rightarrow \frac{11x}{10} + \frac{25}{22} \left[ \left( 30400 - \frac{5x}{4} \right) \right] = 30700$$

$$\Rightarrow \frac{11x}{10} + \frac{25}{22} \times 30400 - \frac{125}{88} x = 30700$$

$$\Rightarrow \frac{11x}{10} - \frac{125}{88}x = 30700 - \frac{25}{22} \times 30400$$

$$\Rightarrow \frac{968x - 1250x}{880} = \frac{675400 - 760000}{22}$$

$$\Rightarrow -\frac{282x}{880} = -\frac{84600}{22}$$

$$\Rightarrow x = \text{Rs. } 12000$$

Hence, cost price of radio = Rs. 12000

64. C

Sol. Let total number of candidates in examination =  $100x$

$$\text{Number of boys appeared in examination} = \frac{55}{100} \times 100x = 55x$$

$$\text{Number of girls appeared in examination} = \frac{45}{100} \times 100x = 45x$$

Percentage of boys passed in examination = 60%

Percentage of boys failed in examination =  $100\% - 60\% = 40\%$

Percentage of girls passed in examination = 75%

Percentage of girls failed in examination =  $100\% - 75\% = 25\%$

According to question:

$$\Rightarrow \frac{25}{100} \times 45x = 315$$

$$\Rightarrow 11.25x = 315$$

$$\Rightarrow x = 28$$

$$\text{Number of boys who failed} = \frac{40}{100} \times 55x = \frac{40}{100} \times 55 \times 28 = 616$$

65. D

Sol. The numbers 25, 34, 46, 48,  $2x+1$ ,  $4x+3$ , 105, 110, 114, 122 are written in ascending order and their median is 77.

Total number of observations = 10

if number of observations is even then median =

$$\frac{\left(\frac{n}{2}\right)^{th} \text{ term} + \left(\frac{n}{2}+1\right)^{th} \text{ term}}{2} = \frac{\left(\frac{10}{2}\right)^{th} \text{ term} + \left(\frac{10}{2}+1\right)^{th} \text{ term}}{2} = \frac{(5)^{th} \text{ term} + (6)^{th} \text{ term}}{2} = \frac{2x+1+4x+3}{2}$$

According to question:

$$\Rightarrow \frac{2x+1+4x+3}{2} = 77$$

$$\Rightarrow 6x+4=154$$

$$\Rightarrow 6x = 150$$

$$\Rightarrow x = 25$$

66. A

Sol. Two workers A and B are engaged to do a piece of work. A working alone would take 14 hours more to complete the work than when A and B work together. B working alone would take  $\frac{1}{3}$  hours more than when A and B work together.

Let time taken by A and B together to complete the work =  $x$  hours

Time taken by A to complete the work =  $(x+14)$  hours

Time taken by B to complete the work =  $\left(x + \frac{7}{2}\right)$  hours

Now,

$$\Rightarrow \frac{1}{x+14} + \frac{1}{x + \frac{7}{2}} = \frac{1}{x}$$

$$\Rightarrow \frac{\left(x + \frac{7}{2}\right) + (x+14)}{(x+14)\left(x + \frac{7}{2}\right)} = \frac{1}{x}$$

$$\Rightarrow x\left(2x + \frac{35}{2}\right) = x^2 + \frac{7}{2}x + 14x + 49$$

$$\Rightarrow 2x^2 + \frac{35x}{2} = x^2 + \frac{35x}{2} + 49$$

$$\Rightarrow x^2 = 49$$

$$\Rightarrow x = 7$$

Hence, time required to finish the work together = 7 hours

67. C

Sol. Let marked price of article = Rs. 100x

$$\text{Selling price of an article when sold at 18\% discount} = 100x - 100x \times \frac{18}{100} = \text{Rs. } 82x$$

$$\text{Selling price of an article when sold at 10.5\% discount} = 100x - 100x \times \frac{10.5}{100} = \text{Rs. } 89.5x$$

According to question:

$$\Rightarrow 89.5x - 82x = 192$$

$$\Rightarrow 7.5x = 192$$

$$\Rightarrow x = 25.6$$

$$\text{Marked price of the article} = 100x = 100 \times 25.6 = \text{Rs. } 2560$$

68. B

Sol. The average of 40% of a number and 33% of the same number is 73.

