GENERAL INTELLIGENCE AND REASONING

Directions (1–4) : In each of the following questions, select the related word/letters/number from the given alternatives.

1. Wood : Paper : : Steel : ?
   (1) Metal
   (2) Nail
   (3) Glass
   (4) Iron

2. 7 : 28: : 2 : ?
   (1) 8
   (2) 12
   (3) 16
   (4) 24

3. RAT : TAR : : PIT : ?
   (1) BIT
   (2) CAT
   (3) TIP
   (4) TOP

4. Sun : Day : : Moon : ?
   (1) Stars
   (2) Night
   (3) Planets
   (4) Darkness

Directions : In each of the following questions, select the one which is different from the other three responses.

5. (1) 21 - 37
   (2) 42 - 26
   (3) 35 - 51
   (4) 56 - 38

6. (1) Wheat
   (2) Mustard
   (3) Barley
   (4) Corn

7. 1) Bus
   (2) Scooter
   (3) Car
   (4) Cycle

8. (1) ACE
   (2) GIK
   (3) JLM
   (4) SUW

9. Find the correct alternative from the given responses that will complete the series.
   2, 5, 9, ___?___, 20, 27
   (1) 14
   (2) 16
   (3) 18
   (4) 24

10. How many 9 are followed by an even number and preceded by an odd number in the following series?
    469259339467924894
    (1) 4
    (2) 3
    (3) 2
    (4) 1

11. From the given alternatives, select the word which **cannot be formed** using the letters of the given word.
    CELEBRATION
    (1) TAILOR
    (2) ACTION
    (3) CREATE
    (4) BREATH

12. Which one of the given responses would be a meaningful order of the following words?
    1. Word
    2. Paragraph
    3. Sentence
    4. Letter
    (1) 1, 3, 4, 2
    (2) 3, 4, 1, 2
    (3) 4, 1, 2, 3
    (4) 4, 1, 3, 2

13. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?
    b _ y _ _ by _ b _ yt
    (1) bgtbt
    (2) btbtb
    (3) atbbt
    (4) cbbte

14. In a platform, train 'A' 225 m long is stopped to allow train 'B' 375m long to pass. Speed of 'B' is 90 km per hour. time taken by train 'B' to cross train 'A' completely will be
    (1) 6.67 sec
    (2) 9 sec
    (3) 2.5 sec
    (4) 24 sec

15. Some equations are solved on the basis of a certain system. On the same basis, find out the correct answer for the unsolved equation.
    $5 \times 6 \times 9 = 659$
    $4 \times 7 \times 3 = 743$
    $9 \times 2 \times 8 = ?$
    (1) 928
    (2) 298
    (3) 982
    (4) 829

16. If in a certain code language NOITCELES represents SELECTION, then what will AIDNI represent?
    (1) AIDS
    (2) INDIA
    (3) HINDI
    (4) HANDI

17. A man goes 5 km East, then he turns right and goes 4 km, then he turns left and goes 5 km. Which direction is he facing now?
    (1) North
    (2) East
    (3) South
    (4) West

18. Umesh is taller than Satish. Suresh is shorter than Neeraj but taller than Umesh. Who is the tallest among them?
    (1) Umesh
    (2) Suresh
    (3) Satish
    (4) Neeraj

19. Two statements are given followed by two inferences I and II. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You are to decide which of the given inferences, if any, follow from the given statements. Indicate your answer.
    Statements:
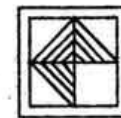   1. All players are educated.
    2. All educated are cultured.
    Inferences :
    I. All players are cultured.
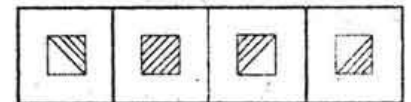   II. All cultured persons are players.
    (1) Only inference I follows
    (2) Only inference II follows
    (3) Both inference I and II follows
    (4) Neither inference I nor II follows

20. Which answer figure will complete the pattern in the question figure?
    Question Figure
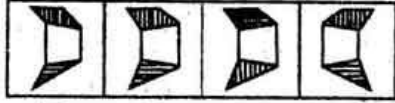

    Answer Figures

    (1)   (2)   (3)   (4)

