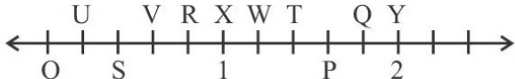


Sainik School Entrance Exam Solved Paper-2021 (Class-VI)

MATHEMATICS

1. Whole numbers are closed under which operation?
(a) Subtraction (b) Division
(c) Multiplication (d) All of these
2. The successor of 1 million is
(a) 2 million (b) 1000001
(c) 100001 (d) 10001
3. The points O, U, S, V, R, X, W, T, P, Q and Y on the number line are equidistant. The fraction represented by length OP is

 (a) $\frac{1}{5}$ (b) $\frac{7}{5}$ (c) $\frac{4}{5}$ (d) $\frac{6}{5}$
4. The two consecutive integers, between which the fraction $\frac{5}{7}$ lies, are
(a) 0 and 1 (b) 5 and 7
(c) 5 and 6 (d) 6 and 7
5. Which of the following is the smallest fraction?
(a) $\frac{4}{5}$ (b) $\frac{5}{3}$
(c) $\frac{5}{6}$ (d) $\frac{5}{2}$
6. The HCF and LCM of two numbers are 6 and 864 respectively. If one number is 96, find the other numbers
(a) 84 (b) 45 (c) 54 (d) 24
7. The HCF of two numbers is 12 and their difference is 12. Which of the following can be the numbers?
(a) 84, 96 (b) 66, 78
(c) 70, 82 (d) 62, 78
8. Find the smallest number that is divisible by each one of 9, 12 and 15.
(a) 60 (b) 90 (c) 120 (d) 180
9. A certain brand of soap-powder is sold at ₹ 15 per packet. It costs ₹ 144 a dozen. What is the profit in percent on 8 dozen packets?
(a) 20 (b) 25 (c) 24 (d) 36
10. Find the greatest number that will divide 37, 56, 93 leaving remainder 1, 2 and 3 respectively.
(a) 9 (b) 18 (c) 15 (d) 12
11. If 10 men can do a piece of work in 4 days, how many men will be required to get the same work done in 5 days?
(a) 10 (b) 8 (c) 40 (d) 12
12. 21 goats eat as much as 15 cows. How many goats eat as much as 35 cows?
(a) 38 (b) 49 (c) 37 (d) 41
13. A mechanic earns ₹ 36,000 on 9 cars. How much will he earn in 1 day, if in a day he receives 27 cars
(a) ₹ 1,08,000 (b) ₹ 1,80,000
(c) ₹ 1,00,800 (d) ₹ 1,00,080
14. If $x : y = 3 : 5$, find the ratio $3x + 4y : 8x + 5y$.
(a) 39 : 49 (b) 29 : 50
(c) 29 : 49 (d) 39 : 50
15. Find the value of m, if 3, 18, m, 42 are in proportion.
(a) 6 (b) 54
(c) 7 (d) 252
16. In an NCC Camp, 1200 trainees are participating out of which 900 are selected for Republic Day Camp. What is the ratio between the number of selected and non-selected cadets?
(a) 300 : 120 (b) 4 : 1
(c) 3 : 1 (d) 120 : 130
17. If a boy sells a book for ₹ 450, he makes a loss of 10%. To gain 10%, what should be the selling price?
(a) ₹ 500 (b) ₹ 600
(c) ₹ 550 (d) ₹ 525

18. A man sells one speaker for ₹ 7,500 at a profit of 20% and another speaker for ₹ 8,100 at a loss of 10%. Find his total loss or profit.
 (a) Loss = ₹ 300 (b) Loss = ₹ 350
 (c) Profit = ₹ 300 (d) Profit = ₹ 350
19. Simplify $(8 + 4 - 2) \times (17 - 12) \times 10 - 89 =$ _____.
 (a) 3950 (b) 411
 (c) 412 (d) 3949
20. Simplify $0.05 + 1.5 \times 5 \div 10 \times 0.5 =$ _____.
 (a) 4.25 (b) 42.5
 (c) 0.425 (d) 0.42
21. Simplify $7 + 5 - 2 \times (7 + 89) - 94 \div 2 + (33 \div 3 + 9 \times 2 - 7) \div 11 =$ _____.
 (a) 254 (b) -225
 (c) -235 (d) 245
22. The average weight of 20 boys in a class is 160 kg and that of the remaining 5 boys is 50 kg. Find the average weight of all the boys in the class.
 (a) 138 kg (b) 183 kg
 (c) 140 kg (d) 150 kg
23. The average marks obtained by 7 students in a group is 226. If the marks obtained by six of them are 340, 180, 260, 56, 275 and 307 respectively, find the marks obtained by the seventh student.
 (a) 160 (b) 162 (c) 163 (d) 164
24. A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors in a month of 30 days starting with Sunday is
 (a) 280 (b) 285 (c) 290 (d) 295
25. A batsman makes a score of 87 runs in the 17th match and thus increases his average by 3. Find his average after the 17th match.
 (a) 36 (b) 37 (c) 38 (d) 39
26. Average of 1, 3, 5, 7, 9, 11, 13 is
 (a) 7 (b) 8 (c) 7.5 (d) 8.5
27. If x% of y is 100 and y% of z is 200, then find the relation between x and z.
 (a) $z = x$ (b) $2z = x$
 (c) $z = 2x$ (d) $z = 3x$
28. One-fourth of one-third of two-fifth of a number is 15. What will be 40% of that number?
 (a) 140 (b) 150 (c) 180 (d) 200
29. If 15% of 40 is greater than 25% of a number by 2, then the number is
 (a) 14 (b) 16 (c) 18 (d) 20
30. Find the length of a rectangular playground in cm whose area is 700 sq.m and breadth is 25 m.
 (a) 28 (b) 280
 (c) 2800 (d) 2500
31. Reena took a loan of ₹ 1,200 with simple interest for as many years as the rate of interest. If she paid ₹ 432 as interest at the end of the loan period, what was the rate of interest?
 (a) 3.6 (b) 6 (c) 18 (d) 10
32. Write the name of the angle formed when the clock time is 7:15 pm.
 (a) Acute angle (b) Right angle
 (c) Obtuse (d) Straight angle
33. The table below shows the maximum temperatures in New York City last year. Use the information in this table and answer the following:
 What was the average maximum temperature (upto 2 decimal places) of three months May, July and September last year in New York City?
- | Month | Jan. | Mar. | May | Jul. | Sept. | Nov. |
|---------------------------|------|------|-----|------|-------|------|
| Maximum temperature, in C | 3 | 9 | 21 | 29 | 24 | 11 |
- (a) 21.65 °C (b) 24.66 °C
 (c) 25.52 °C (d) 26.23 °C
34. In the morning, the temperature was - 10 °C and it decreased 3 degrees by the evening. What was the temperature in the evening?
 (a) - 7°C (b) - 23°C
 (c) - 13°C (d) - 12°C
35. A rectangular garden is 185 m long and 220 m wide. It has two roads in its centre of uniform width of 4 m, one parallel to its length and the other parallel to its breadth. Find the cost of levelling the roads at ₹ 1.25 per sq.m.
 (a) ₹ 3,900 (b) ₹ 3,010
 (c) ₹ 4,010 (d) ₹ 2,005
36. One decimeter is equal to
 (a) 1×10^{-1} m (b) 1×10^{-2} m
 (c) 1×10^2 m (d) 1×10^3 m