Let number = x

$$\Rightarrow \frac{\frac{40x}{100} + \frac{33x}{100}}{2} = 73$$

$$\Rightarrow \frac{40x}{100} + \frac{33x}{100} = 146$$

$$\Rightarrow 73x = 14600$$

$$\Rightarrow x = 200$$

$$\text{Average of } \frac{1}{5} \text{ th and } \frac{1}{4} \text{ th of that number} = \frac{\frac{1}{5} \times 200 + \frac{1}{4} \times 200}{2} = \frac{40 + 50}{2} = 45$$

69. C

Sol. The radius of the base of a cone and also that of a hemisphere each is 14 cm.

Also, the volumes of these two solids are equal.

$$\Rightarrow \frac{2}{3} \pi r^3 = \frac{1}{3} \pi \times (r)^2 h$$

$$\Rightarrow \frac{2}{3} \pi \times (14)^3 = \frac{1}{3} \pi \times (14)^2 h$$

$$\Rightarrow 2 \times (14) = h$$

$$\Rightarrow h = 28 \text{ cm}$$

Hence, height of cone = 28 cm

$$\text{Slant height of cone} = \sqrt{(14)^2 + (28)^2} = \sqrt{196 + 784} = \sqrt{980} \text{ cm}$$

$$\text{Curved surface area of the cone} = \pi r l = \frac{22}{7} \times 14 \times \sqrt{980} = 616\sqrt{5} \text{ cm}^2$$

70. C

Sol. The slant height and the diameter of the base of a right circular cone are 34 cm and 32 cm.

Radius of the base of a right circular cone = 16 cm

$$\text{Height of a right circular cone} = \sqrt{(34)^2 - (16)^2} = \sqrt{1156 - 256} = \sqrt{900} = 30 \text{ cm}$$

$$\text{Volume of a right circular cone} = \frac{1}{3} \pi r^2 h = \frac{1}{3} \pi \times (16)^2 \times 30 = 2560\pi \text{ cm}^3$$

71. B

Sol. Volume of a cube =  $375\sqrt[3]{3}$  cm<sup>3</sup>

Let side of cube = x cm

$$\Rightarrow x^3 = 375\sqrt[3]{3}$$

$$\Rightarrow x = 5\sqrt[3]{3} \text{ cm}$$

$$\text{Diagonal of cube} = \sqrt{3}x = \sqrt{3} \times 5\sqrt[3]{3} = 15 \text{ cm}$$

72. C

Sol. Let x and y are two numbers.

Sum of two numbers is 60 and their product is 875.

$$\Rightarrow x + y = 60 \dots\dots\dots(1)$$

$$\Rightarrow xy = 875 \dots\dots\dots(2)$$

$$(x-y) = \sqrt{(x+y)^2 - 4xy} = \sqrt{(60)^2 - 4(875)} = \sqrt{3600 - 3500} = 10 \quad \dots \dots \dots (3)$$

Adding (1) and (2)

$$\Rightarrow 2x = 70$$

$$\Rightarrow x = 35$$

Put the value of x in (1)

$$\Rightarrow y = 60 - 35 = 25$$

HCF of two numbers = HCF (35,25) = 5

73. B

Sol. Vaishnav left from place A at 11 a.m. for place B, and Suman left from place B at 2 p.m. for place A. The distance between them is 516km.

Vaishnav's speed is 44 km/h and Suman's speed is 52 km/h.

Distance travelled by Vaishnav in 3 hours =  $44 \times 3 = 132$  km

Remaining distance between Vaishnav and Suman =  $516 - 132 = 384$  km

After 2 P.M. they move towards each other.

Let Distance travelled by Vaishnav after 2 P.M. =  $x$  km

Distance travelled by Suman after 2 P.M. =  $(384-x)$  km

Now, Time to cover  $x$  km distance by Vaishnav = Time to cover  $(384-x)$  km distance by Suman

$$\Rightarrow \frac{x}{44} = \frac{384-x}{52}$$

$$\Rightarrow 52x = 16896 - 44x$$

$$\Rightarrow 96x = 16896$$

$$\Rightarrow x = 176$$

Distance travelled by Vaishnav after 2 P.M. = 176 km

Time to cover 176 km distance by Vaishnav =  $\frac{176}{44} = 4$  hour

Therefore, they meet each other after 4 hours post 2 P.M.