21. Find the missing number from the given responses.

16	12	13
32	24	26
48	?	39

    (1) 28
    (2) 36
    (3) 42
    (4) 32

22. Which of the answer figure is exactly the mirror image of the given figure, when the mirror is held on the line MN?
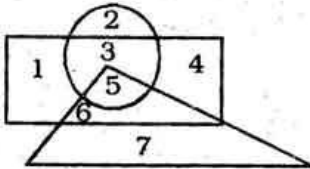
Question Figure
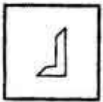

Answer Figures

(1)   (2)   (3)   (4)

23. In the following figure, the triangle represents teachers, the circle represents students and the rectangle represents actors. Which number represents teachers who are also students and actors?
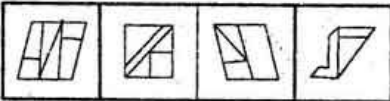

(1) 3   (2) 6
(3) 5   (4) 2

24. Select the answer figure in which the question figure is hidden/embedded.
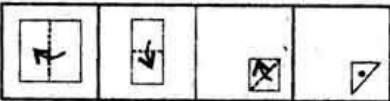
Question Figure
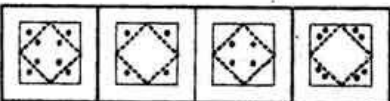

Answer Figures

(1)   (2)   (3)   (4)

25. A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?

Question Figures

(1)   (2)   (3)   (4)

Answer Figures

(1)   (2)   (3)   (4)

GENERAL KNOWLEDGE AND GENERAL AWARENESS

26. The oldest era is
(1) Saka era
(2) Buddhist era
(3) Mohammadan era
(4) Vikrama era

27. The most accessible medium in India is
(1) Television
(2) Radio
(3) Cinema
(4) Newspapers

28. Name the curve which shows the quantity of products a seller wishes to sell at a given price level.
(1) Demand curve
(2) Cost curve
(3) Supply curve
(4) None of these

29. The supply of labour in the economy depends on
(1) Population
(2) National income
(3) Per capita income
(4) Natural resources

30. The main feature of a capitalist economy is
(1) Administered prices
(2) Public ownership
(3) Economic planning
(4) Private ownership

31. A State cannot exist without
(1) Democratic government
(2) Parliamentary government
(3) Presidential government
(4) Some kind of government

32. The second largest producer of cotton textiles in India is
(1) Maharashtra
(2) Tamil Nadu
(3) Andhra Pradesh
(4) Gujarat

33. An instrument that records earthquakes is
(1) Ergograph
(2) Ediograph
(3) Thermograph
(4) Seismograph

34. A matured mammalian cell without nucleus is
(1) Lymphocyte
(2) Erythrocyte
(3) Spermatozoan
(4) Oocyte

35. Haemoglobin contains the metal
(1) Copper
(2) Molybdenum
(3) Iron
(4) Magnesium

36. Whom do we call "The Iron Man of India" ?
(1) Gopal Krishna Gokhale
(2) B.G. Tilak
(3) M.K. Gandhi
(4) Sardar Patel

37. Sikh army was called
(1) Akali
(2) Singh Dal
(3) Khalsa
(4) Gurudwara

38. The most common cause of pollution of air is
(1) Carbon dioxide
(2) Carbon monoxide
(3) Sulphur dioxide
(4) Smoke

39. The Industrial Revolution has led to
(1) Conservation of forests
(2) Increased pollution
(3) Conservation of wild life
(4) Ecological balance

40. The process by which milk is converted to curd is called
(1) Pasteurization
(2) Vernalization
(3) Fermentation
(4) Retting

41. The historic Ellora Caves are located near
(1) Delhi
(2) Agra
(3) Ahmedabad
(4) Aurangabad

42. Citizens of India can vote at the age of
(1) 18 years
(2) 21 years
(3) 22 years
(4) 25 years

43. The author of 'The Satanic Verses' is
(1) Kushal Das
(2) Salman Rushdie
(3) Rammurthy
(4) John Grisham

44. The technique of calculating the age of fossil organisms is
(1) Radiocarbon dating
(2) Electroporation
(3) Counting the annual rings
(4) Micromanipulation

