

## Verbal Ability in English

**Directions (Q. No. 1-3):** The following question, consists of an incomplete sentence or a sentence which is split into four parts. All four parts are jumbled up and are named as P, Q, R and S. These four parts are not given in their proper order. Arrange the jumbled parts of the sentence and find out which of the four combinations from the given options will correctly complete the sentence.

1. "The Indian Civil Service gradually developed into one of the most powerful civil services; \_\_\_\_\_ though these qualities obviously served British, and not Indian interests."

P: independence, integrity, and hard work  
Q: and often participated in the making of policy,

R: and developed a certain tradition of

S: its members exercised vast power

- (a) SQRP (b) QPRS  
(c) RSQP (d) PRSQ

2. "The decomposers \_\_\_\_\_ into the soil, air, and water."

P: help in decomposing the

Q: and hence help to clean the environment

R: dead bodies of plants and animals

S: and put back various useful elements

- (a) SPRQ (b) PRQS  
(c) QSPR (d) PQRS

3. "Thick glass may \_\_\_\_\_ glass requires personal attention."

P: of the home bottle-cutters

Q: which are available

R: in many large stores, but any fine

S: be cut with one

- (a) SPQR (b) RPSQ  
(c) PQSR (d) QSPR

**Directions (Q. No. 4-6):** Read the passage given below and then answer the questions given below the passage.

".....X....., farmers have used a variety of methods to protect their crops from pests and diseases. They have put herb-based poisons on crops, handpicked insects off plants, bred strong varieties of crops, and rotated crops to .....Y.....

insects. Now, almost all farmers, especially in developed countries, .....Z..... on chemicals to control pests."

4. Select the most appropriate word from the options against X,

- (a) Occasionally (b) Mainly  
(c) Traditionally (d) Fanatically

5. Select the most appropriate word from the options against Y.

- (a) control (b) bred  
(c) heed (d) maintain

6. Select the most appropriate word from the options against Z.

- (a) based (b) rely  
(c) perceive (d) lay

**Directions (Q. No. 7-9):** Fill in the blank with the most appropriate word from the given options.

7. "The diner complained that his meal was too \_\_\_\_\_ to consume."

- (a) wobble (b) pure  
(c) brackish (d) delicious

8. "He returned to the castle, stopping at the sound of \_\_\_\_\_ from the direction of the forest."

- (a) calm (b) commotion  
(c) peace (d) quiet

9. "Alcohol deaddiction centers try to \_\_\_\_\_ behavioral changes in the lifestyle of addicts by keeping them busy in various activities."

- (a) bring about (b) bring in  
(c) bring out (d) bring off

**Directions (Q. No. 10-11):** Choose the word which is opposite in meaning to the given word.

10. "Colossal"

- (a) Giant (b) Dark  
(c) Small (d) Opaque

11. "Intrinsic"

- (a) Benefit (b) Acquired  
(c) Extravagant (d) Intensive

12. Choose the word which best expresses the meaning of the given word.

"Proponent"

- (a) Supporter (b) Opponent  
(c) Passive (d) Bestow

13. Choose the meaning of the given idiom.

"Haul over the coals"

- (a) To scold (b) To barter  
(c) To pretend (d) To prevail

14. Choose the most appropriate word explaining the sentence or the phrase.

"A divine force that some people believe controls our lives and in a way protects us is called \_\_\_\_\_"

- (a) Providence (b) Universal  
(c) Spiritual (d) Metaphysics

15. Choose the meaning of the given idiom.

"Take time by the forelock"

- (a) To take revenge  
(b) To take for granted  
(c) To be late  
(d) To seize an opportunity

16. Fill in the blank with the most appropriate word from the given options.

"You must \_\_\_\_\_ to the rules followed by our company."

- (a) obey (b) adhere  
(c) ought (d) pursue

17. Choose the phrase that can be filled in the blank to make the sentence most meaningful and correct.

"An honest person lives by \_\_\_\_\_?"

- (a) The sweat of one's brows  
(b) A sight for sore eyes  
(c) Long arm of the law  
(d) Foot in the mouth

18. Fill in the blank with the most appropriate word from the given options.

"A light breeze \_\_\_\_\_ the forest fire and made it more dangerous."

- (a) give up (b) riled up  
(c) fanned (d) enraged

19. Choose the word which best expresses the meaning of the given word.

"Precarious"

- (a) Uncertain (b) Perfect  
(c) Perpetual (d) Certain

20. Select the antonym of "Engender"

- (a) Cause (b) Subdue  
(c) Conserve (d) Restrain

21. Choose the word that expresses the meaning of the given word.  
"Rout"  
(a) Debate (b) Discussion  
(c) Defeat (d) Ending
22. Choose the pair of words that best expresses the relationship like the original pair.  
"Shame : Honor"  
(a) Hypocrisy : Deception  
(b) Daring : Courageous  
(c) Cautious : Hasty  
(d) Humility : Resignation
23. Choose the pair of words that best expresses the relationship like the original pair.  
"Exterminate : Eradicate"  
(a) Dismantle : Fabricate  
(b) Gentle : Ferocious  
(c) Example : Epitome  
(d) Truth : Fallacy
24. Choose the part of the sentence with an error.  
"If I am the principal (A) / of the school (B) / I would make co-curricular activities compulsory for each student (C) / No Error (D)"  
(a) A (b) B  
(c) C (d) D
25. Choose the part of the sentence with an error.  
"My senior asked me (A) / whether I was interested (B) / to joining the group for the skit. (C) / No Error (D)"  
(a) A (b) B  
(c) C (d) D
26. Choose the part of the sentence with an error.  
"The judge was (A) / referring to the two postmortem reports (B) / that was reviewed by a team of forensic experts. (C) / No Error (D)"  
(a) A (b) B  
(c) C (d) D

**Directions (Q. No. 27-29): Read the following passage carefully and answer the question given below it:**

Although interactions between humans and wild animals have been explored in the literature, the mechanism for how such experiences influence wellbeing is an area needing further examination. Despite idiographic differences between narratives, a common theme of Relationships and Connectedness between participants and nonhuman animals emerged. The expression of this indicates that human-dolphin experiences fulfill aspects of the human need for connection and relationships and that the experiences promote wellbeing and environmental behaviors. This is contextualized within an ongoing nature relationship and the

importance of a lifelong connection with wildlife, to ensure that humans see themselves as part of the natural world. The narratives reported here describe strong emotional connections, transmitted through both tangible and perceived contact with dolphins, which translate into positive senses of emotion and well-being. The connections described are powerful: perceptions of communion and mutual exchange become articulated through the rhetoric of friendship and kinship. Importantly, it appears that dolphin encounters are signifiers of wider relationships, both with nature and people. In this case, participants are reinforcing established habits of nature connectedness, habits reflecting a lifelong involvement with nonhuman animals.