37. In Roman numeration, if a symbol is repeated, its value is not multiplied as many times as it occurs.
 (a) True (b) False
 (c) Cannot say (d) Both are equal
38. The angle subtended by the diameter of a semicircle on any point on the circle is
 (a) 45° (b) 180° (c) 90° (d) 60°
39. A big cube has each portion of 44 cm. Tiny cubes of 4 cm portion each are cut from that. Then how many tiny cubes will be formed that are surrounded by at least once cube?
 (a) 888 (b) 729 (c) 164 (d) 33
40. A rectangular tank 15 cm long, 12 cm wide and 8 cm high was completely filled with water. Find the volume of water in the tank.
 (a) 180 cm³ (b) 1200 cm³
 (c) 440 cm³ (d) 1440 cm³
41. Which option shows fractions arranged in ascending order?
 (a) $\frac{5}{8} < \frac{7}{12} < \frac{3}{4} < \frac{13}{16}$
 (b) $\frac{5}{8} < \frac{7}{12} < \frac{13}{16} < \frac{3}{4}$
 (c) $\frac{5}{8} < \frac{3}{4} < \frac{13}{16} < \frac{7}{12}$
 (d) $\frac{7}{12} < \frac{5}{8} < \frac{3}{4} < \frac{13}{16}$
42. What is the value of $945.341 - 1042.792 + 875.435 + 31.025$?
 (a) 908.004 (b) 810.008
 (c) 795.659 (d) 809.009
43. A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr. The average speed for the first 320 km of the tour is
 (a) 35.55 km/hr (b) 36 km/hr
 (c) 71.11 km/hr (d) 71 km/hr
44. On dividing 2272 as well as 875 by a 3-digit number N, we get the same remainder. The sum of the digits of N is
 (a) 10 (b) 11
 (c) 12 (d) 13
45. It takes Julie $\frac{1}{2}$ hour to wash, comb her hair and put on her clothes and $\frac{1}{4}$ hour to have her breakfast. How much time does it take Julia to be ready for school?
 (a) $\frac{3}{4}$ hour (b) 1 hour
 (c) $\frac{2}{4}$ hour (d) $\frac{5}{4}$ hour
46. Which of the following numbers in Roman Numerals is incorrect ?
 (a) LXII (b) XCI
 (c) LC (d) XLIV
47. How many faces are there in a cuboid?
 (a) 6 (b) 12 (c) 8 (d) 4
48. A flat surface which extends indefinitely in all directions is called a
 (a) Plane (b) Line
 (c) Line segment (d) Point
49. The difference between two complementary angles is 10° . Calculate the values of both the angles.
 (a) $55^\circ, 45^\circ$ (b) $40^\circ, 50^\circ$
 (c) $50^\circ, 60^\circ$ (d) $100^\circ, 90^\circ$
50. The total weight of brinjal, lady-finger and onion is 48.057 kg. If brinjal and lady-finger weight 5.35 kg and 24.52 kg respectively, find the weight of onion.
 (a) 17.187 kg (b) 18.187 kg
 (c) 17.180 kg (d) 18.180 kg

GENERAL KNOWLEDGE

51. Which device is used to measure the speed of vehicles?
 (a) Gravometer (b) Speedometer
 (c) Gyroscope (d) Kilometer
52. From which monument did India adopt its National Emblem?
 (a) Kapilavastu (b) Hastinapur
 (c) Sarnath (d) Panipat
53. In which of the following styles of dance is the story/theme always taken from Mahabharata and Ramayana?
 (a) Mohiniattam (b) Odissi
 (c) Bharatanatyam (d) Kuchipudi
54. Arrange the months based on our National Calender (Saka Era) in correct serial order – a-Chaitra b-Vaishakha c-Jyaishtha d-Aashada:
 (a) abcd (b) bcda
 (c) dacb (d) cdab

55. Which one of the following is a combat aircraft?
(a) Tejas
(b) Dhruv
(c) Boeing C-17 Globemaster
(d) Chetak
56. Which of the following cups/trophies is associated with football?
(a) Davis Cup
(b) Champions Trophy
(c) Santosh Trophy
(d) Deodhar Trophy
57. How do ants recognize ants from their group?
(a) By colour
(b) By face
(c) By smell
(d) By Height
58. Which of the following is domesticated in poultry farms?
(a) Goat
(b) Sheep
(c) Hen
(d) Horses
59. The _____ cover the tongue and react to chemicals in food.
(a) Taste Buds
(b) Sphincters
(c) Teeth
(d) Skin
60. What does freezing do when preserving foods?
(a) Keeps the foods product hard
(b) Keeps the flavours of the food fresh
(c) Stops growth of micro-organisms
(d) None of the above
61. Seeds of drumstick and maple are carried over long distances by wind because they possess.
(a) winged seeds
(b) large and hairy seeds.
(c) long and ridged fruits.
(d) spiny seeds
62. _____ is a traditional rainwater harvesting technique of Rajasthan.
(a) Taanka
(b) Khadin
(c) Bavadi
(d) Kuan
63. Which of the following will dissolve in water?
(a) Soil
(b) Chalk Powder
(c) Sugar
(d) Oil
64. Which of the following is a communicable disease?
(a) Diabetes
(b) Chicken pox
(c) Alzheimer's
(d) Cancer
65. To climb the mountains, we have to
(a) Bend forward
(b) Bend backwards
(c) Walk straight
(d) Walk sideways
66. Name an astronomical observatory built in the 18th century by Rajput King Sawai Jai Singh of Rajasthan.
(a) Red Fort
(b) Qutab Minar
(c) Jantar Mantar
(d) Taj Mahal
67. _____ includes internal rocks, minerals, etc.
(a) Atmosphere
(b) Biosphere
(c) Hemisphere
(d) Geosphere
68. The remains of plants and animals that were buried millions of years ago are known as
(a) potential reserves
(b) fossil fuels
(c) biomass fuel
(d) animate power
69. Rasgulla is a popular sweet of _____.
(a) West Bengal
(b) Punjab
(c) Kerala
(d) Himachal Pradesh
70. Which of the following is a tribal community of India?
(a) Pandit
(b) Jaat
(c) Bhil
(d) Punjabi
71. Clouds are mostly made of
(a) snow
(b) dust
(c) water droplets
(d) smog
72. For which of the following works has Vasdev Mahi been awarded the 29th Saraswati Samman?
(a) Lost Children Archive
(b) Chequebook
(c) The Stranger Diaries
(d) A Song for a New Day
73. Who was the first Indian to be the President of U.N. General Assembly?
(a) Natwar Singh
(b) V.K. Krishna Menon
(c) Smt. Vijaya Lakshmi Pandit
(d) Smt. Indira Gandhi
74. In which of the following parts of the human body are sweat glands absent?
(a) Scalp
(b) Armpits
(c) Lips
(d) Palms
75. What do we call the young one of a Kangaroo?
(a) Foal
(b) Colt
(c) Joey
(d) Cub

LANGUAGE

Direction : Read the following passage and answer the questions.