45. 'Comose' seeds are seeds with
(1) Long hairs
(2) Wings
(3) Bristles
(4) Hooks

46. Velocity of sound in air does not depend on
(1) Density of air
(2) Temperature of air
(3) Pressure of air
(4) Humidity of air

47. A dynamo is used to convert
(1) mechanical energy into electrical energy
(2) electrical energy into mechanical energy
(3) electrical energy into magnetic energy
(4) magnetic energy into mechanical energy

48. _____ allows users to access accounts and pay bills
(1) Distance Learning
(2) Online Banking
(3) E-Commerce
(4) Multimedia

49. Nitrogen forms a variety of compounds in all oxidation states ranging from
(1) –3 to + 5
(2) –3 to + 3
(3) –3 to + 4
(4) –3 to + 6

50. The next higher homologue of C_6H_{14} is
(1) C_7H_{14}
(2) C_7H_{12}
(3) C_6H_{12}
(4) C_7H_{16}

ELEMENTARY MATHEMATICS

51. The sum of all those prime numbers which are not greater than 17 is
(1) 59
(2) 58
(3) 41
(4) 42

52. A can do $\frac{1}{6}$ of a work in 5 days and B can do $\frac{2}{5}$ of the work in 8 days. In how many days, can both A and B together do the work?
(1) 12 days
(2) 13 days
(3) 15 days
(4) 20 days

53. The simplified value of $\sqrt{0.25 \times 2.25}$ is
(1) 0.075
(2) 0.705
(3) 0.750
(4) 7.500

54. The decimal fraction $2.3\overline{49}$ is equal to
(1) 2326 /999
(2) 2326/990
(3) 2347/999
(4) 2347/990

55. A milk vendor has 21 litres of cow milk, 42 litres of toned milk and 63 litres of double toned milk. If he wants to pack them in cans so that each can contains same number of litres of milk and does not want to mix any two kinds of milk in a can, then the least number of cans required is
(1) 3
(2) 6
(3) 9
(4) 12

56. The number of integers in between 100 and 600, which are divisible by 4 and 6 both, is
(1) 40
(2) 42
(3) 41
(4) 50

57. From a solid cylinder whose height is 12 cm and diameter 10cm, a conical cavity of same height and same diameter of the base is hollowed out. The volume of the remaining solid is approximately $\left(\pi = \frac{22}{7}\right)$
(1) 942.86 cm³
(2) 314.29 cm³
(3) 628.57 cm³
(4) 450.76 cm³

58. After allowing a discount of 12% on the marked price of an article, it is sold for ₹ 880. Find its marked price.
(1) ₹ 1,100
(2) ₹ 2,000
(3) ₹ 1,000
(4) ₹ 2,100

59. A trader marks his goods at 20% above the cost price. If he allows a discount of 5% for cash down payment, his profit percent for such a transaction is
(1) 15
(2) 12
(3) 14
(4) 17

60. A, B and C individually can do a work in 10 days, 12 days and 15 days respectively. If they start working together, then the number of days required to finish the work is
(1) 16 days
(2) 8 days
(3) 4 days
(4) 2 days

61. The length of the three sides of a right angled triangle are $(x-2)$ cm, x cm and $(x + 2)$ cm respectively. Then the value of x is
(1) 10
(2) 8
(3) 4
(4) 0

62. Dinesh bought two radios for ₹ 1,920. He sold one at a profit of 20% and the other at a loss $6\frac{2}{3}\%$. If the selling price of both radios are same, the cost prices of the two radios are
(1) ₹ 800 and ₹ 1,120
(2) ₹ 840 and ₹ 1,080
(3) ₹ 860 and ₹ 1,060
(4) ₹ 900 and ₹ 1,020

63. If Y% of one hour is 1 minute 12 seconds, then Y is equal to
(1) 2
(2) 1
(3) $\frac{1}{2}$
(4) $\frac{1}{4}$

64. A number, on subtracting 15 from it, reduces to its 80%. What is 40% of the number?
(1) 75
(2) 60
(3) 30
(4) 90

65. In covering a distance of 30 km, Abhay takes 2 hours more than Sameer. If Abhay doubles his speed, then he would take 1 hour less than Sameer. Abhay's speed (in km/hr) is

