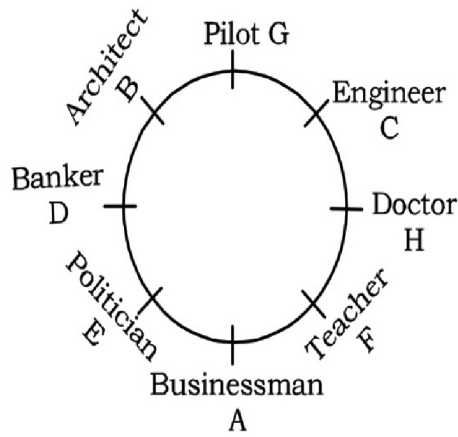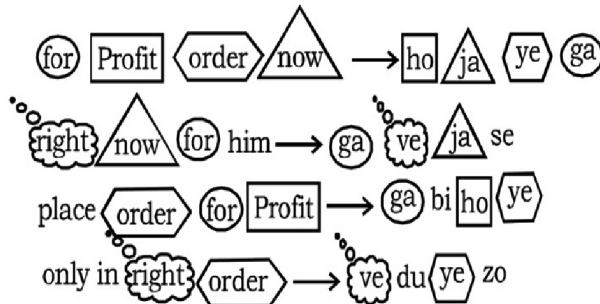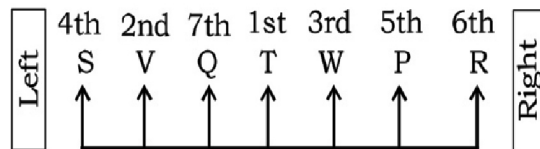(1 - 7):

1. (1) A is Businessman
2. (3) E is the Politician. F is second to the right of E.
3. (3) Doctor (H) sits exactly between the Teacher (F) and the Engineer (C).
4. (5) Doctor (H) sits second to the right of Businessman (A).
5. (2) G is a Pilot.
6. (4) Only the combination E-Politician is correct.
7. (4) E is the Politician.

(8-13):

8. (4) The code for 'him' is 'se'.
9   (3) 'bi' stands for 'place'.
10. (1) ve ⇒ right : du ⇒ only/ in 'fo ' may mean 'spirts'.
11. (5) The code for 'profit' is 'ho'
12. (3) only ⇒ du/zo: for ⇒ ga; now ⇒ja.
13. (1) The code for 'order' is 'ye'.

(14 -20):

Left	4th	2nd	7th	1st	3rd	5th	6th	Right
	S	V	Q	T	W	P	R	

14. (4) S lives on the 4the floor.
15. (1) T lives on the 1st floor.
16. (2) V lives on the 2nd floor and P lives on the 5th floor.
17. (3) S is sitting at the extreme left end.

18. (5) Except in the case of Q-6th floor, in all other the floor number is one more than the actual floor number. In case of Q the floor   number is one less than the actual floor number
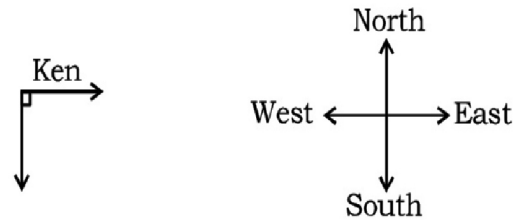
19. (5) S live on the fourth floor and he sits at the extreme left end.

20. (5)
P ⇒ 1st floor
Q ⇒ 2nd floor
R ⇒ 3rd floor
S ⇒ 4th floor
T ⇒ 5th floor
V ⇒ 6th floor
W ⇒ 7th floor

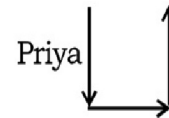21. (1) From statement **I**
$$C > A > B$$
$$\overleftrightarrow{}$$
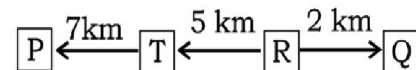D
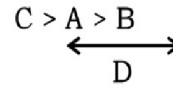
22. (3) From statement **I**

Ken is now facing south.
Therefore, Ali is facing north
From statement **II**

Priya is now facing north

23. (4) No definite conclusion can be derived even with the data provided in both the statements.