Zeus and Prometheus

From the very first, humans had trouble with the Greek Gods. Most Gods thought of humans as toys. But Gods made friends with the humans. One of those Gods was Prometheus. The first people created by the Gods lived happily together. They thought the Gods were wonderful. But their children were not as grateful or as content. The children argued among themselves, and sometimes even argued with the Gods. Zeus was very disappointed at mankind. He decided to punish mankind by depriving them of a very important tool – fire. Prometheus felt sorry for his human friends. Fire was important for many things such as heat and cooking. Prometheus stole a lightning bolt from Zeus and gave it to mankind. That's when man discovered fire.

Zeus was furious as Prometheus had defied Zeus. He ordered Prometheus be chained to a rock as punishment for stealing his lightning bolt, and for going behind his back to help the humans. To make Prometheus even more miserable, Zeus sent storms to beat angry waves against Prometheus, helplessly chained to his rock. Zeus made the sun shine really brightly now and then to burn his skin. It was Hercules who finally released that helpless God from his chains.

76. Which of the following statements is not true about Zeus and Prometheus?
- (a) Most Greek Gods saw humans as a means of their entertainment.
 - (b) Prometheus was chained to a rock as he was a God.
 - (c) Zeus was an unforgiving God who did not like to be disobeyed.
 - (d) Hercules emerged as the saviour of Prometheus.
77. Why was Zeus angry and disappointed at humans?
- (a) They kept asking him for fire.
 - (b) The humans misused his lightning bolt.
 - (c) The humans were quarrelsome and didn't respect the Gods.
 - (d) The humans were not intelligent enough to discover fire.

78. What is the meaning of the underlined word: 'Proetheus had defied Zeus'?

- (a) Prometheus had worshipped Zeus all his life.
- (b) Prometheus had defamed Zeus.
- (c) Prometheus detested Zeus for his attitude.
- (d) Prometheus had disregarded the authority of Zeus.

Fill in the blanks with the most appropriate option.

79. The news is all _____ the internet.
- (a) on
 - (b) through
 - (c) over
 - (d) never
80. We studied about _____ Roman Empire in school.
- (a) a
 - (b) an
 - (c) the
 - (d) no article
81. There was no one else in the room _____ Collin.
- (a) accept
 - (b) except
 - (c) axcept
 - (d) accept

Rearrange the following words/phrases to make meaningful sentences. Choose the correct sequence.

82. the sun (A) / you (B) / of (C) / must (D) / stay out (E)
- (a) ECADB
 - (b) ABCDE
 - (c) BDECA
 - (d) DEACB
83. I (A) / immediately (B) / salary (C) / my (D) / want (E)
- (a) BAEDC
 - (b) AEDCB
 - (c) DCAEB
 - (d) EADCB
84. Do as directed:
There are some diseases that are inherited. (Identify the kind of Noun)
- (a) 'diseases' is a proper noun
 - (b) 'diseases' is an abstract noun
 - (c) 'diseases' is a collective noun
 - (d) 'diseases' is a common noun
85. After school you and _____ must discuss a few things. (Choose the correct pronoun)
- (a) him
 - (b) me
 - (c) I
 - (d) we
86. It is quite warm, _____ ? (Use a Question Tag)
- (a) is it
 - (b) wasn't it
 - (c) isn't it
 - (d) was it
87. Leave your bags at the gate. (Identify the type of sentence)
- (a) Imperative
 - (b) Declarative
 - (c) Interrogative
 - (d) Exclamatory

88. Near the equator, the sun _____ greater quantities of water. (Choose the correct form of the verb)
 (a) is evaporating (b) evaporates
 (c) has evaporated (d) evaporate
89. Chose the correct spelling:
 (a) appartment (b) aparttment
 (c) apartment (d) apartmant
90. Today is the _____ day of my life. (Choose the correct adjective)
 (a) more important (b) less important
 (c) important (d) most important
91. Poets are known to fly in their thoughts. (Choose the word nearest in meaning to the underlined ward)
 (a) sore (b) sour
 (c) soar (d) sure
92. Choose the most appropriate option:
 Which of the following options is the meaning of the word 'exhausted' ?
 (a) Very hot (b) Very polluted
 (c) Very fresh (d) Very tired
93. A confectioner is a person who _____.
 (a) sells tools (b) sells confetti
 (c) sells sweets (d) sells clothes
94. The captain _____ along with the players.
 (a) was present
 (b) was presenting
 (c) have been presenting
 (d) has been presenting
95. Choose the word that means the opposite of MORTAL.
 (a) Unmortal (b) Immortal
 (c) Inmortal (d) Dismortal
96. A _____ of thieves was caught by the Police.
 (a) swarm (b) pack
 (c) team (d) batch
97. It has become his habit to _____ do his homework and then copy it from others.
 (a) always (b) often
 (c) frequently (d) never
98. There were several _____ at the conference.
 (a) women (b) woman
 (c) wemens (d) womans
99. 'To beat around the bush' means
 (a) to turn violent against a stranger.
 (b) to avoid saying something because it is uncomfortable.

- (c) to come to the main point of the conversation.
 (d) to start a fire in the forest.

100. My father is a bookworm, he _____ books to films and sports.
 (a) is prefer (b) prefer
 (c) prefers (d) are prefer

INTELLIGENCE TEST

101. What comes next in the given series ?
 A, C, F, H, K, M,
 (a) N (b) Y (c) P (d) M
102. Rahul started walking straight towards East. He walks a certain distance and then turns towards his right and walks again. In which direction is he heading now?
 (a) North (b) East
 (c) South (d) West
103. From the given options, choose the odd one out.
 (a) Bangladesh : Taka
 (b) Brazil : Real
 (c) Cyprus : Dollar
 (d) Iran : Rial
104. Tanya is older than Eric.
 Cliff is older than Tanya.
 Eric is older than Cliff.
 If the first two statements are true, the third statement is
 (a) True (b) False
 (c) Uncertain (d) None of these
105. What will come at the place of the question mark ?
 10, 100, 200, 310, ?
 (a) 420 (b) 410 (c) 430 (d) 400
106. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then how is A related to D?
 (a) Grandfather (b) Grandmother
 (c) Daughter (d) Grand-daughter
107. In a certain code language, COMPUTER is written as RFUVQNPC. How will MEDICINE be written in that code language?
 (a) MFEDJJOE (b) EOJDEJFM
 (c) MFEJDJOE (d) EOJDJEFM
108. If South-East becomes North, North-East becomes West and so on, what will West become?
 (a) North-East (b) North-West
 (c) South-East (d) South-West

109. In a class of 45 students, Amir's rank from the top is 16th. Ashok is 6 ranks below Amir. What is Ashok's rank from the bottom?

- (a) 23rd (b) 32nd
(c) 24th (d) 30th

110. Which one set of letters when sequentially placed at the gaps in the given letters series shall complete it?

_ab_b_aba__abab.