27. Which word, mentioned in the passage, can replace the description "The art of speaking or writing effectively"?
- (a) Rhetoric (b) Reinforcing  
(c) Idiographic (d) Kinship
28. Connections are powerful because \_\_\_\_.
- (a) Humans see themselves as part of the natural world.  
(b) A mechanism for how such experiences influence wellbeing is an area.  
(c) Communion and mutual exchange become articulated through the rhetoric of friendship and kinship.  
(d) Of lifelong involvement with nonhuman animals started at an early stage.
29. The strong emotional connections are transmitted through \_\_\_\_.
- (a) Lifelong involvement with nonhuman animals.  
(b) The ongoing relationship with nature.  
(c) Both tangible and perceived contact with dolphins.  
(d) Narratives of human-dolphin experiences.
30. Which one of the following is implied by "perceptions of communion and mutual exchange become articulated through rhetoric of friendship and kinship"?
- (a) The relationship between dolphins and people is regarded as sharing and exchanging thoughts effectively through antipathy and agony.  
(b) The relationship between dolphins and people becomes communicative with the help of effective persuasion of trust and sympathy.  
(c) The relationship between dolphins and people is regarded as non-communicative and cannot be trustworthy.  
(d) The relationship between dolphins and people is regarded as sharing and exchanging perceptions will effectively be exchanged through hostility and trust.

## Numerical Ability

31. A milkman makes 20% profit by selling milk mixed with water at ₹8 per litre. If the cost price of pure milk is ₹10 per litre then the ratio of milk and water in the given mixture?
- (a) 2 : 1 (b) 2 : 3  
(c) 3 : 4 (d) 4 : 5
32. The ratio of efficiencies of X and Y for doing a certain work is 5 : 9. Working together, they can complete a work in 15 days. X alone will complete  $66\frac{2}{3}\%$  of the same work in?
- (a) 23 days (b) 27 days  
(c) 28 days (d) 35 days
33. Which of the following fractions can be written as a non-terminating decimal?
- (a)  $\frac{11}{250}$  (b)  $\frac{21}{28}$   
(c)  $\frac{7}{18}$  (d)  $\frac{15}{75}$
34. What is the compound interest on a sum of ₹19500 invested for  $1\frac{2}{5}$  at 10% p.a interest compound annually?
- (a) ₹2560 (b) ₹2300  
(c) ₹2250 (d) ₹2808
35. Simplify  
 $11\frac{1}{9}\% \text{ of } 9\frac{1}{11}\% \text{ of } 7\frac{1}{7}\% \text{ of } 6\frac{1}{4}\% \text{ of } 11088$
- (a)  $11\frac{1}{4}$  (b) 0.5  
(c) 3.2 (d) 7
36. Value of the expression  $\frac{2.25^2 - 1.25^2}{2.25 - 1.25}$ .
- (a) 4.7 (b) 5.6  
(c) 4.2 (d) 3.5
37. A train 100 metre long, moving at a speed of 50 km per hour, crosses another train 120 metre long coming from the opposite direction in 6 seconds. What is the speed of the second train?
- (a) 82 kmph (b) 75 kmph  
(c) 79 kmph (d) 88 kmph
38. A train leaves Meerut at 5 a.m. and reaches Delhi at 9 a.m. Another train leaves Delhi at 7 a.m. and reaches Meerut at 10:30 a.m. At what time do the two trains cross each other?
- (a) 2 hour 48 min  
(b) 4 hour 58 min  
(c) 2 hour 56 min  
(d) 3 hour 15 min

39. The simple interest on a certain sum of money at the rate of 5 p.a for 8 years is ₹840. The rate of interest for which the same amount of interest can be received on the same sum after 5 years is  
(a) 9.5% (b) 8%  
(c) 7% (d) 11%
40. The average age of a man and his son is 40 years. The ratio of their ages is 11:5 respectively. What is the son's age?  
(a) 25 years (b) 30 years  
(c) 27 years (d) 40 years
41. Which one among the following is the largest?  
(a)  $\frac{3}{4}$  (b)  $\frac{10}{13}$   
(c)  $\frac{11}{14}$  (d)  $\frac{7}{9}$
42. Out of four numbers, the average of the first three is 16 and that of the last three is 15. If the last number is 21 then the first number is:  
(a) 24 (b) 26  
(c) 28 (d) 22
43. A shopkeeper buys 2 dozen bananas at ₹16 per dozen. After selling 18 bananas at the rate of ₹12 per dozen, the shopkeeper reduced the rate to ₹4 per dozen. find the loss percentage.  
(a) 37.5% (b) 25%  
(c) 25% (d) 12.5%
44. A container contains 40 litres of milk. From this container, 4 litres of milk were taken out and replaced by water. This process was repeated further two times. How much milk is now contained by the container?  
(a) 29.16 l (b) 27 l  
(c) 25.54 l (d) 30.5 l
45. Two dice are thrown together. What is the probability that the sum of the numbers on the two faces is divisible by 4 or 6?  
(a)  $\frac{5}{9}$  (b)  $\frac{7}{9}$   
(c)  $\frac{5}{18}$  (d)  $\frac{7}{18}$
46. The denominator of a fraction is 4 more than twice the numerator. When both the numerator and denominator are decreased by 6, then the denominator becomes 12 times the numerator. Determine the fraction  
(a)  $\frac{5}{7}$  (b)  $\frac{7}{22}$   
(c)  $\frac{4}{15}$  (d)  $\frac{7}{18}$
47. 94 is divided into two parts in such a way that the fifth part of the first and the eighth part of the second are in the ratio 3:4. The first part is:  
(a) 50 (b) 45  
(c) 64 (d) 30

48. The area of a circular field is 13.86 hectares. Find the cost of fencing it at the rate of ₹4.40 per metre  
(a) 5066 (b) 5168  
(c) 5808 (d) 6208
49. 1 lakh books can be printed by machine P in 8 hours, one lakh books by machine Q in 10 hours, and one lakh books by machine R in 12 hours. The machines begin operating at 9 A.M in the morning. Machine P closes at 11 A.M in the morning, and the other two machines finish their work. What time will the work (print 1 lakh books) be completed approximately?  
(a) 2 P.M (b) 4 P.M  
(c) 5 P.M (d) 1 P.M
50. At what time between 3 o'clock and 4 o'clock, both the hands of a clock will coincide with each other?  
(a) 3 hour  $\frac{1}{5}$  min  
(b) 3 hour 16  $\frac{4}{11}$  min  
(c) 3 hour 15 min  
(d) None of the above

### General Awareness

51. The Shanti Swarup Bhatnagar Award is given in India for contribution to the field of:  
(a) Literature  
(b) Social work  
(c) Science and Technology  
(d) Sports
52. Which among the following is a nuclear powered submarine of Indian Navy?  
(a) INS Shalki  
(b) INS Shishumar  
(c) INS Sindhuvir  
(d) INS Chakra
53. Which DRDO developed anti-tank missile is capable of being launched from helicopter?  
(a) SANT Missile (b) Helina  
(c) Nag Missile (d) Amogha
54. Which is an indigenously launched Covid Vaccine?  
(a) Sputnik (b) Pfizer  
(c) Covaxin (d) AstraZeneca
55. Asad Ali Khan is associated with which among the following musical instruments?  
(a) Rudra veena (b) Tabla  
(c) Sitar (d) Shehnai
56. With which country India has recently signed a Project Agreement (PA) for Air-Launched Unmanned Aerial Vehicle?  
(a) Canada  
(b) Russia  
(c) United Kingdom  
(d) United States