24. (5) From both the statements

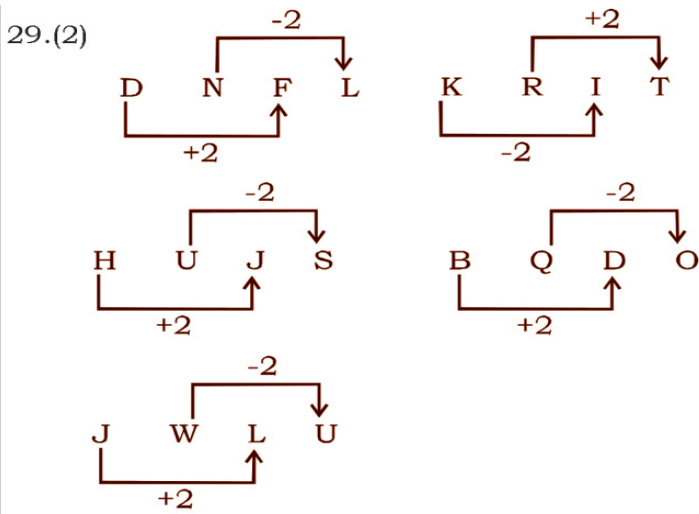25. (4) From both the statements The gender of B is not known.

26. (3) Except Heart, all others are found in pair in humans

27. (5) Except Extinct, all others words convey more or less similar meaning.
  Extinct (Adjective): means 'no longer in existence'. "no longer active."

28. (5)
X ⇒ 24, 24 + 2 = 26
V ⇒ 22, 22 + 4 = 26
T ⇒ 20, 20 + 6 = 26
W ⇒ 23, 23 + 3 = 26
S ⇒ 19, 19 + 5 = 24

29.(2)

30. (2) Execpt in DWVT, in all other there is at least one Vowel.

31. (2) A ≥ B = C < D ≤ E
Conclusions:
  I.   D > A : Not true
  II. E > C : true

32. (5) L > U > Z
R > U ≥ K
Conclusions:
  I.   L > Z : true
  II. K < R : true

33. (1) Conclusions:
  I.   J > I : true
  II. Y < R : Not true

34. (4) T < K > M = N
V ≥ K > M = N > S
Conclusions:
  I.   T < N : Not true
  II. V = S : Not true

35. (1) F ≤ X ≤ E
F ≤ X > R
Conclusions:
  I.   F ≤ E : True
  II. R < F : Not true

Question 36, 37, 38, 39, 40. continue on page no. 5

81.. (3) $3420 \times \dfrac{30}{100} \times \dfrac{3}{19} = (?)^2 \times 2$

⇒ $162 = (?)^2 \times 2$

⇒ $(?)^2 = \dfrac{162}{2} = 81$

∴ $? = \sqrt{81} = 9$

82.. (3) $\dfrac{1898}{73} \times 72 = (?)^2 \times 13$

⇒ $26 \times 72 = ?^2 \times 13$

⇒ $?^2 = \dfrac{26 \times 72}{13} = 144$

∴ $? = \sqrt{144} = 12$

83. . (5) $? = \sqrt{7^2 \times \ldots \times \ldots - (\ldots) + 3}$

  $= \sqrt{2352 - \ldots + 3} = \sqrt{1024} = 32$

84. . (4) $((0.9)^4) \div ((0.9)^9) = (0.9)^{-2}$

⇒ $(0.9)^4 \div (0.9)^9 \times (0.9)^2$

= $(0.9)^{?-3}$

⇒ $(0.9)^{4-9+2} = (0.9)^{?-3}$

⇒ $? - 3 = -3$

⇒ $? = 3 - 3 = 0$

85. . (2) $\sqrt{3136} \times \dfrac{65}{100} \times 5 = ? + 154$

⇒ $56 \times \dfrac{65}{100} \times 5 = ? + 154$

⇒ $182 = ? + 154$

⇒ $? = 182 - 154 = 28$

86. (2) $\sqrt{3100} \times \sqrt{567} \div \sqrt{250} = ? + 8$
$56 \times 24 \div 16 = ? + 8$

$56 \times \dfrac{3}{2} = ? + 8$

$84 - 8 = ?$
$76 = ?$

87. (4) $? \approx \dfrac{700 \times 90}{100} + \dfrac{1000 \times 50}{100} - 170$