(1) 5   (2) 6
(3) 6.25   (4) 7.5

66. In what time will ₹ 1,860 amount to 2,641.20 at simple interest 12% per annum ?

(1) 3 years   (2) $3\frac{1}{2}$ years

(3) 4 years   (4) $4\frac{1}{2}$ years

67. If the annual income of A, B and C are in the ratio 1 : 3 : 7 and the total annual income of A and C is ₹ 8,00,000, then the monthly salary of B (in ₹) is
(1) 20,000   (2) 25,000
(3) 30,000   (4) 15,000

68. The ratio of successful and unsuccessful examinees in an examination in a school is 6 : 1. The ratio would have been 9 : 1 if 6 more examinees had been successful. The total number of examinees is
(1) 140   (2) 120
(3) 200   (4) 160

69. Out of four numbers, the average of the first three is 18 and that of the last three is 16. If the last number is 19, the first is
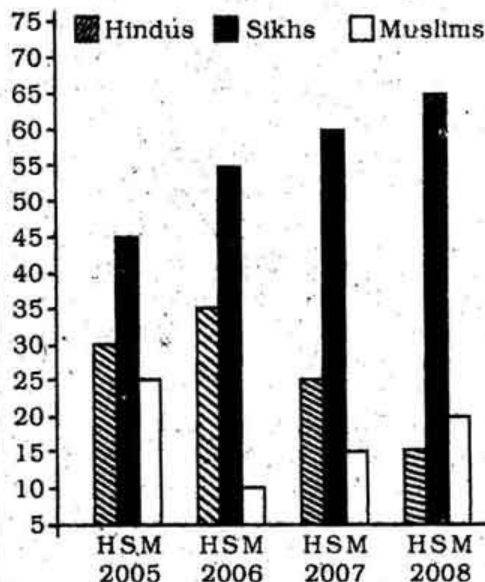(1) 19   (2) 18
(3) 20   (4) 25

70. B was born when A was 4 years 7 months old and C was born when B was 3 years 4 months old. When C was 5 years 2 months old, then their average age was
(1) 8 years 9 months
(2) 7 years 3 months
(3) 8 years 7 months
(4) 8 years 11 months

71. Peter buys a table for ₹450 and spends ₹30 on its transportation. If he sells the table for ₹600 his gain percent will be
(1) 30%   (2) 25%
(3) 28%   (4) 24%

Directions (72–75) : The following diagram shows the percentage of population of Hindus, Sikhs and Muslims with respect to total population in a town during 2005 to 2008. Study the diagram and answer the questions :

72. If the total population in 2007 was 80 lakh, then the number of Hindus in 2007 was (in lakh)
(1) 25   (2) 16
(3) 18   (4) 20

73. Percentage decrease in Hindu population from 2005 to 2008 is
(1) 50   (2) 40
(3) 25   (4) 15

74. Difference of percentage of population of Hindus in 2005 and 2008 is
(1) 20   (2) 15
(3) 25   (4) 30

75. If the total number of Hindus in 2008 was 12 lakh, the number of Muslims in 2008 was (in lakh)
(1) 18   (2) 12
(3) 24   (4) 16

Directions (76–81) : In the following questions, sentences are given with blanks to be filled in with an appropriate word(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four.

76. I haven't _____ butter but I have a lot of bread.
(1) a lot of   (2) little
(3) much   (4) some

77. People from _____ and near came to see the final match of the tournament yesterday.
(1) distance   (2) long
(3) above   (4) far

78. The student _____ book I still have, can take it from me.
(1) that   (2) whose
(3) which   (4) his

79. Corruption should be _____ out with the utmost vigour.
(1) talked   (2) left
(3) rooted   (4) brought

80. Books are a great source _____ happiness.
(1) of   (2) for
(3) into   (4) with

81. He spoke _____ his travels.
(1) of   (2) on
(3) about   (4) along

Directions (82–84) : In the following questions, out of the four alternatives, choose the one which best, expresses the meaning of the given word.