- (a) abbaa (b) bbaab
(c) abaab (d) aaaba

111. Look at this series: 2, 1, (1/2), (1/4), What number should come next?

- (a) 1/3 (b) 1/8
(c) 2/8 (d) 1/16

112. Choose the correct alternative that has the same relation.

SCD, TEF, UGH, _____, WKL

- (a) CMN (b) UJI (c) VIJ (d) IJT

113. If 'WAY' is coded as 679, 'MAY' is coded as 579, then 'YAW' will be coded as.

- (a) 976 (b) 769 (c) 679 (d) 579

114. If '+' means "Minus", '-' means "Multiply", 'x' means "Add", then what is the value of $10 \times 5 + 3 - 2$?

- (a) 24 (b) 52 (c) 9 (d) 10

115. mend : sewing :: edit : _____

- (a) darn (b) repair
(c) manuscript (d) makeshift

116. Fill in the Blank

Rein : horse :: control panel : _____

- (a) pilot (b) bit
(c) plane (d) rider

117. Choose the word which is least like the words in the group.

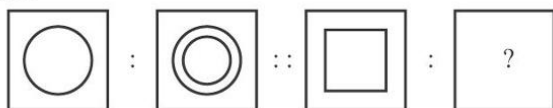
- (a) MS Paint (b) Facebook
(c) WhatsApp (d) Twitter

118. Choose the word that is a necessary part of the underlined word.

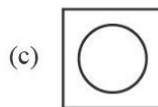
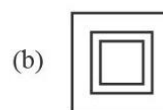
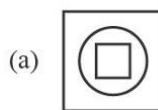
Guitar

- (a) Band (b) Teacher
(c) Songs (d) Strings

119.



Completer the second pair by selecting the appropriate alternative.



120. A man walks 6 km south, turns left and walks 4 km, again turns left and walks 5 km. Which direction is he facing now?

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

121. Which letter replaces the question mark?

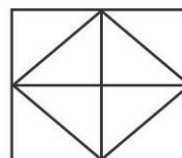


- (a) N (b) O (c) P (d) M

122. The priest told the devotee, "The bell rings at regular intervals of 45 minutes. The last bell rang 5 minutes ago. The next bell is due to be rung at 7:45 am." At what time did the priest give this information to the devotee?

- (a) 6:55 am (b) 7:00 am
(c) 7:05 am (d) 7:40 am

123. How many triangles are there in the figure given below?



- (a) 4 (b) 12 (c) 16 (d) 10

124. In a code, 'BOMBAY' is coded as 'CNNABX', then what will be the #code# of 'DELHI'?

- (a) EDMJG (b) GMDEJ
(c) DEGMJ (d) EDMGJ

125. Fill in the blank.

Segregate : unify :: repair : _____

- (a) approach (b) push
(c) damage (d) outwit

Solutions

MATHEMATICS

- (c) The whole numbers are closed under multiplication.
- (b) 1 million = 1,000,000
Successor of 1 million = 1,000,000 + 1 = 1,000,001
- (*) x is at 1.
 y is at 2.
XW, WT, TP, PQ, QY is 5 equal parts from 1 to 2.

$$\text{Each part} = \frac{(2-1)}{5} = \frac{1}{5}.$$

From O to P.

OU, US, SV, VR, RX, XW, WT, TP.

$$8 \text{ equal parts, hence } OP = 8\left(\frac{1}{5}\right) = \frac{8}{5}.$$

The fraction represented by length OP is $\frac{8}{5}$.

- (a) $\frac{5}{7} = 0.71$

So, the two consecutive integers, between the fraction $\frac{5}{7}$ lies, are "0 and 1".

- (a) $\frac{4}{5} = 0.8$ $\frac{5}{3} = 1.66$
 $\frac{5}{6} = 0.83$ $\frac{5}{2} = 2.5$

So, smallest fraction is " $\frac{4}{5}$ ".

- (c) HCF = 6
LCM = 864
One number = 96
Second number = ?
Let, the second number is x .
LCM $\times$ HCF = First number $\times$ Second number
 $\Rightarrow 864 \times 6 = 96 \times x$
 $\Rightarrow x = \frac{864 \times 6}{96} \Rightarrow x = 54$.
- (a) Given that the HCF of two numbers is 12 and their difference is 12.
Let the two numbers are x and y .

Since the HCF of x and y is 12.

So, $x = 12a$ and $y = 12b$, where a and b are prime to each other.

Also, the difference of x and y is 12.

$$\therefore x - y = 12$$

$$\Rightarrow 12a - 12b = 12$$

$$\Rightarrow 12(a - b) = 12$$

Both sides dividing by 12.

$$a - b = 1$$

a and b are consecutive to each other and also are prime to each other.

Now we will check by the options.

Option (1),

$$\text{Let } x = 96 \text{ and } y = 84$$

$$x - y = 96 - 84$$

$$x - y = 12 \quad \dots(1)$$

Hence, the difference of two numbers is 12 and also the HCF of the two numbers is 12.

Now we will check whether the values satisfy the equation or not.

By dividing x and y by 12 and then subtracting

$$\frac{y}{12} \text{ from } \frac{x}{12},$$

$$\text{we get } \frac{x}{12} - \frac{y}{12} = \frac{96}{12} - \frac{84}{12} = 8 - 7 = 1$$

$$\therefore x - y = 12$$

Hence, option (1) is correct.

- (d) LCM of 9, 12 and 15

3	9,	12,	15
3	3	4	5
4	1	4	5
5	1	1	5
	1	1	1

$$= 3 \times 3 \times 4 \times 5 = 180.$$

So, smallest number that is divisible by 9, 12 and 15 is 180.

- (b) Cost price of one dozen soap powder = ₹144
 $\therefore$ Cost price of 8 dozen soap powder = ₹144 $\times$ 8 = ₹1152
Selling price of one soap powder packet = ₹15