$\approx 630 + 500 - 170 \approx 960$

88. (4) $? = \dfrac{340}{20} \div \dfrac{30}{510} \times \dfrac{180}{60}$

$= \dfrac{340}{20} \times \dfrac{510}{30} \times \dfrac{180}{60} = 867$

∴ Required answer = 870

89. (1) $7000 \div 70 \times 95 = ? \times 20$

⇒ $? = \dfrac{7000 \times 95}{70 \times 20} = 475$

90.(1) $? \approx (50)^2 - (9)^2 - (16)^2$
$= 2500 - 81 - 256 = 2163$
∴ Required answer = 2165

91.. (2) ∴ The pattern of the number series is:
958 - 853 = 125
833 - 733 = 100
733 - 658 = 75
658 - 608 = 50
∴ ? = 608 - 25 = **583**

92..(4) The pattern of the number series is:
11 × 1 - 1 = 10
10 × 2 - 2 = 18
18 × 3 - 3 = 51
51 × 4 - 4 = 200
200 × 5 - 5 = **995**

93. (1) The pattern of the number series is :
25 × 2 - 2 = 50 - 2 = 48
48 × 2 - 2 = 96 - 2 = 94
94 × 2 - 2 = 188 - 2 = 186
186 × 2 - 2 = 372 - 2 = 370
370 × 2 - 2 = 740 - 2 = **738**

94.(2) The pattern of the number series is:
14 + 10 = 24
24 + 19 (= 10 + 9) = 43
43 + 28 (=19 + 9) = 71
71 + 37 (= 28 + 9) = 108
108 + 46 (=37 + 9) = **154**

95.(5) The pattern of the number series is:
144 + 29 = 173
173 - 33 = 140
140 + 29 = 169
169 - 33 = 136
136 + 29 = **165**