82. Conceal
(1) show   (2) hide
(3) cancel   (4) excuse

83. Efficient
(1) clever   (2) smart
(3) known   (4) capable

84. Disease
(1) fall   (2) damage
(3) illness   (4) injury

Directions (85–87) : In the following questions, choose the word opposite in meaning to the given word.

85. Destructive
(1) strctural
(2) constructive
(3) wind speed
(4) static

86. Corrupt
(1) honest (2) unclean
(3) heartless (4) hateful
87. Prominent
(1) notorious (2) obscure
(3) wicked (4) hostile

Directions (88–89) : In the following questions, four alternatives are given for the idiom/phrase. Choose the alternative which best expresses the meaning of the idiom/phrase.

88. Not my cup of tea
(1) A refreshing drink
(2) A routine work
(3) Not what I like
(4) Not liked by me

89. To have second thoughts
(1) To change decision
(2) To plan carefully
(3) To take someone
(4) To reconsider

Directions (90–91) : In the following questions, a part of the sentence is underlined. Below are given alternatives to the underlined part at (1), (2), (3) and (4) which may improve the sentence. Choose the correct alternative.

90. The teacher told that Monday would be a holiday
(1) is telling (2) has told
(3) said (4) might tell

91. We have to respect our elders.
(1) should (2) may
(3) can (4) better

Directions (92–93) : In the following questions, out of the four alternatives, choose the one which can be substituted for the given words/sentence.

92. Work for which one does not take salary or payment
(1) remunerated
(2) charge-sheet
(3) Complementary
(4) honorary

93. No longer in use
(1) absolsute
(2) obsolete
(3) contemporary
(4) remote

Directions (94–95) : In the following questions, groups of four words are given. In each group, one word is correctly spelt. Find the correctly spelt word.

94. (1) Misterious (2) Mistereous
(3) Mysterious (4) Mystere-ous

95. (1) Dictionery (2) Dectionary
(3) Dictionary (4) Dictienary

Directions (96–100) : In the following questions, you have one brief passage with 5 questions following the passage. Read the passage carefully and choose the best answer to each question out of the four alternatives.

Once there lived an old man who had a bag of gold. He was foolish. He dug a hole in the ground and put the bag of gold into the hole. Then he covered the hole with a stone. He used to visit the place nearly every day. He would take away the stone and put his fingers into the hole. Then he would touch the gold and feel very happy.

One day he took the stone away and put his fingers into the hole. How angry and sad he was when he discovered that his treasure was not there. The old man went to a friend and sadly told him the story. His friend said. There is no reason for you to be sad. Your gold was useless to you. You still have the hole. You can visit it whenever you like. All you have to do is to imagine that your treasure is still there.

96. The old man hid the gold
(1) in a secret chamber
(2) in a bank locker
(3) underground
(4) in an unknown place

97. The old man was pleased when he
(1) used the gold
(2) touched the gold
(3) added to the gold
(4) gave away the gold

98. The old man visited the place where he had kept the gold hidden
(1) every day
(2) once a week
(3) almost every day
(4) as often as possible

99. The friend's words possibly made the old man
(1) happy (2) angry
(3) relieved (4) excited

100. The friend told the old man that
(1) he had not lost anything
(2) he would get back his gold
(3) he should complain to the police
(4) he should not have hidden it in a hole.

ANSWERS

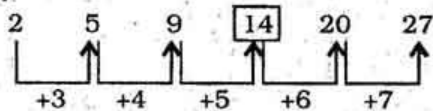|			
1. (2)	2. (1)	3. (3)	4. (2)
5. (4)	6. (2)	7. (4)	8. (3)
9. (1)	10. (3)	11. (4)	12. (4)
13. (2)	14. (4)	15. (2)	16. (2)
17. (3)	18. (4)	19. (1)	20. (3)
21. (2)	22. (1)	23. (3)	24. (4)
25. (1)	26. (2)	27. (4)	28. (2)
29. (1)	30. (4)	31. (4)	32. (4)
33. (4)	34. (2)	35. (3)	36. (4)
37. (3)	38. (2)	39. (2)	40. (3)
41. (4)	42. (1)	43. (2)	44. (1)
45. (1)	46. (4)	47. (1)	48. (3)
49. (2)	50. (4)	51. (2)	52. (1)
53. (3)	54. (2)	55. (2)	56. (3)
57. (3)	58. (3)	59. (3)	60. (3)
61. (2)	62. (2)	63. (1)	64. (3)
65. (1)	66. (2)	67. (2)	68. (1)
69. (4)	70. (4)	71. (2)	72. (4)
73. (1)	74. (2)	75. (4)	76. (3)
77. (4)	78. (2)	79. (3)	80. (1)
81. (1)	82. (2)	83. (4)	84. (3)
85. (2)	86. (1)	87. (2)	88. (3)
89. (1)	90. (3)	91. (1)	92. (4)
93. (2)	94. (3)	95. (3)	96. (3)
97. (2)	98. (3)	99. (3)	100. (1)