Time of their meeting = 2 P.M. + 4 hours = 6 P.M.

74. D

Sol. Prasad bought 12 TV sets at Rs. 18,000 each and sold all of them at a total price of Rs. 2,59,200.

Cost price of 12 TV sets =  $12 \times 18000 = \text{Rs. } 216000$

Selling price of 12 TV sets = Rs. 259200

Profit = Rs. 259200 – Rs. 216000 = Rs. 43200

$$\text{Profit \%} = \frac{43200}{216000} \times 100 = 20\%$$

75. A

Sol.  $21 \times [(9 - 4) \div \{(8 \div 8 \text{ of } 4) + (4 \div 4 \text{ of } 2)\}]$

Using BODMAS:

$$\Rightarrow 21 \times \left[ 5 \div \left( \frac{1}{4} + \frac{1}{2} \right) \right]$$

$$\Rightarrow 21 \times \left[ 5 \div \left( \frac{3}{4} \right) \right]$$

$$\Rightarrow 21 \times \left[ 5 \times \frac{4}{3} \right] = 140$$

76. C

Sol.

- नितिन गडकरी जुलाई 2020 तक केंद्रीय सङ्क परिवहन और राजमार्ग मंत्री थे।
- वह सङ्क परिवहन और राजमार्ग मंत्री के पद पर सबसे लंबे समय तक सेवा करने वाले मंत्री हैं जो वर्तमान में अपने पद पर 7 वर्षों से अधिक का समय दे चुके हैं।
- उन्हें महाराष्ट्र राज्य के लोक निर्माण विभाग मंत्री के रूप में उनके काम के लिए भी जाना जाता है।

• थावर चंद गहलोत मध्य प्रदेश से कर्नाटक के राज्यपाल के रूप में सेवा करने वाले पहले व्यक्ति हैं।

• किरेन रिजिजू वर्तमान में भारत सरकार में कानून और न्याय मंत्री के रूप में कार्यरत हैं।

• पीयूष गोयल वर्तमान में कपड़ा मंत्री और उपभोक्ता मामले, खाद्य और सार्वजनिक वितरण मंत्री हैं।

77. D

Sol. • जिम्नास्ट दीपा कर्माकर त्रिपुरा राज्य से ताल्लुक रखती हैं।

• उन्होंने 2014 राष्ट्रमंडल खेलों में कांस्य पदक जीता और खेलों के इतिहास में ऐसा करने वाली पहली भारतीय महिला जिम्नास्ट बनीं।

• वह जुलाई 2018 में एक वैश्विक कार्यक्रम में स्वर्ण पदक जीतने वाली पहली भारतीय जिम्नास्ट बनीं।

• त्रिपुरा अपने हस्तशिल्प, विशेष रूप से हाथ से बुने हुए सूती कपड़े, लकड़ी की नक्काशी और बांस उत्पादों के लिए जाना जाता है।

• यह देश का तीसरा सबसे छोटा राज्य है और भारत में सबसे अधिक साक्षर राज्यों में से एक है।

• महाराष्ट्र भारत में सबसे अधिक औद्योगीकृत राज्यों में से एक है और भारत में क्षेत्रफल के हिसाब से तीसरा सबसे बड़ा राज्य है।

78. C

Sol. • कोल्लेरु झील आंध्र प्रदेश राज्य में स्थित है।

• यह आंध्र प्रदेश राज्य में स्थित भारत की सबसे बड़ी मीठे पानी की झीलों में से एक है और एशिया में सबसे बड़ी उथले मीठे पानी की झील बनाती है।

• इसे मौसमी बुडामेरु और तामिलेरु धाराओं के पानी से सीधे सिंचित किया जाता है।

• यह अनुमानित 20 मिलियन निवासियों और प्रवासी पक्षियों के लिए एक महत्वपूर्ण निवास स्थान था।

• यह भारत के सबसे महत्वपूर्ण आदर्शभूमि में से एक है और यह एलुरु शहर के पास गोदावरी और कृष्णा नदी के डेल्टा के बीच स्थित है।