- Selling price of one dozen soap-powder packet
 $= ₹15 \times 12 = ₹180$.
 Selling price of 8 dozen soap-powder packet
 $= ₹180 \times 8 = ₹1440$
 Profit on 8 dozen soap-powder = $1440 - 1152$
 $= ₹288$.
 Profit percentage
 $= \frac{\text{Profit}}{\text{Cost Price}} \times 100 = \frac{288}{1152} \times 100 = 25\%$.
10. (b) To find the greatest number that will divide 37, 56, 93 leaving remainder 1, 2 and 3 respectively we should find the HCF of $37 - 1 = 36$, $56 - 2 = 54$ and $93 - 3 = 90$
 The factors of
 $36 = 1, 2, 3, 4, 6, 9, 12, 18, 36$
 $54 = 1, 2, 3, 6, 9, 18, 27, 54$
 $90 = 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90$
 So, HCF is 18.
 $\therefore$ The greatest number is 18.
11. (b) $M_1 = 10$ men
 $D_1 = 4$ days
 $D_2 = 5$ days
 $M_2 = ?$
 Let x men will be required.
 Then, $M_1 \times D_1 = M_2 \times D_2$
 $\Rightarrow 10 \times 4 = x \times 5$
 $\Rightarrow x = \frac{10 \times 4}{5} = 8$ men.
 So, "8" men will be required.
12. (b) 15 cows = 21 goats
 $1 \text{ cow} = \frac{21}{15} \text{ goats}$
 $35 \text{ cows} = \frac{21}{15} \times 35 = 49 \text{ goats}$
 So, 49 goats eat as much as 35 cows.
13. (a) A mechanic earns on 9 cars = ₹36,000
 A mechanic earns on 1 car
 $= \frac{36000}{9} = ₹4000$
 A mechanic earns on 27 cars = 4000×27
 $= ₹1,08,000$.
 So, he will receive in 1 day = ₹1,08,000.
14. (c) $x : y = 3 : 5$
 Or, $\frac{x}{y} = \frac{3K}{5K}$
 So, $x = 3K, y = 5K$
 $3x + 4y : 8x + 5y$
 Putting the values of x and y .
 $3 \times 3K + 4 \times 5K : 8 \times 3K + 5 \times 5K$
 $\Rightarrow 9K + 20K : 24K + 25K$
 $\Rightarrow 29K : 49K$
 $\therefore$ Required ratio = $29 : 49$.
15. (c) If 3, 18, m , 42 are in proportion.
 Then, $\frac{3}{18} = \frac{m}{42}$
 $\Rightarrow \frac{1}{6} = \frac{m}{42} \Rightarrow m = \frac{42}{6}$
 So, $m = 7$.
16. (c) Total trainees in NCC camp = 1200
 Selected for Republic Day camp = 900
 Not selected = $1200 - 900 = 300$.
 The ratio between the number of selected and non-selected candidates
 $= 900 : 300 = 3 : 1$.
17. (c) Let the cost price of the book = ₹ x .
 Selling Price of the book = ₹450.
 Loss percentage = 10%
 $\therefore \text{CP} \times 90\% = \text{SP}$
 $\Rightarrow x \times \frac{90}{100} = 450$
 $\Rightarrow x = ₹500$.
 To gain 10% profit, the selling price should be 110% of CP
 $= 500 \times \frac{110}{100} = ₹550$.
18. (d) Selling price of first speaker = ₹7,500
 Profit percentage = 20%
 $\therefore$ Cost price of first speaker
 $= \frac{7500}{120} \times 100 = ₹6250$.
 Selling price of second speaker = ₹8100.
 Loss percentage = 10%
 $\therefore$ Cost price of second speaker
 $= \frac{8100 \times 100}{90} = ₹9000$
 Cost price of both the speakers
 $= 6250 + 9000 = ₹15250$.
 Selling price of both the speakers
 $= 8100 + 7500 = ₹15600$.
 Profit = $15600 - 15250 = ₹350$.

19. (b) $(8 + 4 - 2) \times (17 - 12) \times 10 - 89 = ?$

$$\Rightarrow (10) \times (5) \times 10 - 89 = ?$$

$$\Rightarrow 50 \times 10 - 89 = ?$$

$$\Rightarrow 500 - 89 = ? \Rightarrow ? = 411.$$

20. (c) $0.05 + 1.5 \times 5 \div 10 \times 0.5 = ?$

$$\Rightarrow 0.05 + 1.5 \times \frac{5}{10} \times 0.5 = ?$$

$$\Rightarrow 0.05 + 1.5 \times \frac{1}{2} \times 0.5 = ?$$

$$\Rightarrow 0.05 + \frac{.75}{2} = ?$$

$$\Rightarrow 0.05 + 0.375 = ? \Rightarrow ? = 0.425.$$

21. (b) $7 + 5 - 2 \times (7 + 89) - 94 \div 2 + (33 \div 3 + 9 \times 2 - 7) \div 11 = ?$

$$\Rightarrow 12 - 2 \times (96) - 47 + (11 + 18 - 7) \div 11 = ?$$

$$\Rightarrow 12 - 192 - 47 + (22) \div 11 = ?$$

$$\Rightarrow 12 - 192 - 47 + 2 = ?$$

$$\Rightarrow 14 - 239 = ? \Rightarrow ? = -225.$$

22. (a) The average weight of 20 boys = 160 Kg.
Total weight of 20 boys = $20 \times 160 = 3200$ Kg.
The weight of remaining 5 boys
= $50 \times 5 = 250$ Kg.
Total weight of 25 boys = $3200 + 250 = 3450$ Kg.
Average weight of all 25 boys

$$= \frac{3450}{25} = 138 \text{ Kg.}$$

23. (d) The average marks obtained by 7 students = 226.

Total marks obtained by 7 students

$$= 226 \times 7 = 1582$$

The sum of six students' marks

$$= 340 + 180 + 260 + 56 + 275 + 307 = 1418.$$

Marks obtained by 7th student

$$= 1582 - 1418 = 164.$$

24. (b) If a month starting with Sunday, then there will be 5 Sundays.

Average visitors on Sunday = 510

Total visitors in 5 Sundays = $510 \times 5 = 2550$

Average visitors on other days = 240

Total visitors in on other days

$$= 240 \times (30 - 5) = 240 \times 25 = 6000.$$

The average number of visitors in a month

$$= \frac{6000 + 2550}{30} = \frac{8550}{30} = 285.$$

25. (d) Let his average in 16th match was x .
Then, ATQ -

$$16 \times x + 87 = 17(x + 3)$$

$$\Rightarrow 16x + 87 = 17x + 51$$

$$\Rightarrow 17x - 16x = 87 - 51 \Rightarrow x = 36$$

$$\therefore \text{His average after 17th match} = (x + 3) = 36 + 3 = 39.$$

26. (a) Average of 1, 3, 5, 7, 9, 11, 13

$$= \frac{1 + 3 + 5 + 7 + 9 + 11 + 13}{7} = \frac{49}{7} = 7.$$

27. (c) $x\%$ of $y = 100$

$$\Rightarrow y \times \frac{x}{100} = 100$$

$$\Rightarrow \frac{y}{100} = \frac{100}{x} \quad \dots(1)$$

$$y\% \text{ of } z = 200$$

$$z \times \frac{y}{100} = 200 \quad \dots(2)$$

Put the value of $\left(\frac{y}{100}\right)$ in eqn. (2) from the eqn. (1)

$$z \times \left(\frac{100}{x}\right) = 200$$

$$\Rightarrow \frac{z}{x} = 2 \Rightarrow z = 2x.$$

28. (c) Let the number is ' a '.
According to the question -

$$a \times \frac{1}{4} \times \frac{1}{3} \times \frac{2}{5} = 15$$

$$\Rightarrow a = 15 \times 30 = 450.$$

$$\text{Now, } 40\% \text{ of the number} = \frac{450 \times 40}{100} = 180.$$

29. (b) Let the number is ' a '.
According to the question :

$$40 \times 15\% = a \times \frac{25}{100} + 2$$

$$\Rightarrow 40 \times \frac{15}{100} = a \times \frac{1}{4} + 2$$

$$\Rightarrow 6 = \frac{a}{4} + 2 \Rightarrow \frac{a}{4} = 6 - 2$$

$$\Rightarrow \frac{a}{4} = 4 \Rightarrow a = 16.$$

30. (c) Area of rectangular playground = 700 sq. m.
Breadth of rectangular playground = 25 m.
Let the length of rectangular playground = l m.
Area of rectangle = Length $\times$ Breadth

$$\Rightarrow 700 = l \times 25$$

$$\Rightarrow l = \frac{700}{25} = 28 \text{ m.}$$

$$\Rightarrow l = 28 \times 100 = 2800 \text{ cm } (\because 1 \text{ m} = 100 \text{ cm})$$

31. (b) Principal amount = ₹1200.