EXPLANATIONS

1. (2) Wod pulp is the basic raw material used in the production of paper.
   Similarly, steel is used to make nail.
2. (1) $7 \times 4 = 28$; $2 \times 4 = 8$
3. (3) RAT $\Rightarrow$ TAR (Reverse order)
   Similarly,
   PIT $\Rightarrow$ TIP
4. (2) Sun can be seen in day time. Similarly, moon appears in night.
5. (4) $31 - 21 = 16$
   $42 - 26 = 16$
   $51 - 35 = 16$

But,
56 − 38 = 18

6. (2) Mustard is an oilseed. Wheat, barley and corn are grains.

7. (4) Bus, scooter and car are automobiles and run on fuel. Cycle does not need fuel.

8. (3) $A \xrightarrow{+2} C \xrightarrow{+2} E$

$G \xrightarrow{+2} I \xrightarrow{+2} K$

$J \xrightarrow{+2} L \xrightarrow{+1} M$

$S \xrightarrow{+2} U \xrightarrow{+2} W$

9. (1)

2　　5　　9　　$\boxed{14}$　　20　　27
　　+3　+4　+5　+6　+7

10. (3)

Odd Number	9	Even Number

4 6 9 2 5 9 $\boxed{394}$ 6 $\boxed{792}$ 4894

11. (4) There is no 'H' letter in the keyword.

12. (4) Meaningful order of words :
4. Letter
↓
1. Word
↓
3. Sentence
↓
2. Paragraph

13. (2)

$b\boxed{b}y\boxed{t} / \boxed{b}by\boxed{t} / b\boxed{b}yt$

14. (4) Time taken by train 'B' to cross the standing train 'A' will be equal to time taken by the train 'B' to cover a total distance of (225 + 375) metres.
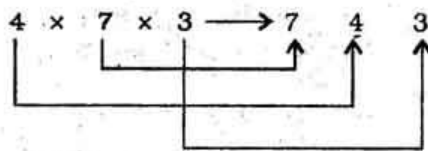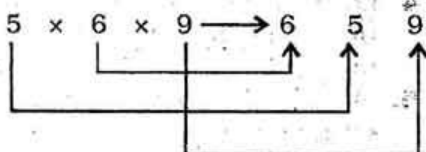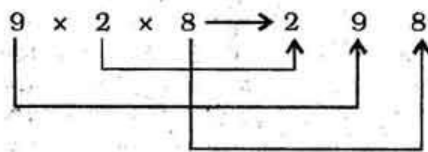
$t = \dfrac{225 + 375}{V}$

Speed of train 'B'

$= 90 \times \dfrac{5}{18} = 25$ m per second

$\Rightarrow t = \dfrac{600}{25} = 24$ second
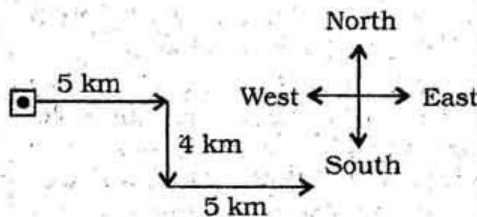
15. (2)

5　×　6　×　9　⟶　6　5　9

16. (2) 1 2 3 4 5 6 7 8 9
N O I T C E L E S
Reverse the order of letters to get the word
9 8 7 6 5 4 3 2 1
S E L E C T I O N
Similarly,
A I D N I → INDIA

17. (3)

North
West ← → East
South

5 km
4 km
5 km

18. (4) Umesh > Satish
Neeraj > Suresh > Umesh
Neeraj > Suresh > Umesh > Satish

19. (1) Both the Premises are Univeral Affirmative (A-type).
All players are educated.