79. B

Sol. • अकीरा योशिनो 2019 में भौतिकी में नोबेल पुरस्कार के सह-प्राप्तकर्ता नहीं थे।

• उन्होंने पहली सुरक्षित, उत्पादन-योग्य लिथियम-आयन बैटरी बनाई जो सेलुलर फोन और नोटबुक कंप्यूटरों में व्यापक रूप से उपयोग की जाने लगी।

• उन्हें 2019 में रसायन विज्ञान में नोबेल पुरस्कार से सम्मानित किया गया था।

• नोबेल पुरस्कारों को व्यापक रूप से उनके संबंधित क्षेत्रों में उपलब्ध सबसे प्रतिष्ठित पुरस्कारों के रूप में माना जाता है।

- उन्हें भौतिकी, रसायन विज्ञान, शरीर क्रिया विज्ञान या चिकित्सा, साहित्य और शांति के क्षेत्र में सम्मानित किया जाता है।

- उन्हें पहली बार 1901 में सम्मानित किया गया था और पुरस्कार समारोह प्रतिवर्ष आयोजित किए जाते हैं।

80. B

Sol. • सितंबर 2020 तक, राज्यसभा का सदस्य बनने के लिए किसी की आयु 30 वर्ष से कम नहीं होनी चाहिए।

- राज्यसभा भारत की द्विसदनीय संसद का ऊपरी सदन है और इसे भारतीय संसद में बुजुर्गों का घर कहा जाता है।

- इसकी अधिकतम सदस्यता 245 है और 233 राज्यों के विधानमंडलों द्वारा चुने जाते हैं।

- यह एक स्थायी सदन है और इसकी पहली बैठक 13 मई 1952 को हुई थी।

- राज्यसभा में तीन प्रकार के प्रतिनिधित्व होते हैं:

a) राज्य सभा में राज्यों का प्रतिनिधित्व

b) राज्यसभा में केंद्र शासित प्रदेशों का प्रतिनिधित्व

c) राज्य सभा में मनोनीत सदस्यों का प्रतिनिधित्व

81. C

Sol. • आब्सटेट्रिक्स (Obstetrics), गर्भावस्था, प्रसव और प्रसवोत्तर अवधि पर केंद्रित अध्ययन का क्षेत्र है।

- यह गर्भावस्था, प्रसव और प्रसवोत्तर अवधि पर केंद्रित अध्ययन का क्षेत्र है।

- ऑन्कोलॉजी (Oncology) कैंसर का अध्ययन है और कैंसर की रोकथाम, निदान और उपचार से भी संबंधित है।

- ऑप्थल्मोलॉजी (Ophthalmology) चिकित्सा की एक शाखा है जो नेत्र विकारों के निदान और उपचार से संबंधित है।

- ओर्थोपेडिक्स (Orthopedics) शल्य चिकित्सा की वह शाखा है जो मस्कुलोस्केलेटल प्रणाली से संबंधित स्थितियों से संबंधित है।

82. C

Sol. • विश्वनाथ प्रताप सिंह भारत के पूर्व राष्ट्रपति नहीं हैं।

- वह 1989 से 1990 तक भारत के 7वें प्रधानमंत्री और मांडा के 41वें राजा बहादुर थे।

- वह भारत के एकमात्र ऐसे प्रधानमंत्री हैं जो पूर्व जर्मींदार रह चुके हैं।

- शंकर दयाल शर्मा भारत के नौवें राष्ट्रपति और भारत के आठवें उपराष्ट्रपति थे।

- ज्ञानी जैल सिंह 1982 से 1987 तक भारत के पहले सिख राष्ट्रपति थे।
- केआर नारायणन ने भारत के दसवें राष्ट्रपति और भारत के नौवें उपराष्ट्रपति के रूप में कार्य किया।
- उन्हें एक स्वतंत्र और मुखर राष्ट्रपति के रूप में माना जाता है।