57. Who among the following started the newspaper 'Bahishkrit Bharat'?  
(a) Jyotiba Phule  
(b) M. K. Gandhi  
(c) Dr. B. R. Ambedkar  
(d) Maulana Abdul Kalam Azad
58. The reign of Raja Krishnadev Raya is considered the golden age of which literary language?  
(a) Telugu (b) Hindi  
(c) Tamil (d) Malayalam
59. Who wrote 'Why I am an Atheist'?  
(a) Khushwant Singh  
(b) Subhash Chandra Bose  
(c) Madan Lal Dhingra  
(d) Bhagat Singh
60. Supernova is:  
(a) A black hole (b) An asteroid  
(c) A comet (d) A dying star
61. With reference to the office of the Attorney General of India, Which of the following statements is/are correct?  
I. He is the highest law officer in the country.  
II. In the performance of his official duties, the Attorney General has the right of audience in all courts in the territory of India.  
(a) II only (b) I only  
(c) Both I and II (d) Neither I nor II
62. Who among the following won the Gold medal in 2020 Paralympics in Javelin Throw?  
(a) Sumit Antil  
(b) Rameshwar Choudhary  
(c) Neeraj Chopra  
(d) Piyush Khanna
63. "Global Competitiveness Report" is released by which of the following organization?  
(a) SAARC (b) WEF  
(c) WTO (d) EU
64. The most commonly used semiconductor element is:  
(a) Cu (b) A  
(c) C (d) Si
65. Which among the following do not contribute to the green house effect?  
(a) Ozone  
(b) CFCs  
(c) Water Vapours  
(d) Nitrogen

66. Match List-I with the correct options of List-II.

List-I (Grasslands)		List-II (Region)	
1.	Prairies	I.	South America
2.	downs	II.	australia
3.	Llanos	III.	USA
4.	Pampas	IV.	Venezuela

- (a) 1-I, 2-II, 3-IV, 4-III  
 (b) 1-III, 2-IV, 3-I, 4-II  
 (c) 1-III, 2-II, 3-IV, 4-I  
 (d) 1-IV, 2-III, 3-I, 4-II
67. Which one among the following substances does not contribute to global warming?  
 (a) Methane  
 (b) Oxides of Sulphur and Nitrogen  
 (c) Carbon dioxide  
 (d) Water vapour
68. Match List I with the correct options of List II.

List I (Name of the Operation)		List II (Related to)	
1.	Operation Nistar	A.	Rescue operation in Yemen
2.	Operation Pawan	B.	Control of Jaffna Peninsula
3.	Operation Trident	C.	Indo-Pak navy 1971 war
4.	Operation Brasstacks	D.	1986 Joint military exercise

- (a) 1-D, 2-C, 3-B, 4-A  
 (b) 1-B, 2-A, 3-D, 4-C  
 (c) 1-B, 2-A, 3-C, 4-D  
 (d) 1-A, 2-B, 3-C, 4-D
69. Which of the following is a short range surface to surface missile?  
 (a) TRISHUL (b) PRITHVI  
 (c) AKASH (d) NAG
70. The first city to initiate a flood early warning system in India is :  
 (a) Lucknow (b) Mumbai  
 (c) Chennai (d) Kolkata
71. With reference to the PM CARES Fund, consider the following statements:  
 I. The amount collected by it directly goes to the Consolidated Fund of India.  
 II. It can avail donations from the foreign contribution and donations to fund can also avail 100% tax exemption.  
 Which of the above statements is/are correct?  
 (a) I only (b) II only  
 (c) Both I and II (d) Neither I nor II

72. Which among the following factors contributes to Earthquake?

1. Location  
 2. Distance from the epicentre  
 3. Local geological conditions

Select the correct answer from the code given below.

- (a) 2 and 3 only  
 (b) 1 and 2 only  
 (c) 1 and 3 only  
 (d) 1, 2, and 3
73. Which among the following factors does not contribute to Earthquakes?  
 (a) Distance from the epicentre  
 (b) Location  
 (c) Rate of Evaporation  
 (d) Local geological conditions
74. Given below are two statements, one is labeled as Assertion (A) and the other is labeled as Reason (R).

**Assertion (A):** The Portuguese were the first European community to discover a direct sea route to India.

**Reason (R):** The Turks started levying too many taxes on the goods passing through the routes of trade and commerce between Asia and Europe.


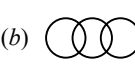


Choose the most appropriate answer.

- (a) A is true, but R is false  
 (b) A is false, but R is true.  
 (c) Both A and R are true and R is the correct explanation of A  
 (d) Both A and R are true, but R is not the correct explanation of A.
75. When we jump out of a boat, the boat moves in the opposite direction. This is due to:  
 (a) Newton's First Law of Motion  
 (b) The fact that the net force acting on the boat is to be zero  
 (c) Newton's Third Law of Motion  
 (d) Newton's Second Law of Motion

## Reasoning and Military Aptitude Test

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





Oak, Maple, and Furniture

- (a)  (b)   
 (c)  (d) 

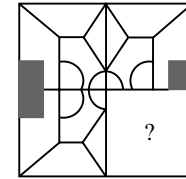
77. Select the correct option to complete the following analogy.  
 Rabbit : Hop :: Duck : ?





- (a) Waddle (b) Slither  
 (c) Creep (d) Crawl

78. Which diagram correctly represents the relationship of pigeons, birds, dogs?

- (a)  (b)   
 (c)  (d) 

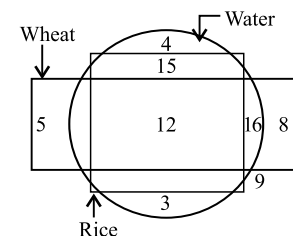
79. Which answer figure will complete the pattern in the question figure?



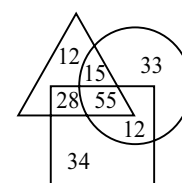
- (a)  (b)   
 (c)  (d) 

80. Divya travels 15 km south, turns left and travels 40 km to reach at the college gate. She then turns right and travels 50 km. Finally, she turns right and travels 40 km. How much minimum distance does she have to travel to go back to the starting point?  
 (a) 65 km (b) 50 km  
 (c) 40 km (d) 45 km

81. In the given diagram, circle represent water, rectangle represent wheat and square represent Rice. Find the number of rice which are not water.

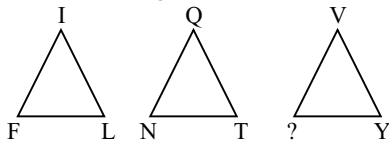


- (a) 25 (b) 16  
 (c) 9 (d) 5
82. In the given Venn diagram, the rectangle represents 'people having blue eyes', the triangle represents 'people having extra fingers', and the circle represents 'people having dimples'.