Interest = ₹432.

Let the rate of interest is r , then time period = r .

$$\text{Simple interest} = \frac{\text{Principal} \times \text{rate} \times \text{time}}{100}$$

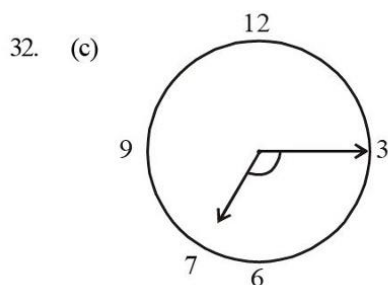
$$\Rightarrow 432 = \frac{1200 \times r \times r}{100}$$

$$\Rightarrow r^2 = \frac{432}{12} = 36$$

$$\Rightarrow r^2 = 36 \Rightarrow r = \sqrt{36}$$

$$\therefore r = 6.$$

$$\therefore \text{Rate of interest} = 6\%.$$



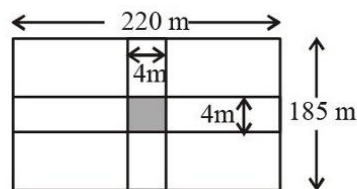
Obtuse angle will be formed.

33. (b) The maximum temperature of May, July and September in New York City last year = 21°C , 29°C and 24°C

Average maximum temperature in these months last year

$$= \frac{21 + 29 + 24}{3} = \frac{74}{3} = 24.66^\circ\text{C}$$

34. (a) In the morning, temperature = -10°C
In the evening, temperature = -7°C
($\therefore$ If decreases 3° by the evening)
35. (d) Length of rectangular garden = 185 m
Breadth of rectangular garden = 220 m



Area of road parallel to its breadth

$$= 220 \times 4 = 880 \text{ m}^2$$

Area of road parallel to its length

$$= 185 \times 4 = 740 \text{ m}^2$$

Common area of road = $4 \times 4 = 16 \text{ m}^2$

$$\therefore \text{Total area of road} = (880 + 740) - 16$$

$$= 1620 - 16 = 1604 \text{ m}^2$$

Cost of levelling the road = ₹1.25 per sq. m.

$$\text{Total cost of levelling the road} = 1604 \times 1.25 = ₹2005.$$

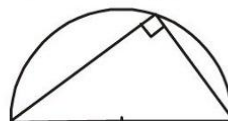
36. (a) 1 decimeter = 10 cm or 0.1 m.

$$\therefore 1 \text{ decimeter} = \frac{1}{10} \text{ m} = 1 \times 10^{-1} \text{ m.}$$

37. (b) It is a false statement.

In roman numeration, if a symbol is repeated, its value is added as many times as it occurs.

38. (c) The angle subtended by the diameter of a semicircle on any point on the circle is 90° .



39. (b) Length of each portion of big cube = 44 cm
Length of each portion of tiny cube = 4 cm

$$\text{Total length is divided into} = \frac{44}{4} = 11 \text{ parts}$$

$$\text{So, } x + 2 = 11$$

$$\Rightarrow x = 11 - 2 = 9 \text{ cm.}$$

$\therefore$ The number of cubes will be formed such that each face of these cubes is surrounded by other cubes is

$$(x)^3 = (9)^3 = 729.$$

40. (d) Length of rectangular tank = 15 cm

Breadth of rectangular tank = 12 cm

Height of rectangular tank = 8 cm

Volume of rectangular tank

$$= \text{Length} \times \text{Breadth} \times \text{Height}$$

$$= 15 \times 12 \times 8 = 120 \times 12 = 1440 \text{ cm}^3.$$

41. (d) $\frac{5}{8}, \frac{7}{12}, \frac{3}{4}$ and $\frac{13}{16}$

$$\text{LCM of } 8, 12, 4 \text{ and } 16 =$$

4	4	8	12	16
2	1	2	3	4
3	1	1	3	2
2	1	1	1	2
	1	1	1	1

$$= 4 \times 2 \times 3 \times 2 = 48.$$

$$\frac{5}{8} \times 48 = 30$$

$$\frac{7}{12} \times 48 = 28$$

$$\frac{3}{4} \times 48 = 36$$

$$\frac{13}{16} \times 48 = 39.$$

So, ascending order of fractions is

$$\frac{7}{12} < \frac{5}{8} < \frac{3}{4} < \frac{13}{16}.$$

42. (d) $945.341 - 1042.792 + 875.435 + 31.025 = ?$

$$\Rightarrow 1851.801 - 1042.792 = ?$$

$$\therefore ? = 809.009.$$

43. (c) First distance = 160 Km

$$\text{First speed} = 64 \text{ Km/h.}$$

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{160}{64} = 2.5 \text{ hr.}$$

$$\text{Second distance} = 160 \text{ Km.}$$

$$\text{Second speed} = 80 \text{ Km/h.}$$

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{160}{80} = 2 \text{ hr.}$$

$$\text{Total distance} = 320 \text{ Km.}$$

$$\text{Total time} = 2.5 + 2 = 4.5 \text{ hr.}$$

$$\text{Average speed of the tour}$$

$$= \frac{320}{4.5} = 71.11 \text{ Km/hr.}$$

44. (a) On dividing 2272 as well as 875 by 3-digit number N , we get the same remainder.

$$\text{Clearly } 2272 - 875 = 1397, \text{ is divisible by } N.$$

$$\text{Now, Factors of } 1397 = 11 \times 127$$

$$\text{So, required 3-digit number is } 127.$$

$$\text{And the sum of 3-digit number} = 1 + 2 + 7 = 10.$$

45. (a) Julia takes to wash, comb and put on her

$$\text{clothes} = \frac{1}{2} \text{ hour.}$$

$$\text{Julia takes to have her breakfast} = \frac{1}{4} \text{ hour.}$$

Required time for Julia to be ready for school

$$= \frac{1}{2} + \frac{1}{4} = \frac{2+1}{4} = \frac{3}{4} \text{ hour.}$$

46. (c) LXII = 62

$$\text{XCI} = 91$$

$$\text{XLIV} = 44$$

So, LC is incorrect.

47. (a) A cuboid has 6 faces.

48. (a) A flat surface which extends indefinitely in all directions is called 'Plane'.

49. (b) Let both the angles are a and b .