83. A

Sol. ● अमर्त्य सेन को 1998 में अर्थशास्त्र का नोबेल पुरस्कार मिला।

- उन्होंने कल्याणकारी अर्थशास्त्र, सामाजिक विकल्प सिद्धांत, आर्थिक और सामाजिक न्याय में योगदान दिया है।
- वैशिक न्याय के मुद्दों को संबोधित करने और शिक्षा और स्वास्थ्य सेवा में सामाजिक असमानता का मुकाबला करने के लिए उनकी अग्रणी छात्रवृत्ति के लिए उन्हें जर्मन बुक ट्रेड के 2020 शांति पुरस्कार से सम्मानित किया गया।
- नोबेल पुरस्कार व्यापक रूप से अपने संबंधित क्षेत्रों में उपलब्ध सबसे प्रतिष्ठित पुरस्कारों के रूप में माने जाते हैं।
- उन्हें भौतिकी, रसायन विज्ञान, शरीर किरण विज्ञान या चिकित्सा, साहित्य और शांति के क्षेत्र में सम्मानित किया जाता है।
- उन्हें पहली बार 1901 में सम्मानित किया गया था और पुरस्कार समारोह प्रतिवर्ष आयोजित किए जाते हैं।

84. A

Sol. ● दूधसागर जलप्रपात गोवा राज्य में है।

- यह मंडोवी नदी पर स्थित एक चार-स्तरीय जलप्रपात है।
- यह भारत के सबसे ऊँचे झरनों में से एक है जिसकी ऊँचाई 310 मीटर और औसत चौड़ाई 30 मीटर है।
- इसे कुछ स्थानीय लोगों के लिए तांबड़ी सुरला के नाम से भी जाना जाता है।
- दुदुमा जलप्रपात भारत के कोरापुट और विशाखापत्तनम जिलों की सीमा पर स्थित है।
- शिवनासमुद्र जलप्रपात कर्नाटक में एक जलप्रपात है और यह कावेरी नदी के किनारे स्थित है।
- यह एक खंडित जलप्रपात है और अधिकतम दर्ज की गई मात्रा 18,887 घन मीटर प्रति सेकंड है।

85. A

Sol. ● बादामी चालुक्यों की प्रारंभिक राजधानी थी।

- यह 540 से 757 ईस्वी तक बादामी चालुक्यों की राज राजधानी थी।
- यह अगस्त्रय झील के चारों ओर एक ऊबड़-खाबड़, लाल बलुआ पत्थर की चौकी के तल पर एक खड़ड में स्थित है।

- चालुक्य वंश दक्षिण भारत के इतिहास में एक महत्वपूर्ण मील का पत्थर और कर्नाटक के इतिहास में एक स्वर्ण युग का प्रतीक है।
- पल्लव वंश एक भारतीय राजवंश था जो 275 ईस्वी से 897 ईस्वी तक अस्तित्व में था।
- मौर्य साम्राज्य पहला अखिल भारतीय साम्राज्य था और इसका गठन लगभग 321 ईसा पूर्व हुआ था और 185 ईसा पूर्व में समाप्त हुआ था।

86. B

Sol. • क्यूरियम का रासायनिक प्रतीक Cm है।

- यह एक ट्रांसयूरानिक, रेडियोधर्मी रासायनिक तत्व है और एकिटनॉइड शृंखला के तत्वों में से एक है।
- यह अब तक खोजा गया तीसरा ट्रांसयूरोनियम तत्व माना जाता है।
- क्रोमियम का रासायनिक प्रतीक Cr है और यह समूह 6 में पहला तत्व है।
- यह एक फौलादी-धूसर, चमकदार, कठोर और भंगुर संकरण धातु है।
- कॉपर का रासायनिक प्रतीक Cu है और यह प्रकृति में मुक्त धात्विक अवस्था में पाया जाता है।
- यह बहुत ही उच्च तापीय और विद्युत चालकता के साथ एक नरम, लचीला और नमनीय धातु है।

87. A

Sol. • संयुक्त राष्ट्र के सतत विकास लक्ष्यों के संदर्भ में पहला लक्ष्य कोई गरीबी नहीं है।

- इसका मुख्य उद्देश्य गरीबी को हर रूप में, हर जगह खत्म करना है।
- लक्ष्य संख्या दो भूख को समाप्त करना, खाद्य सुरक्षा प्राप्त करना और पोषण में सुधार करना और स्थायी कृषि को बढ़ावा देना है।
- देशों के भीतर और देशों के बीच असमानता को कम करना लक्ष्य संख्या दस है।
- उद्योग, नवाचार और बुनियादी ढांचा लक्ष्य संख्या नौ है।
- यह लचीला बुनियादी ढांचे के निर्माण, समावेशी और टिकाऊ औद्योगीकरण को बढ़ावा देने और नवाचार को बढ़ावा देने में मदद करता है।