The number of people who have extra fingers and blue eyes and no dimples is A

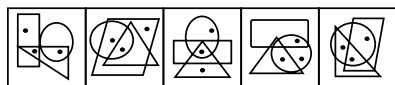
- (a) 40                      (b) 67  
(c) 70                      (d) 43



- [illegible]

- (a) Only I                      (b) Only II  
(c) Both I and II            (d) Neither I nor II

- (a) GEPONI (b) TOGA  
(c) LEEGA (d) RARPOT

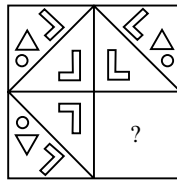


- (A) (B) (C) (D) (E)

- [illegible]

- (a) CNILPE                      (b) ANNABA  
(c) NGMAO                     (d) APELP

- (a) 7 km South      (b) 7 km East  
(c) 5 km West      (d) 5 km North-East



- 

- (a) East                      (b) South- East  
(c) South                    (d) West

- (a) 150                      (b) 134  
(c) 144                      (d) 145

=	S	C	+	+	C	O	★	★	O	?
C	+	=	S	O	★	+	C	S	=	
★	O	O	★	=	S	S	=	+	C	

- (a)

O	★
C	+
=	S

(b)

S	=
★	O
C	+

(c)

+	C
=	S
★	O

(d)

O	★
=	S
C	+

- (a) SCUXI

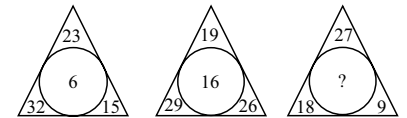
(c) TCUXI

(b) TCUXJ

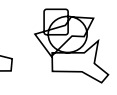
(d) TDUXI

- (a) Daughter-in-law  
(b) Daughter  
(c) Niece  
(d) Grand Daughter

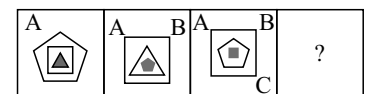
- (a) Maternal Uncle
- (b) Paternal Uncle
- (c) Grandfather
- (d) Brother



- (a) 22                  (b) 16  
(c) 18                  (d) 26



- (a) D                  (b) C  
(c) B                (d) A



- 

- (a) OQVVJV  
(b) OQWVKV  
(c) OPVUJW  
(d) OPWUKW



1. (a) The sentence talks about the Indian Civil Service developing into a powerful institution, despite serving British interests. So, the order should be: S (its members exercised vast power), Q (and often participated in the making of policy), R (and developed a certain tradition of), P (independence, integrity, and hard work).
2. (b) The sentence talks about decomposers breaking down dead bodies and putting back useful elements. So, the order should be: P (help in decomposing the), R (dead bodies of plants and animals), Q (and hence help to clean the environment), S (and put back various useful elements).
3. (a) The sentence talks about how thick glass can be cut with a home bottle-cutter. So, the order should be: S (be cut with one), P (of the home bottle-cutters), Q (which are available), R (in many large stores, but any fine).
4. (c) The word "traditionally" fits here because it describes the historical practices of farmers. It indicates that these methods have been used over a long period of time, implying a sense of tradition.
5. (a) The phrase "rotated crops to control insects" makes sense in the context. Crops rotation is a method used to control insects, as different crops attract different pests, and rotating them disrupts the lifecycle of pests, controlling their populations.
6. (b) The phrase "rely on chemicals" suggests dependence. It reflects that farmers now predominantly depend on chemicals for pest control, especially in developed countries.
7. (c) Brackish means having a slightly salty flavor. Here, the meal was too brackish to consume.
8. (b) Commotion means a state of noisy confusion or activity, which makes sense in the context of the sentence.
9. (a) "Bring about" means to cause something to happen or come into being.
10. (c) Colossal means extremely large; its opposite is small.
11. (b) Intrinsic means belonging naturally; its opposite is acquired, which means gained or learned.
12. (a) A proponent is someone who supports a cause or an idea.
13. (a) "Haul over the coals" means to scold or reprimand severely.
14. (a) Providence refers to the protective care of nature or of God.
15. (d) "Take time by the forelock" means to seize an opportunity promptly.
16. (b) "Adhere" means to stick to or follow closely.
17. (a) This phrase implies hard work and honesty.
18. (c) "Fanned" here means to blow air upon (a fire) in order to intensify it.
19. (a) Precarious means uncertain or insecure.
20. (b) Engender means to cause or give rise to; its opposite is Subdue, meaning to overcome or bring under control.
21. (c) "Rout" means a disorderly retreat of defeated troops.
22. (d) Both pairs show opposites in terms of meaning.
23. (c) Both pairs represent a more general term followed by a more specific term.
24. (a) The correct form should be "If I were the principal" instead of "If I am the principal" for a hypothetical situation.
25. (c) "To joining" should be corrected to "to join."
26. (c) "That was reviewed" should be corrected to "that were reviewed" to match the plural subject "reports."
27. (a) The passage mentions "rhetoric of friendship and kinship" which indicates the art of speaking or writing effectively.
28. (c) The passage describes the powerful connections between humans and dolphins, where communion and mutual exchange become articulated through the rhetoric of friendship and kinship.
29. (c) The passage mentions that strong emotional connections are transmitted through both tangible and perceived contact with dolphins.
30. (b) The passage suggests that perceptions of communion and mutual exchange between humans and dolphins are expressed through the rhetoric of friendship and kinship.
31. (a) Cost price of 1 litre mixture  

$$= 8 \times \frac{100}{120} = ₹ \frac{20}{3}$$
 Cost of water = ₹10  
 Remaining cost = ₹  $\left(10 - \frac{20}{3}\right) = ₹ \frac{10}{3}$   
 Ratio of water : milk =  $\frac{\left(\frac{10}{3}\right)}{\left(\frac{20}{3}\right)} = \frac{1}{2}$   
 Ratio of milk : water = 2 : 1
32. (c) Total Efficiency of X and Y  

$$= (5 + 9) = 14 \text{ units}$$
 Total work =  $14 \times 15 = 210 \text{ units}$   
 Now, X can alone complete  $66\frac{2}{3}\%$  of the total work  

$$= 210 \times 66\frac{2}{3}\%$$

$$= 210 \times \frac{200}{300} = 140 \text{ units}$$
 Time taken by X to complete 140 units
33. (c)  $\Rightarrow \frac{11}{250} = 0.044$  (Terminating decimal)  

$$\Rightarrow \frac{21}{28} = 0.75$$
 (Terminating decimal)  

$$\Rightarrow \frac{7}{18} = 0.388... = 0.\bar{3}$$
 (Non-terminating Decimal)  

$$\Rightarrow \frac{15}{75} = 0.2$$
 (Terminating decimal)
34. (d) Interest rate for  $\frac{2}{5}$  years  