All educated are cultured.
A + A ⇒ A-type of Conclusion
"All players are cultured."
This is Conclusion I.

20. (3)

21. (2) 16 + 32 = 48
12 + 24 = 36
13 + 26 = 39

23. (3) The required region should be common in all the three figures. Such region is reprsented by '5'.

24. (4)

51. (2) Prime numbers upto 17
⇒ 2, 3, 5, 7, 11, 13, 17
∴ Required sum = 2 + 3 + 5 + 7 + 11 + 13 + 17 = 58

52. (1) Time taken by A to finish the work = 5 × 6 = 30 days
Time taken by B to complete

the work = $\dfrac{8 \times 5}{2}$ = 20 days

∴ (A + B)'s 1 day's work

$= \dfrac{1}{30} + \dfrac{1}{20} = \dfrac{2+3}{60} = \dfrac{1}{12}$

∴ Required time = 12 days

53. (3) $\sqrt{0.25 \times 2.25} = 0.5 \times 1.5$
= 0.75

54. (2) $2.3\overline{49} = \dfrac{2349 - 23}{990}$

$= \dfrac{2326}{990}$

55. (2) Maximum quantity in each can
= HCF of 21, 42 and 63 litres
= 21 litres
Required least number of cans

$= \dfrac{21}{21} + \dfrac{42}{21} + \dfrac{63}{21}$

= 1 + 2 + 3 = 6

56. (3) We have to find such numbers which are divisible by 12 (LCM of 4 and 6).
Number of numbers divisible by 12 and lying between 1 to 600

$= \dfrac{600}{12} - 1 = 49$

Number of numbers divisible by 12 from 1 to 100 $\dfrac{100}{12} = 8$

∴ Required answer
= 49 − 8 = 41

57. (3) Volume of solid cylinder
$= \pi r^2 h$

Volume of cone $= \dfrac{1}{3} \pi r^2 h$

Difference $= \pi r^2 h - \dfrac{1}{3} \pi r^2 h$

$= \dfrac{2}{3} \pi r^2 h = \dfrac{2}{3} \times \dfrac{22}{7} \times 5 \times 5 \times 12$

= 628.57 cu.cm.