88. A

Sol. • लॉर्ड लिटन ने 1877 में महारानी विक्टोरिया को भारत की महारानी के रूप में स्वीकार करने के लिए एक दरबार का आयोजन किया।

- 1876-1878 के महान भारतीय अकाल से निपटने के कारण उन्हें आमतौर पर एक क्रूर वायसराय माना जाता है।
- लॉर्ड रिपन को स्थानीय स्वशासन के पिता के रूप में जाना जाता था और उन्होंने वर्ष 1882 में स्थानीय स्वशासन की शुरुआत की थी।

- वह ब्रिटिश भारत के सबसे उदार और लोकप्रिय वायसराय में से एक थे।
- लॉर्ड मिंटो ने 1905 से 1910 तक भारत के गवर्नर-जनरल और वायसराय के रूप में कार्य किया।
- लॉर्ड डफरिन को अब अपने समय के सबसे सफल राजनियों में से एक के रूप में जाना जाता है।

89. B

Sol. • पश्चिम बंगाल वन विभाग ने राज्य के दक्षिण-पश्चिमी जिलों में खराब हो चुके साल वनों को पुनर्जीवित करने में अपनी विफलताओं को पहचाना।

- साल का पेड़ डिप्टरोकार्पेसी परिवार में वृक्ष की एक प्रजाति है।
- इसे आदिवासी देवी का घर माना जाता है और इसे एक पवित्र वृक्ष के रूप में महत्व दिया जाता है।
- यह आमतौर पर इसके कसैले गुण के कारण दस्त और पेचिश को रोकने के लिए प्रयोग किया जाता है।
- इसका धार्मिक, औषधीय और व्यावसायिक महत्व भी है।

90. C

Sol. • राजा राव 'कंठपुरा' पुस्तक के लेखक हैं।

- वह अंग्रेजी में भारतीय लेखन के संस्थापक स्तंभों में से एक थे जिन्होंने भारतीय तत्त्वमीमांसा और दर्शन को अपने काल्पनिक काम में शामिल करने का प्रयास किया।
- सीताकांत महापात्रा एक प्रख्यात भारतीय कवि और ओडिया के साथ-साथ अंग्रेजी के साहित्यिक आलोचक हैं।
- नीरद सी चौधरी 20वीं सदी के सबसे प्रसिद्ध भारतीय कथा लेखकों में से एक थे।
- वह प्रतिष्ठित डफ कूपर मेमोरियल अवार्ड से सम्मानित होने वाले एकमात्र भारतीय हैं।
- कमला दास को कविताओं और स्पष्ट आत्मकथा के लिए जाना जाता है।
- वह अपनी कई मलयालम लघु कथाओं और अंग्रेजी में लिखी कविताओं के लिए विख्यात थीं।

91. D

Sol. • गोलकुंडा का किला काकतीय वंश द्वारा बनवाया गया था।

- यह कुतुब शाही वंश द्वारा निर्मित और हैदराबाद, तेलंगाना में स्थित एक मजबूत गढ़ है।

- नीमराना किले ने अपने शानदार किले महल के कारण लोकप्रियता हासिल की है जिसे एक लक्जरी होटल में बदल दिया गया है।
- रायगढ़ भारत के महाराष्ट्र राज्य के रायगढ़ जिले के महाड में स्थित एक पहाड़ी किला है।
- यह दक्कन के पठार पर सबसे मजबूत किलों में से एक है और इसे छत्रपति शिवाजी महाराज द्वारा बनवाया गया था।
- पन्हाला किले को सांपों का किला भी कहा जाता है क्योंकि यह आकार में टेढ़ा है।