$$= 10 \times \left(\frac{2}{5}\right) = 4\%$$
 For  $1\frac{2}{5}$  years amount will be  

$$\Rightarrow A = 19500 \left(1 + \frac{10}{100}\right)^1 \times \left(1 + \frac{4}{100}\right)$$

$$\Rightarrow A = 19500 \left(\frac{11}{10}\right) \times \left(\frac{26}{25}\right)$$

$$\Rightarrow A = 22308$$
 Compound interest =  $22308 - 19500$   
 = ₹ 2808
35. (b) We can write these percentages as fraction value  

$$\Rightarrow 11\frac{1}{9}\% = \frac{1}{9}$$

$$\Rightarrow 9\frac{1}{11}\% = \frac{1}{11}$$

$$\Rightarrow 7\frac{1}{7}\% = \frac{1}{14}$$

$$\Rightarrow 6\frac{1}{4}\% = \frac{1}{16}$$
 So the expression can be written as  

$$\frac{1}{9} \text{ of } \frac{1}{11} \text{ of } \frac{1}{14} \text{ of } \frac{1}{16} \text{ of } 11088 = ?$$

$$= \frac{1}{9} \text{ of } \frac{1}{11} \text{ of } \frac{1}{14} \text{ of } 693$$

$$= \frac{1}{9} \text{ of } \frac{1}{11} \text{ of } 49.5$$

$$= \frac{1}{9} \text{ of } 4.5 = 0.5$$

36. (d)

$$\frac{2.25^2 - 1.25^2}{2.25 - 1.25} = \frac{(2.25 - 1.25)(2.25 + 1.25)}{(2.25 - 1.25)}$$

$$= (2.25 + 1.25) = 3.5$$

37. (a) Let the speed of the train is  $V$

Distance covered = (relative speed of the train)  $\times$  time

$$\Rightarrow (100 + 120) = (50 + V) \times 6$$

$$\Rightarrow \frac{220}{1000} \text{ km} = (5 + V) \times \left( \frac{3}{3600} \right) \text{ hr}$$

$$\Rightarrow 22 = (50 + V) \times \frac{1}{6}$$

$$\Rightarrow V = 132 - 50 = 82 \text{ kmph}$$

38. (c) Time taken by train 1 = 4 hours

$$\text{Time taken by train 2} = 3.5 = \frac{7}{2} \text{ hours}$$

Let the distance between Meerut and Delhi

$$\text{is } 28 \text{ km (LCM of } 4 \text{ \& } \frac{7}{2} \text{)}$$

$$\text{Speed of train 1} = \frac{28}{4} = 7 \text{ km/hr}$$

$$\text{Speed of train 2} = \frac{28}{3.5} = 8 \text{ km/hr}$$

Relative speed = Speed of train 1 + Speed of train 2

$$\Rightarrow \text{Relative speed} = 7 + 8 = 15 \text{ km}$$

Distance travel by train 1 before starting off train 2 = speed of train 2  $\times$  time

$$\Rightarrow 7 \times 2 = 14 \text{ km}$$

$$\text{Remaining distance} = 28 - 14 = 14 \text{ km}$$

Time to cross each other

$$\frac{\text{remaining distance}}{\text{relative speed}} = \frac{14}{15} \text{ or } 56 \text{ minutes}$$

$$\text{Total time is } = 2 \text{ hour} + 56 \text{ min}$$

39. (b) According to question,

Simple interest is the same in both conditions

$$\Rightarrow P \times 8 \times \frac{5}{100} = P \times 5 \times \frac{R}{100}$$

$$\Rightarrow \frac{40}{100} = \frac{R}{20}$$

$$\Rightarrow R = 8\%$$

40. (a) Total age of man and his son

$$= 40 \times 2 = 80 \text{ years}$$

Let the age of man and son be  $11x$  and  $5x$ .

$$\Rightarrow 11x + 5x = 80$$

$$\Rightarrow x = 5 \text{ years}$$

$$\text{Age of son} = 5x$$

$$\Rightarrow 5 \times 5 = 25 \text{ years}$$

41. (c) Converting the fractions into decimal

$$\Rightarrow \frac{3}{4} = 0.75$$

$$\Rightarrow \frac{10}{13} = 0.77$$

$$\Rightarrow \frac{11}{14} = 0.79$$

$$\Rightarrow \frac{7}{9} = 0.78$$

42. (a) Sum of last 3 numbers =  $3 \times 15 = 45$

$$\text{Sum of 2 middle number} = 45 - 21 = 24$$

$$\text{Sum of first 3 number} = 3 \times 16 = 48$$

$$\therefore \text{First number} = 48 - 24 = 24$$

43. (a) The cost price of 2 dozen bananas

$$= 2 \times 16 = ₹ 32$$

$$\text{SP of 18 bananas} = \frac{18}{12} \times 12 = ₹ 18$$

$$\text{SP of remaining bananas} = \frac{6}{12} \times 4 = ₹ 2$$

$$\text{Total SP} = 18 + 2 = ₹ 20$$

$$\text{Loss \%} = \frac{32 - 20}{32} \times 100 = 37.5\%$$

44. (a) Quantity of pure liquid in the final

$$\text{mixture} = A \left[ 1 - \left( \frac{B}{A} \right) \right]^n$$

Where A is Quantity of pure milk

B is quantity of milk replaced by water

$n$  represent how many times water replaced by milk = 3

Putting the value of A and B in above equation

$$= 40 \times \left[ 1 - \left( \frac{4}{40} \right) \right]^3$$

$$= 40 \times \left[ 1 - \left( \frac{1}{10} \right) \right]^3$$

$$= 40 \times \left( \frac{729}{1000} \right) = 29.16 \text{ litres}$$

45. (d) Number of possible outcomes

$$= 6^2 = 36$$

Sum of number which is divisible by 4 or 6.

$$\{(1, 3), (1, 5), (2, 2), (2, 4), (2, 6), (3, 1), (3, 3), (3, 5), (4, 2), (4, 4), (5, 1), (5, 3), (6, 2), (6, 6)\}$$

Number of favorable outcomes = 14

$$\text{Probability} = \frac{14}{36} = \frac{7}{18}$$

46. (d) Let the required fraction is  $\frac{x}{y}$

According to the question,

$$y = 2x + 4$$

...(i)

Again, According to the question

$$(y - 6) = 12(x - 6)$$

$$\Rightarrow y - 6 = 12x - 72$$

From equation (i),

$$(2x + 4) - 6 = 12x - 72$$

$$\Rightarrow 10x = 70$$

$$\Rightarrow x = 7$$

Again, From the equation (i),

$$y = 2 \times 7 + 4$$

$$\Rightarrow y = 18$$

So, the fraction will be  $\frac{7}{18}$ .

47. (d) Let the first and second parts be  $x$  and  $y$  respectively.