If two angles make 90° angle then they are called complementary.

$$\text{Then, } a + b = 90$$

$$\text{and } a - b = 10 \quad (\text{given})$$

$$\text{By adding : } 2a = 100 \Rightarrow a = 50^\circ$$

$$\text{By subtracting : } 2b = 80 \Rightarrow b = 40^\circ.$$

50. (b) Total weight of Brinjal, Lady-finger and Onion = 48.057 Kg.

$$\text{Weight of Brinjal} = 5.35 \text{ Kg.}$$

$$\text{Weight of Lady-finger} = 24.52 \text{ Kg.}$$

$$\text{Weight of Onion} = 48.057 - (5.35 + 24.52)$$

$$= 48.057 - 29.87 = 18.187 \text{ Kg.}$$

GENERAL KNOWLEDGE

51. (b) Speedometer is a instrument that indicates the speed of a vehicle, usually combined with a device known as an odometer that records the distance travelled.

52. (c) The national emblem of India is an adaptation of the Lion Capital atop the Ashoka Pillar of Sarnath, Uttar Pradesh.

53. (c) Bharatanatyam is the dance form in which the themes are taken from Ramayana and Mahabharata. It is a genre of Indian classical dance. Bharatanatyam was originated in Tamil Nadu.

54. (a) Saka Samvat has been adopted as an official civil calendar by India. Saka Samvat starts from 78 AD, The months in the Saka Samvata are Chaitra, Vaisâkha, Jyêshtha, Âshâdha, Shrâvana, Bhâdra, Âshwin, Kârtika, Agrahâyana, Pausha, Mâgha and Phâlguna respectively. Hence (1) is the correct answer.

55. (a) Combat aircraft are designed to destroy enemy equipment using their own aircraft ordnance. Combat aircraft are typically developed and procured only by military forces. Tejas, MIG 21, MiIG 29, Sukhoi Su-30, Dassault Rafale, Mirage 2000, SEPECAT Jaguar are combat aircrafts in India.

56. (c) Santosh Trophy is associated Football. It is an Indian football tournament in which the states of the country along with some government institutions participate. Davis Cup is associated with Lawn Tennis, 'Champion Trophy' with hockey while the Deodhar Trophy is associated with the game of cricket.
57. (c) Every ant of a constant group has a different claw and characteristics smell. So by this they can recognize the ants from their group.
58. (c) Poultry farming is the form of animal husbandry which raises domesticated birds such as Hens, ducks, turkeys and geese to produce meat or eggs for food.
59. (a) Taste buds are sensory organs that are found on your tongue and allow you to experience tastes that are sweet, salty, sour, and bitter.
60. (c) Freezing delays spoilage and keeps foods safe by preventing microorganisms from growing and by slowing down the enzyme activity that causes food to spoil.
61. (a) Various seeds and fruits have some special feature due to which they are carried away in a particular way (by wind, water or animal). Seeds of drumstick and maple have wings which help them to be easily carried away by wind.
62. (a) A taanka, are also known as a tanka or kunds, is a traditional rainwater harvesting technique, common to the Thar desert region of Rajasthan, India.
63. (c) Salt and Sugar are soluble substances. Soluble substances are those which disappear when mixed with water while Insoluble substances are those which don't disappear or dissolve when mixed with water. Eg: sand, chalk, sawdust etc.
64. (b) Communicable diseases spread from one person to another or from an animal to a person. The spread often happens via airborne viruses or bacteria, but also through blood or other bodily fluid.
Non-communicable diseases (NCDs) include a range of chronic conditions, including cancer, diabetes, cardiovascular disease, hypertension, as well as Alzheimer's and other dementias. Chickenpox is a highly contagious disease caused by the varicella-zoster virus (VZV). The virus spreads mainly through close contact with someone who has chickenpox.
65. (a) To climb the mountains we have to bend forward.
66. (c) Jantarmantra was built in 1724 by Maharaja Jai Singh II of Jaipur, it is among the five observatories, the biggest one located in Jaipur. The rest are in Ujjain, Varanasi and Mathura.
67. (d) The geosphere is the part of the planet composed of rock and minerals; it includes the solid crust, the molten mantle and the liquid and solid parts of the earth's core.
68. (b) Fossil fuels are made from decomposing plants and animals. These fuels are found in the Earth's crust and contain carbon and hydrogen, which can be burned for energy. Coal, oil, and natural gas are examples of fossil fuels.
69. (a) Rasgulla is a popular bengali sweet made of milk and sugar. It is made from ball-shaped dumplings of chhena (an Indian cottage cheese) and semolina dough, cooked in light syrup made of sugar.
70. (c) Bhils are one of the tribal community of India. A large number of Bhils live in the neighbouring States of Maharashtra, Gujarat and Rajasthan. They constitute the third largest tribe of India.
71. (c) A cloud is made of water drops or ice crystals floating in the sky. The drops of water are too small to see. They have turned into a gas called water vapor. As the water vapor goes higher in the sky, the air gets cooler. The cooler air causes the water droplets to start to stick to things like bits of dust, ice or sea salt.
72. (b) Sindhi writer Vasdev Mohi conferred with 29th Saraswati Samman. He has been selected for this prestigious literary award for his short stories collection- Chequebook.
73. (c) Vijaya Lakshmi Pandit was the first female elected to 6th Governor of Maharashtra and 8th President of the United Nations General Assembly.
74. (c) Sweat glands are absent in the vermilion border of the lips, external ear canal, nail beds, clitoris and labia minora. The inability to sweat can cause overheating. It can affect the entire body.
75. (c) The young of a kangaroo is called a joey. Female kangaroos sport a pouch on their belly, made by a fold in the skin, to cradle baby kangaroos called joeys.

LANGUAGE

76. (d) Option (a) is correct as it is mentioned that most Gods thought of human as toys but Gods made friends with humans. In other words, it can be said that the Gods treated humans as their 'entertainment'.
Option (b) is wrong. However, it is mentioned that *'Prometheus was chained to a rock as punishment'* **but not because he was a God.**
Option (c) is correct as per the information as given in the passage. There is no direct mention about Zeus being an unforgiving God who did not like to be disobeyed. But it is written in the second paragraph that Zeus was furious because Prometheus had defied him. So that justifies the fact given in option (c).
Option (d) also stands correct as per the information given in the passage.
Read the last line of the given passage, *'It was Hercules who finally released the helpless God from his chains.'*
Hence, option (b) is not true about Zeus and Prometheus.
77. (c) Read the lines of first paragraph, *'The first people created by the Gods lived happily together. They thought the Gods were wonderful. But their children were not as grateful or as content. The children argued among themselves, and sometimes even argued with the Gods. Zeus was disappointed at mankind.'*
Hence, option (c) is the reason that Zeus was angry and disappointed at humans.
78. (d) The meaning of the underlined word: *'Prometheus had defied Zeus.'* is that Prometheus had disregarded the authority of Zeus. For clarification, read the lines of first paragraph, *'Zeus was very disappointed at mankind. He decided to punish mankind by depriving them of a very important tool-fire. Prometheus felt sorry for his human friends. Fire was important for many things such as heat and cooking. Prometheus stole a lightning bolt from Zeus and gave it to mankind.'*
In this was Prometheus defied Zeus.
To defy means to openly resist or refuse to obey. Hence, option (d) is the right answer choice.
79. (c) The news is all **over** the internet.
80. (c) We studied about **the** Roman Empire in school.
81. (b) There was no one else in the room **except** Collin.
82. (c) The correct sequence will be BDECA.
You must stay out of the sun.
83. (b) The correct sequence is AEDCB.
I want my salary immediately.
84. (d) 'Diseases' is a common noun. 'Diseases' are common nouns however diseases named after people/ inventors/ discoverers are proper noun e.g., Alzheimer's disease.
85. (c) **After school you and I must discuss a few things.**
There is a simple way to tell which one to use, by imagining the clause without the "you and" part:
Example: You and (I/me?) should spend more time together
Imagine: "Me should..." (this is clearly wrong)
Imagine: "I should..." (correct!)
Answer: You and I should spend more time together
Example: He should have spoken to you and (I/me?).
Imagine: "He should have spoken to me" (correct!)
Imagine: "He should have spoken to I" (wrong)
Answer: He should have spoken to you and me.
86. (c) It is quite warm, ***isn't it?***
87. (a) The given sentence is a command hence, it is a imperative sentence.
88. (b) Near the equator, the sun **evaporates** greater quantities of water.
Simple Present tense is used when we talk about the **universal truth or fact.**
89. (c) 'Apartment' is the correct spelling here. Other words are misspelt.
90. (d) Today is the **most important** day of my life.
91. (c) Soar: to fly aloft or about.
(1) : to sail or hover in the air often at a great height : glide.
(2) of a glider : to fly without engine power and without loss of altitude
Sore: (of a part of one's body) painful or aching.
Sour: having an acid taste like lemon or vinegar.
Sure: completely confident that one is right.
92. (d) Exhausted means very tired.
OR (of resources or reserves) completely used up.
93. (c) A confectioner is a person who **sells sweet.**
94. (a) The captain **was present** along with the players.