92. D

Sol. • ओजोन के एक अणु में ऑक्सीजन के तीन परमाणु होते हैं।

- यह एक अकार्बनिक अणु है जिसका रासायनिक सूत्र O<sub>3</sub> है।
- यह पृथ्वी के वायुमंडल के भीतर पराबैंगनी प्रकाश और विद्युत निर्वहन की क्रिया द्वारा डाइऑक्सिन से बनता है।
- इसे इलेक्ट्रोकेमिकल सेल के एनोड पर ऑक्सीजन से भी बनाया जा सकता है।
- ऑक्सीजन पृथ्वी का सबसे प्रचुर तत्व है और यह ब्रह्मांड में तीसरा सबसे प्रचुर तत्व है।
- यह एक रंगहीन, गंधहीन, स्वादहीन गैस है जो जीवों के लिए आवश्यक है।

93. D

Sol. • भुसावल कर्नाटक का शहर नहीं है।

- यह भारत के महाराष्ट्र राज्य में जलगाँव जिले में एक शहर और साथ ही एक नगरपालिका परिषद है।
- यह तापी नदी के तट पर स्थित है और इसकी औसत ऊंचाई 209 मीटर है।
- चित्रदुर्ग कर्नाटक का एक प्रमुख पर्यटन केंद्र है।
- यह अपने किले के लिए प्रसिद्ध है जिसे स्थानीय रूप से कलिना कोटे या स्टोन किले के रूप में जाना जाता है।
- बीजापुर शहर आदिल शाही वंश के शासन के दौरान निर्मित स्थापत्य महत्व के अपने ऐतिहासिक स्मारकों के लिए जाना जाता है।

94. D

Sol. • गुरु केलू चरण महापात्र का नाम मुख्य रूप से ओडिसी से जुड़ा है।

- ओडिसी एक प्रमुख प्राचीन भारतीय शास्त्रीय नृत्य है जिसकी उत्पत्ति ओडिशा के हिंदू मंदिरों में हुई थी।
- यह माझकल जैक्सन के 1991 के हिट सिंगल ब्लैक या व्हाइट में मौजूद एकमात्र भारतीय नृत्य रूप था।

- मोहिनीअट्टम एक भारतीय शास्त्रीय नृत्य है जो भारत के केरल राज्य में विकसित हुआ है।
- सत्तारिया भारत का एक शास्त्रीय नृत्य है, जिसकी जड़ें भारत के प्राचीन नाटक और संगीत ग्रंथों में हैं।
- कथक भारतीय शास्त्रीय नृत्य के आठ प्रमुख रूपों में से एक है और यह इस्लामी तत्वों को प्रदर्शित करने वाला एकमात्र भारतीय शास्त्रीय नृत्य है।

95. C

Sol. • एक परिसंपत्ति जो 12 महीने की अवधि के लिए घटिया श्रेणी में बनी हुई है, उसे एक बैंक द्वारा एक संदिग्ध संपत्ति के रूप में वर्गीकृत किया जाता है।

- एक हानि संपत्ति वह है जहां बैंक या आंतरिक या बाहरी लेखा परीक्षकों या आरबीआई निरीक्षण द्वारा नुकसान की पहचान की गई है, लेकिन राशि पूरी तरह से बढ़ते खाते में नहीं डाली गई है।
- एक गैर-निष्पादित परिसंपत्ति उन ऋणों या अग्रिमों के वर्गीकरण को संदर्भित करती है जो डिफॉल्ट रूप से या बकाया राशि में हैं।
- यह एक ऋण या अग्रिम है जिसके लिए मूलधन या ब्याज भुगतान 90 दिनों की अवधि के लिए अतिदेय रहता है।
- एक तरल संपत्ति एक ऐसी संपत्ति है जिसे कम समय में आसानी से नकदी में परिवर्तित किया जा सकता है।

96. A

Sol. • शॉर्टघर्झ अफगानिस्तान में स्थित हड्ड्या स्थल है।

- यह 2000 ईसा पूर्व के आसपास स्थापित सिंधु घाटी सभ्यता का एक व्यापारिक उपनिवेश था।
- इसे सिंधु घाटी सभ्यता की सबसे उत्तरी बस्ती माना जाता है।
- नागेश्वर को भारत में पहला हड्ड्या शैल-कार्य स्थल माना जाता है।
- कालीबंगा उत्तरी राजस्थान राज्य, उत्तर-पश्चिमी भारत में सिंधु घाटी सभ्यता का एक प्राचीन स्थल है।
- बालाकोट पाकिस्तान के चार ज्ञात प्राचीन तटीय स्थलों में से एक है।