According to the question,

$$\Rightarrow \left( \frac{x}{5} \right) : \left( \frac{y}{8} \right) = \frac{3}{4}$$

Cross Multiplying the above equation

$$\Rightarrow \frac{8x}{5y} = \frac{3}{4}$$

$$\Rightarrow \frac{x}{y} = \frac{15}{32} = z \quad \dots\dots(z \text{ is some constant})$$

$$\Rightarrow x = 15z, y = 32z$$

Sum of two parts = 94

$$x + y = 94$$

$$\Rightarrow 15z + 32z = 94$$

$$\Rightarrow 47z = 94 \text{ or } z = 2$$

$$\text{Hence, } x = 15z = 15 \times 2 = 30$$

48. (c) The area of the field =  $\pi r^2$

$$\Rightarrow \pi(r)^2 = 13.86$$

$$\Rightarrow \left( \frac{22}{7} \right) r^2 = 13.86 \times 10000$$

$$[\because 1 \text{ hectares} = 10000 \text{ m}^2]$$

$$\Rightarrow r^2 = \frac{7}{22} \times 138600$$

$$\Rightarrow r^2 = 44100$$

$$\Rightarrow r = 210 \text{ m}$$

Length of the circular field =  $2\pi r$

$$= 2 \times \frac{22}{7} \times 210 = 1320 \text{ m}$$

Cost of fencing the circular field

$$= 1320 \times 4.4 = 5808$$

49. (d) Efficiency of P =  $\frac{1}{8}$

$$\text{Efficiency of Q} = \frac{1}{10}$$

$$\text{Efficiency of R} = \frac{1}{12}$$

Work done by P + Q + R in 1 hour

$$= \frac{1}{8} + \frac{1}{10} + \frac{1}{12} = \frac{(15 + 12 + 10)}{120}$$

$$= \frac{37}{120}$$

P, Q, and R work for 2 hours 9 A.M to

$$11 \text{ A.M} = \frac{37}{120} \times 2 = \frac{37}{60}$$

$$\text{Remaining work is } = 1 - \frac{37}{60} = \frac{23}{60}$$

Work done by Q and R in an hour

$$= \left( \frac{23}{60} \right) \div \left( \frac{11}{60} \right)$$

$$= \left( \frac{23}{60} \right) \times \left( \frac{60}{11} \right) = \frac{23}{11} \approx 2 \text{ hour}$$

So, add 2 hours in 11 A.M we get 1 P.M

50. (b) The angle between the hour-hand and minute-hand

$$\theta = \left( 30H - \frac{11M}{2} \right)$$

When minute and hour hands coincide then,

$$\theta = 0$$

$$\Rightarrow 0 = 30 \times 3 - \frac{11M}{2}$$

$$\Rightarrow 0 = 90 - \frac{11M}{2}$$

$$\Rightarrow 90 = \frac{11M}{2}$$

$$\Rightarrow M = 16 \frac{4}{11} \text{ minutes}$$

So, the both hand will coincide at

$$3 \text{ hour } 16 \frac{4}{11} \text{ min}$$

51. (c) The Shanti Swarup Bhatnagar Prize for **Science and Technology** is one of the most prestigious scientific awards in India.

The award was established in 1958 in honor of Dr. Shanti Swarup Bhatnagar, a renowned Indian scientist, educationist, and the founder-director of the Council of Scientific and Industrial Research (CSIR).

The primary objective of the Shanti Swarup Bhatnagar Awards is to recognize outstanding contributions to various fields of science and technology.

52. (d) **INS Chakra** refers to the nuclear-powered submarine operated by the Indian Navy.

It's worth noting that India has leased nuclear-powered submarines from Russia under the name INS Chakra.

The INS Chakra is part of a series of submarines that India has acquired from Russia over the years.

53. (b) The DRDO (Defence Research and Development Organization) developed anti-tank missile capable of being launched from a helicopter is the **Helina (HELicopter-launched Nag)**.

Helina is a third-generation, fire-and-forget, anti-tank guided missile designed to be launched from helicopters.

Helina is equipped with an infrared imaging seeker that allows it to lock onto and track targets independently, eliminating the need for continuous guidance from the launch platform.

54. (c) **Covaxin** is an indigenously developed COVID-19 vaccine produced by Bharat Biotech, an Indian biotechnology company. It was developed in collaboration with the Indian Council of Medical Research (ICMR) and the National Institute of Virology (NIV).

Covaxin is an inactivated virus vaccine, and it received emergency use authorization in India.

Pfizer is a multinational pharmaceutical company, and the Pfizer-BioNTech COVID-19 vaccine is not indigenously developed in India.

55. (a) Asad Ali Khan (1937–2011) was a renowned Indian musician, and he was a master of the **Rudra veena**, a traditional plucked string instrument associated with Indian classical music.

He hailed from the Senia gharana, a school or tradition of music that has been associated with the dhrupad style, one of the oldest forms of classical music in North India.

Asad Ali Khan was born in a family with a rich musical heritage. He received training in music from his father and grandfather, both of whom were accomplished musicians.

56. (d) India and the **United States** have signed a Project Agreement for Air-Launched Unmanned Aerial Vehicle (UAV).

The agreement, signed between the Ministry of Defence (India) and the US Department of Defence, falls under the framework of the Defence Technology and Trade Initiative (DTTI).

57. (c) “Bahishkrit Bharat” was a Marathi language newspaper launched by **Dr. B. R. Ambedkar** in 1927.

Dr. Ambedkar, a prominent social reformer, jurist, and the chief architect of the Indian Constitution, used this newspaper as a platform to address the social issues and concerns of the marginalized and oppressed communities in India.

The term “Bahishkrit” translates to “Excluded” or “Outcast,” and the newspaper played a crucial role in advocating for the rights and upliftment of the Dalits and other socially disadvantaged groups.

58. (a) Raja Krishnadevaraya, who ruled the Vijayanagara Empire in the 16th century, was a patron of literature and arts.

His reign is often referred to as the “Golden Age of Telugu Literature.”

During this period, there was significant literary and cultural development in the

Telugu language, and many poets and scholars flourished under his patronage.

59. (d) “Why I am an Atheist” is an essay written by Bhagat Singh, the Indian revolutionary and freedom fighter.

The essay reflects Bhagat Singh's thought on religion, atheism, and his reasons for rejecting religious beliefs.

He wrote this essay in 1930 while he was in Lahore Central Jail, awaiting trial for his involvement in the killing of British police officer J.P. Saunders.

60. (d) A supernova is a powerful and catastrophic explosion that occurs in the final stages of a massive star's life cycle.

This event results in a sudden and intense increase in brightness, outshining an entire galaxy for a brief period.

The energy released during a supernova is immense, and it can briefly outshine an entire galaxy.

61. (c) The Attorney General of India is the principal legal advisor to the Government of India and is appointed by the President of India.

The Attorney General has the right to represent the government in legal matters and has the authority to appear in any court of law, including the Supreme Court.

The Attorney General of India is the highest law officer in the country. This position is established under Article 76 of the Indian Constitution, and the Attorney General is appointed by the President of India.