106. (d)
- $$\begin{array}{c} \text{E}^- \\ | \\ \text{D}^+ \\ | \\ \text{C}^- \\ | \\ \text{B} \text{ --- } \text{A}^- \end{array}$$

107. (d)

107. (d)

1 2 3 4 5 6 7 8
C O M P U T E R
R F U V Q N P C
8 7 6 5 4 3 2 1

1 2 3 4 5 6 7 8
M E D I C I N E
E O J D J E F M
8 7 6 5 4 3 2 1

Similarly the same order follow in the next letters.

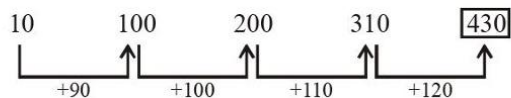
101. (c) The series is as -
- A C F H K M **P**
- +2 +3 +2 +3 +2 +3

- So, now he is heading towards south.

- The currency of Cyprus is 'Euro'.

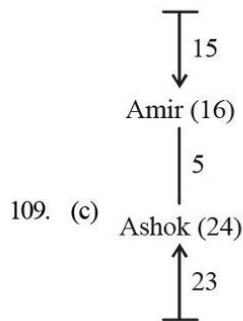
- Cliff ↑
Tanya Age
Eric

105. (c) The pattern of the series is as :



-
- The three diagrams show the following steps:
- Diagram 1:** A vector pointing North and a vector pointing South-East. The angle between them is 135° . A dashed horizontal line is drawn from the origin.
 - Diagram 2:** The North vector is extended horizontally to the right, labeled "North-East". The angle between this extension and the South-East vector is 135° . A dashed vertical line is drawn from the origin.
 - Diagram 3:** The South-East vector is extended vertically downwards, labeled "South-East". The angle between the horizontal extension (labeled "West") and the South-East vector is 135° . A dashed vertical line is drawn from the origin.

We can clearly see that the rotation is 135° anti-clock wise. So, West will become South-East.

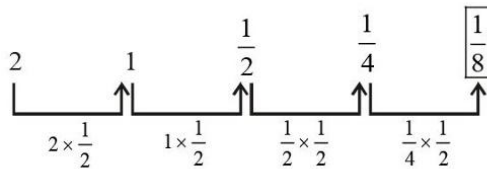


109. (c)

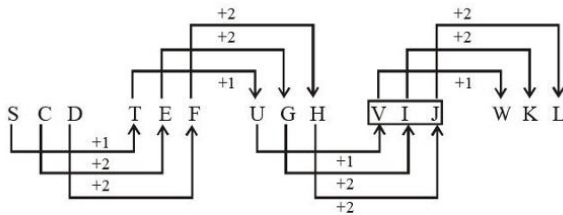
So, Ashok's Rank from bottom is 24th.

110. (d) a a b a b / a a b a b / a a b a b.

111. (b) The series is as :

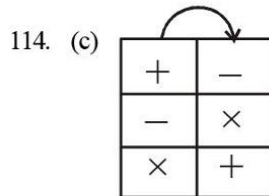


112. (c) The pattern is as :



113. (a)

W	A	Y	M	A	Y	Y	A	W
↓	↓	↓	↓	↓	↓	↓	↓	↓
6	7	9	5	7	9	9	7	6



114. (c)

$$10 \times 5 + 3 - 2 = ?$$

By exchanging the signs -

$$10 + 5 - 3 \times 2 = ?$$

$$\Rightarrow 15 - 6 = ? \Rightarrow ? = 9.$$

115. (b) As, Mend : Sewing

Similarly, Edit : Repair.

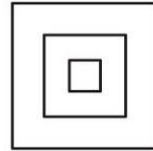
116. (c) A rider uses a Rein to guide a Horse;
A pilog uses the Control Panel to guide a Plane.

117. (a) All ohter are social media platforms, except MS Paint.

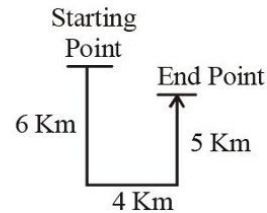
MS Pain is a graphics editor.

118. (d) "Strings" is a necessary part of the Guitar.

119. (b)



120. (b)



So, now he is facing in North direction.

121. (d) The pattern is as :

$$E (5) + H (8) = M (13)$$

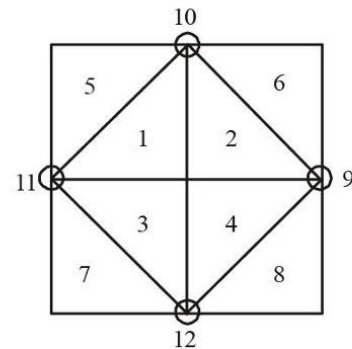
$$N (14) + A (1) = O (15)$$

$$I (9) + D (4) = \boxed{M} (13)$$

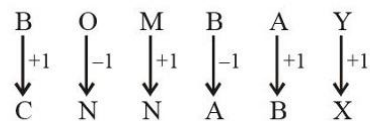
122. (c) The bell rings at regular intervals of 45 minutes.

If last bell rang 5 minutes ago and next bell is due to be rung at 7:45 am then, the Priest give this information to the devotee at 7:05 am.

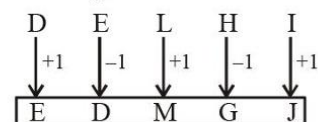
123. (b)



124. (d) As,



Similarly,



125. (c) As Unify is the Antonyms of Segregate;
Similarly Damage is the Antonyms of Repair.