97. D

Sol. • भारत ने 2010 में राष्ट्रमंडल खेलों की मेजबानी की थी।

- यह दिल्ली और भारत में आयोजित होने वाला सबसे बड़ा अंतरराष्ट्रीय बहु-खेल आयोजन भी था।
- यह एक अंतरराष्ट्रीय बहु-खेल आयोजन था जो 3 से 14 अक्टूबर 2010 तक आयोजित किया गया था।

- राष्ट्रमंडल खेल एक अंतरराष्ट्रीय बहु-खेल आयोजन है जिसमें राष्ट्रमंडल राष्ट्रों के एथलीट शामिल होते हैं।
- वे पहली पूर्ण समावेशी अंतर्राष्ट्रीय बहु-खेल आयोजन थे।
- वे पहले वैश्विक बहु-खेल आयोजन बन गए, जिसमें पुरुषों और महिलाओं के पदक की समान संख्या शामिल थी।
- अगले राष्ट्रमंडल खेल 28 जुलाई से 8 अगस्त 2022 तक बर्मिंघम में होने हैं।

98. B

Sol. • अभंग भवित्ति काव्य का एक रूप है जो भगवान विठोबा की स्तुति में गाया जाता है।

- वे साम्यवादी अनुभव की अधिक विपुल अभिव्यक्ति हैं।
- उन्हें भक्तों द्वारा पंढरपुर के मंदिरों की तीर्थयात्रा के दौरान गाया जाता है।
- तेवरम बारह-खंड संग्रह तिरुमुराई के पहले सात खंडों को दर्शाता है।
- भटियाली बांग्लादेश और पश्चिम बंगाल दोनों में लोक संगीत का एक रूप है।
- यह ज्यादातर वृहद तटवर्ती बंगाल डेल्टा के कई भागों में गाया जाता है।

99. B

Sol. • सत्येंद्र नाथ बोस पदम विभूषण पाने वाले पहले व्यक्ति थे।

- उन्हें 1920 के दशक की शुरुआत में क्वांटम यांत्रिकी पर अपने काम के लिए जाना जाता है।
- हर गोबिंद खुराना ने एंजाइमों की मदद से विभिन्न आरएनए श्रृंखलाओं का निर्माण करके इस क्षेत्र में महत्वपूर्ण योगदान दिया।
- वह प्रोटीन संश्लेषण में न्यूकिलयोटाइड की भूमिका का प्रदर्शन करने वाले पहले वैज्ञानिकों में से एक थे और आनुवंशिक कोड को तोड़ने में मदद की।
- जॉन मथाई ने भारत के पहले रेल मंत्री के रूप में कार्य किया।
- जेआरडी टाटा भारत में पहले लाइसेंस प्राप्त पायलट बने और उन्हें टाटा समूह के तहत कई उद्योगों के संस्थापक होने के लिए भी जाना जाता है।

100. C

Sol. • उपभोक्ता संरक्षण अधिनियम, 1986 के अनुसार यदि दावे का मूल्य 20 लाख रुपये तक है तो जिला उपभोक्ता विवाद निवारण फोरम में शिकायत दर्ज की जा सकती है।

- उपभोक्ता संरक्षण अधिनियम, 1986 भारतीय संसद द्वारा पारित किया गया और दिसंबर 1986 में लागू हुआ।
- इसे उपभोक्ताओं के हितों की रक्षा करने के साथ-साथ उपभोक्ता समस्याओं से निपटने के लिए राज्य निकायों की स्थापना के लिए पारित किया गया था।
- वे उपभोक्ता विवादों, संघर्षों और शिकायतों से निपटते हैं।
- राज्य उपभोक्ता विवाद निवारण आयोग किसी भी उपभोक्ता विवाद को लेता है जहां अपीलकर्ता का मुआवजे का दावा 20 लाख की राशि से अधिक है, लेकिन 1 करोड़ रुपये से अधिक नहीं है।
- राष्ट्रीय उपभोक्ता विवाद निवारण आयोग किसी भी उपभोक्ता विवाद को लेता है जहां अपीलकर्ताओं का मुआवजे का दावा 1 करोड़ रुपये से अधिक है।