62. (a) **Sumit Antil** won the Gold medal in Javelin Throw at the 2020 Paralympics.

He is an Indian para-athlete who set a new world record in the Men's Javelin Throw F64 category during the Paralympics held in Tokyo in 2021.

Sumit's impressive performance and world record made him a gold medalist in the event.

63. (b) “Global competitiveness Report” is released by WEF. WEF stands for the World Economic Forum.

The **World Economic Forum (WEF)** is an international organization that brings together leaders from various sectors, including business, government, academia, and civil society.

The WEF is best known for its annual meeting in Davos, Switzerland, where leaders gather to discuss and deliberate on pressing global issues.

64. (d) Semiconductors are the materials which have conductivity between insulators and conductors.

They can be compounds or pure elements.

Out of the given options, **Si** is one of the most commonly used semiconductor.



65. (d) **Nitrogen** does not contribute to the greenhouse effect.

Greenhouse effect is the phenomenon by which certain gases present in the atmosphere trap heat i.e do not allow the heat to escape the Earth.

CO<sub>2</sub> is one of the greenhouse gases. An increase in the amount of carbon dioxide in the atmosphere can cause more heat to be retained and hence leads to global warming.

66. (c) Prairies - USA

Downs - Australia

Llanos - Venezuela

Pampas - South America

67. (b) While methane, oxides of sulfur and nitrogen, and carbon dioxide are all greenhouse gases that contribute to global warming by trapping heat in the Earth's atmosphere, **water vapor** is not considered a significant contributor in terms of human-induced climate change.

Although water vapor is a natural greenhouse gas and plays a crucial role in the Earth's climate system, its concentration in the atmosphere is primarily controlled by temperature and natural processes.

68. (d) **Operation Nistar** was a rescue operation conducted by the Indian government to evacuate Indian nationals from Yemen during a crisis. The operation took place in 2015 and involved the evacuation of Indian citizens from conflict-affected areas in Yemen.

**Operation Pawan** was a military operation conducted by the Indian Peace Keeping Force (IPKF) in Sri Lanka. It aimed at controlling the Jaffna peninsula during the Sri Lankan Civil War.

**Operation Trident** was a naval operation conducted by the Indian Navy during the Indo-Pakistani War of 1971. It was a significant and successful naval offensive carried out on the night of December 4-5, 1971, against Pakistan.

**Operation Brasstacks** was a code name for a military exercise conducted by the Indian Armed Forces in 1986. It was one of the largest military exercises conducted by India.

69. (b) The **PRITHVI** missile is a surface-to-surface tactical short-range ballistic missile developed by India's Defence Research and Development Organisation (DRDO).

It is named after the Prithvi, the Earth in Sanskrit, and has multiple variants, including Prithvi-I, Prithvi-II, and Prithvi-III, each with different ranges and capabilities.

70. (d) The launch of India's first Flood Forecasting and Early Warning System

(FFEWS) for Kolkata City is a significant step towards enhancing the city's resilience to flooding and improving disaster preparedness.

The Flood Forecasting and Early Warning System (FFEWS) for Kolkata City has been launched by the Mayor of Kolkata Municipal Corporation (KMC).

71. (b) Under the chairmanship of Prime Minister Narendra Modi, the Prime Minister's Citizen Assistance and Relief in Emergency Situation Fund was created on March 28th, 2020.

The Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund popularly known as PM-CARES Fund has been established by the government to address any emergency or distress scenario, including the COVID-19 pandemic.

It gives facility to avail donation from the foreign contribution and donation to fund can also avail 100% tax exemption.

72. (d) All three factors contribute to earthquakes:

**Location:** The tectonic plate boundaries play a crucial role in determining the occurrence of earthquakes.

**Distance from the epicenter:** The epicenter is the point on the Earth's surface directly above the earthquake's point of origin (hypocenter).

**Local geological conditions:** The geological characteristics of an area can influence how seismic waves travel through the Earth.

73. (c) Earthquakes are primarily caused by the movement of tectonic plates beneath the Earth's surface, leading to the release of energy in the form of seismic waves.

Distance from the epicenter, location, and local geological conditions are significant factors influencing the occurrence and intensity of earthquakes.

These factors include proximity to fault lines, the type of rock and soil, and the presence of geological features that can amplify seismic waves.

74. (c) Assertion (A) correctly states that the Portuguese were the first European community to discover a direct sea route to India, which they achieved in 1498 under the leadership of Vasco da Gama.

Reason (R) accurately explains the context behind this discovery. The levying of excessive taxes by the Turks on goods passing through traditional trade routes between Asia and Europe incentivized European powers like Portugal to seek alternate sea routes to access valuable goods from the East, such as spices and textiles, directly.

75. (c) According to Newton's third law, for every action, there is an equal and opposite reaction.

When a person jumps out of a boat, they exert a downward force on the boat due to their push-off. Simultaneously, the boat exerts an equal and opposite force upward on the person, as per Newton's third law.

This action-reaction pair of forces causes the boat to move in the opposite direction to the person jumping out, ensuring that the total momentum of the system (person + boat) remains conserved.

76. (b) 

Some Furnitures are made from Maple's treewood

Some Furnitures are made from Oak's treewood

77. (a) The logic followed here is:

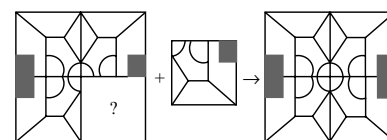
The movement of Rabbits is Hop.

Similarly, the movement of Duck is known as Waddle.

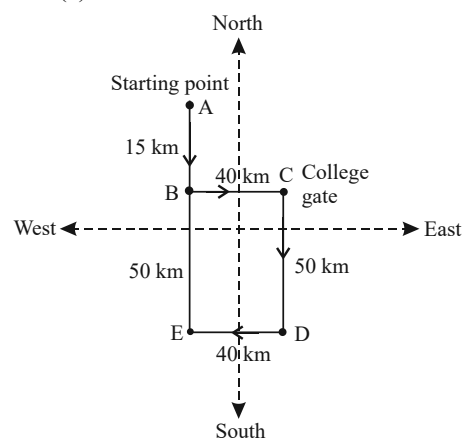
78. (d) Pigeons are a specific type of birds. Thus pigeons will be completely inside birds. And Birds and Dogs are mutually exclusive of each other that mean they will not intersect each other.



79. (d)



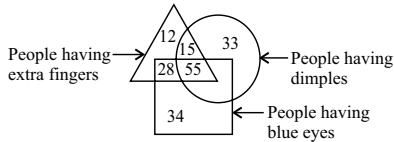
80. (a)



Minimum distance between AE  
= 50 + 15  
= 65 km

81. (a) As per the given diagram, the part 16 and 9 represents number of rice which are not water is  $9 + 16 = 25$

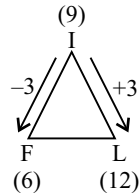
82. (d)



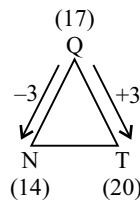
A is represented by the number 28 and B is represented by 15.

$$\therefore A + B = 28 + 15 = 43$$

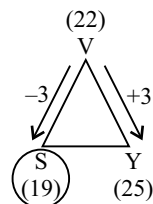
83. (c)



And,



Similarly,



Hence, the missing term is S.