58. (3) Marked price

$= \dfrac{100}{100 - 12} \times 880 =$ Rs. 1000

59. (3) Let C.P. be Rs. 100.
Marked price = Rs. 120

$$\text{S.P.} = \frac{120 \times 95}{100} = \text{Rs. } 114$$

Gain per cent = 14

60. (3) Work done by A, B and C in 1 day

$$= \frac{1}{10} + \frac{1}{12} + \frac{1}{15} = \frac{6+5+4}{60}$$

$$= \frac{15}{60} = \frac{1}{4}$$

∴ Required time = 4 days

61. (2) In a right angled triangle,

$(\text{Hypotenuse})^2$

$= (\text{Perpendicular})^2 + (\text{Base})^2$

$\Rightarrow (x+2)^2 = (x-2)^2 + x^2$

$\Rightarrow x^2 + 4x + 4 = x^2 - 4x + 4 + x^2$

$\Rightarrow x^2 - 8x = 0$

$\Rightarrow x(x-8) = 0$

$\Rightarrow x = 8$

62. (2) C.P. of radio sold on gain = Rs. x

C.P. of radio sold on loss = Rs. $(1920 - x)$

$$\therefore x \times \frac{120}{100}$$

$$= (1920 - x) \times \frac{\left(100 - \dfrac{20}{3}\right)}{100}$$

$$\Rightarrow x \times 120 = (1920 - x) \times \frac{280}{3}$$

$$\Rightarrow 3x = (1920 - x) \times \frac{7}{3}$$

$\Rightarrow 9x + 7x = 1920 \times 7$

$\Rightarrow 16x = 1920 \times 7$

$\Rightarrow x = \text{Rs. } 840$

∴ C.P. of second radio = Rs. 1080

63. (1) $60 \times 60 \times \dfrac{y}{100} = 1$ minute

12 seconds

$\Rightarrow 36y = 72 \Rightarrow y = 2$

64. (3) If the number be x, then

$$x - 15 = \frac{4x}{5}$$

$\Rightarrow 5x - 75 = 4x \Rightarrow x = 75$

$$\therefore 40\% \text{ of } 75 = \frac{75 \times 40}{100} = 30$$

65. (1) Abhay's speed = x kmph

Sameer's speed = y kmph

$$\therefore \frac{30}{x} - \frac{30}{y} = 2 \qquad \text{...(i)}$$

and, $\dfrac{30}{y} - \dfrac{30}{2x} = 1 \qquad$ ...(ii)

On adding,

$$\frac{30}{x} - \frac{30}{2x} = 3$$

$$\Rightarrow \frac{60 - 30}{2x} = 3$$

$$\Rightarrow \frac{30}{2x} = 3 \Rightarrow 6x = 30$$

$\Rightarrow x = 5$

66. (2) S.I. = 2641.20 − 1860 = Rs. 781.2

$$\text{Time} = \frac{\text{S.I.} \times 100}{\text{Principal} \times \text{Rate}}$$

$$= \frac{781.2 \times 100}{1860 \times 12} = 3.5 \text{ years}$$

67. (2) $x + 7x = 800000$

$\Rightarrow 8x = 800000$

$\Rightarrow x = 100000$

∴ B's monthly income

$$= \frac{100000 \times 3}{12}$$

= Rs. 25000

68. (1) Total students

$= 6x + x = 7x$

$$\therefore \frac{6x + 6}{x - 6} = \frac{9}{1}$$

$\Rightarrow 6x + 6 = 9x - 54$

$\Rightarrow 9x - 6x = 54 + 6 = 60$

$\Rightarrow 3x = 60$

$\Rightarrow x = 20$

∴ Total number of students = $7 \times 20 = 140$

69. (4) $a + b + c = 18 \times 3 = 54$

and, $b + c + d = 16 \times 3 = 48$

∴ $a + b + c - b - c - d$

$= 54 - 48 = 6$

$\Rightarrow a - d = 6$

$\Rightarrow a - 19 = 6$

$\Rightarrow a = 19 + 6 = 25$

70. (4) C = 5 years 2 months

B = 8 years 6 months

A = 13 years 1 month

∴ Average

$$= \frac{26 \text{ years } 9 \text{ months}}{3}$$

= 8 years 11 months

71. (2) Actual cost price

= 450 + 30 = Rs. 480

∴ Gain percent

$$= \frac{600 - 480}{480} \times 100 = 25\%$$

72. (4) Number of Hindus

$$= 80 \times \frac{25}{100} = 20 \text{ lakhs}$$

73. (1) Percentage decrease

$$= \frac{30 - 15}{30} \times 100 = 50$$

74. (2) Required difference = 15

75. (4) Number of Muslims = 16 lakhs

76. (3) Much is used only with uncountable nouns. It is used mainly in questions and negative sentences.

81. (1) Speak of/about something means : to mention or describe something/somebody.

Look at the sentence :

Witnesses spoke of a great ball of flame.

82. (2) The word **Conceal** (Verb) means : to hide somebody/something.

Look at the sentence :

The paintings were concealed beneath a thick layer of plaster.

83. (4) The word **Efficient (Adjective)** means : capable; doing something well and thoroughly.

84. (3) The word **Disease (Noun)** means : an illness affecting humans, animals or plants, often caused by infection.

85. (2) The word **Destructive (Adjective)** means : causing destruction or damage.

The word **Constructive (Adjective)** means : having a useful and helpful effect.

86. (1) The word **Corrupt (Adjectuve)** means : dishonest or immoral.

Its antonym should be **honest**.

87. (2) The word **Prominent (Adjective)** means : important or well known; noticeable.

The word **Obscure (Adjective)** means : not well known; unknown.

88. (3) Idiom not somebody's cup of tea means : not what somebody likes or is interested in.

89. (1) Idiom **to have second thoughts** means : to change your opinion after thinking about something again. ❏❏❏