84. (b) **Statement I:**  $32 Q 4 P 16 S 4 R 2 = 24$

After applying the coded symbols

$$\Rightarrow 32 \div 4 + 16 - 4 \times 2 = 24$$

$$\Rightarrow 8 + 16 - 8 = 24$$

$$\Rightarrow 16 \neq 24$$

$32 Q 4 P 16 S 4 R 2 = 24$  is False

**Statements II:**  $27 Q 3 R 2 P 5 S 7 = 16$

After applying the coded symbols

$$\Rightarrow 27 \div 3 \times 2 + 5 - 7 = 16$$

$$\Rightarrow 18 + 5 - 7 = 16$$

$$\Rightarrow 16 = 24$$

$27 Q 3 R 2 P 5 S 7 = 16$  is True

Therefore, only Statement II is correct.

85. (b) TOGA is written as GOAT  
GEPONI is written as PIGEON  
RARPOT is written as PARROT  
LEEGA is written as EAGLE  
All the above are birds except GOAT.

86. (c) In figure (X), one of the dots lies in the region common to circle and parallelogram, the second dot lies in the region of parallelogram, and the third dot lies

in region common to parallelogram, circle and triangle. Only figure (B) consists of these types of regions.

87. (a) Four letter-clusters have been given:

NGMAO – MANGO

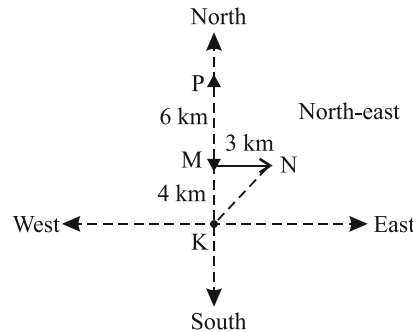
CNILPE – PENCIL

ANNABA – BANANA

APELP – APPLE

All are the names of the fruits except, Pencil which is a stationary item.

88. (d)

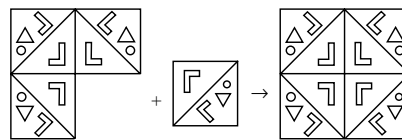


$$KN = \sqrt{MK^2 + MN^2}$$

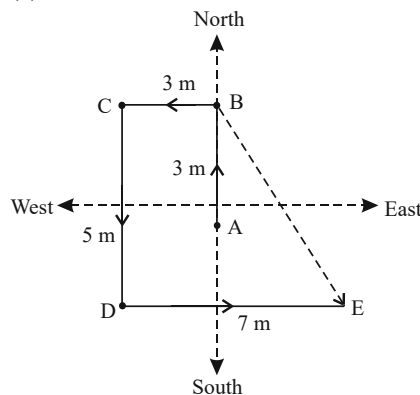
$$KN = \sqrt{4^2 + 3^2} = 5 \text{ km}$$

So, K is 5 km to the North-East of his starting point

89. (d) The figure which will complete the pattern is:



90. (b)



Thus, we can say direction of E is South-East with reference to point B.

91. (c)

**Letter** N M O L

**Means** + - ÷ ×

$$6 L 25 M 15 N 45 O 5$$

$$= 6 \times 25 - 15 + 45 \div 5$$

$$= 150 - 6 = 144$$

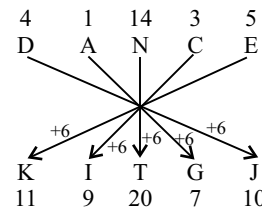
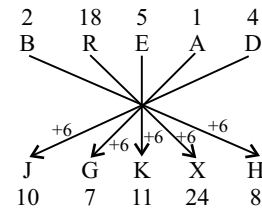
92. (b) In the given figure, the symbols O, C and S are moving in a clockwise direction

and the other symbol +, = and star ★ are moving in an anticlockwise direction.

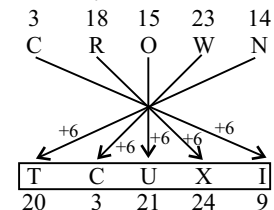
Here, the answer figure is



93. (c) As,

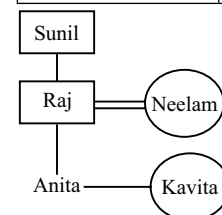


Similarly,



94. (d)

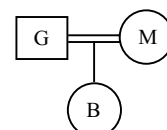
Symbol in Diagram	Meaning
	Female
	Male
	Married Couple
	Siblings
	Difference of a Generation



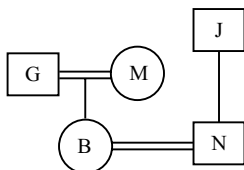
Kavita is the granddaughter of Sunil.

95. (b) According to the given conditions,

1. B is the daughter of M who is the wife of G.

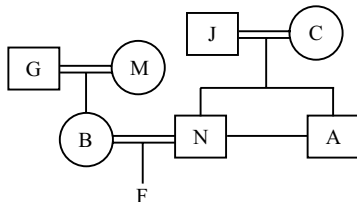


2. N is the only son-in-law of G.  
3. J is the father of N.



4. A is the brother-in-law of B.  
5. B is the daughter-in-law of C who is the grandparent of F.

As the only married child till now in N, F is either the daughter or son of B and N.



Thus, according to the final family tree, A is the paternal uncle of F.

96. (b) The school is headed by the Principal  
Similarly,  
The newspaper is headed by an Editor

97. (c) The logic followed here is,  
 $= (23 + 15) - 32 = 6$   
 $= (19 + 26) - 29 = 16$   
Similarly,  $= (27 + 9) - 18 = 18$   
So, the missing term is 18

98. (d)  
1. One dot is in the common area of the Y-shape, Kite-shape and Square  
2. One dot is in the common area of the Y-shape and circle  
3. One dot is solely placed in the Kite-shape only

**Figure (A):** All the required conditions are fulfilled as shown below:



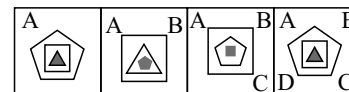
99. (a) There is a repetition of triangle, square and pentagon in the series.

In each step, a new alphabet is introduced at the corner in clockwise pattern.

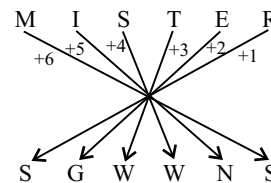
Next step will be:

The alphabet will be D and it will be placed at the only corner left i.e., bottom left.

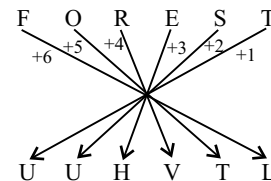
The shapes in the first step will repeat itself.



100. (a)



And,



Similarly,