96..(1) I. $\sqrt{25x^2} - 125 = 0$

⇒ $\sqrt{25x^2} = 125$

⇒ $25x^2 = 125 \times 125$

⇒ $x^2 = \dfrac{125 \times 125}{25} = 625$

∴ $x = \sqrt{625} = 25$

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II. $\sqrt{361}y + 95 = 0$

$\Rightarrow 19y = -95$

$\Rightarrow y = -5$

97. (3) **I.** $\dfrac{5}{7} - \dfrac{5}{21} = \dfrac{\sqrt{x}}{42}$

$\Rightarrow \dfrac{15 - 5}{21} = \dfrac{\sqrt{x}}{42}$

$\Rightarrow \sqrt{x} = \dfrac{10}{21} \times 42 = 20$

$\therefore x = 20 \times 20 = 400$

II. $\dfrac{\sqrt{y}}{16} + \dfrac{\sqrt{y}}{16} = \dfrac{250}{\sqrt{y}}$

$\Rightarrow \dfrac{4\sqrt{y} + \sqrt{y}}{16} = \dfrac{250}{\sqrt{y}}$

$\Rightarrow 5\sqrt{y} \times \sqrt{y} = 250 \times 16$

$\Rightarrow 5y = 250 \times 16$

$\Rightarrow y = \dfrac{250 \times 16}{5} = 800$

98. (1) **I.** $(625)^{\frac{1}{}} x - \overline{1225} = 155$

$\Rightarrow (5^{\prime})^{\frac{1}{4}} x + 35 = 155$

$\Rightarrow 5x = 155 - 35$

$\Rightarrow 5x = 120$

$\Rightarrow x = \dfrac{120}{5} = 24$

II. $\sqrt{196}y + 13 = 279$

$\Rightarrow 14y = 279 - 13 = 266$

$\Rightarrow y = \dfrac{266}{14} = 19$

99. (1) **I.** $5x^2 - 18x + 9 = 0$

$\Rightarrow 5x^2 - 15x - 3x + 9 = 0$

$\Rightarrow 5x(x - 3) - 3(x - 3) = 0$

$\Rightarrow (5x - 3)(x - 3) = 0$

$\Rightarrow x = \dfrac{3}{5}$ or, 3

II. $3y^2 + 5y - 2 = 0$

$\Rightarrow 3y^2 + 6y - y - 2 = 0$

$\Rightarrow 3y(y + 2) - 1(y + 2) = 0$

$\Rightarrow (3y - 1)(y + 2) = 0$

$\Rightarrow y = \dfrac{1}{3}$ or, -2

100. (3) **I.** $\dfrac{13}{\sqrt{x}} + \dfrac{9}{\sqrt{x}} = \sqrt{x}$

$\Rightarrow 13 + 9 = \sqrt{x} \times \sqrt{x} = x$

$\Rightarrow x = 22$

II. $y^4 - \dfrac{(26)^{\frac{9}{2}}}{\sqrt{y}} = 0$

$\Rightarrow (y)^{\frac{9}{2}} = (26)^{\frac{9}{2}}$

$\Rightarrow y = 26$

101. (2) Speed of car = $\dfrac{\text{Distance covered}}{\text{Time taken}}$

$= \dfrac{720}{9} = 80$ kmph

$\therefore$ Speed of bus = $\dfrac{3}{4} \times 80 = 60$ kmph

$\therefore$ Speed of train = $\dfrac{27}{15} \times 60 = 108$ kmph

$\therefore$ Distance covered by train in 7 hours

$= 7 \times 108 = 756$ km.

102. (3) Let Raman's present age = x yrs.

$\therefore$ His daughter's present age = $\dfrac{x}{3}$ yrs.

His mother's present age = $\dfrac{13x}{9}$ years

$\therefore x + \dfrac{x}{3} + \dfrac{13x}{9} = 125$

$\Rightarrow \dfrac{9x + \cdots + \cdots x}{9} = 125$

$\Rightarrow 25x = 125 \times 9$

$\Rightarrow x = \dfrac{125 \times 9}{25} = 45$

$\therefore$ Required difference

$= \dfrac{13x}{9} - \dfrac{x}{3}$

$= \dfrac{13x - \cdots x}{9} = \dfrac{10x}{9}$

$= \dfrac{10}{9} \times 45 = 50$ yrs.

103. (1) Required value = $(27)^2 \times 5 \times \dfrac{4}{9} \times \dfrac{24}{100}$

$= 388.8$

104. (3) Circumference of circle = $\pi \times$ diameter

$= \dfrac{22}{7} \times 56 = 176$ cm

$\therefore$ Perimeter of square = $272 - 176 = 96$ cm

$\therefore$ Side of square = $\dfrac{96}{4} = 24$ cm

$\therefore$ Aera of square = $24 \times 24 = 576$ sq. cm

Area of cirle = πr^2

$= \dfrac{22}{7} \times 28 \times 28 = 2464$ sq. cm.

$\therefore$ Required sum = $(576 + 2464)$ sq.cm.

$= 3040$ sq. cm.

105. (3) The smallest angle of triangle is half of the largest angle.

$\therefore$ Ratio of three angles = $4 : 3 : 2$

$\therefore 4x + 3x + 2x = 180$

$\therefore 9x = 180 \Rightarrow x = 20$

$\therefore$ Required difference = $4x - 2x = 2x$

$= 2 \times 20 = 40°$

106. (1) First S.P. = $\dfrac{46000 \times 88}{100}$ = ₹ 40480

Second S.P. = $\dfrac{40480 \times 112}{100}$ = ₹ 45337.6

∴ Loss = ₹ (46000 - 45337.6)

= ₹ 662.4

107. (2) Third even number = $\dfrac{402}{6}$ - 1

= 67 - 1 = 66

∴ Smallest even number = 62

∴ Smallest number of set - B

= 2 × 62 - 15 = 109

∴ Required sum

= 109 + 110 + 111+ 112 = 442

108. (4) Total spent amount = $\left(\right)$ paise.

= (197 + 585) paise

= 782 Paise

= ₹ 7.82

109. (2) Speed of train = 108 kmph

= $\dfrac{108 \times 5}{18}$ = 30m/ second

If the length of platfrom be x metre, then

$\dfrac{x+280}{12}$ = 30

⇒ x + 280 = 30 × 12 = 360

⇒ x = 360 - 280 = 80 metre

∴ Man's speed = $\dfrac{Distance}{Time}$

= $\dfrac{80}{10}$ = 8 m/second

110. (4) Let the three angles of quadriateral be 13x°, 9x° and 5x° respectively.

∴ 13x + 9x + 5x = 360 - 36

⇒ 27x = 324 ⇒ x = $\dfrac{324}{24}$ = 12

∴ Required difference = 13x - 5x

= 8x = 8 × 12 = 96°

111. (5) Number of participants (athletes) from Country C.

Year 2006 ⇒ (6.6 + 3.3) × 100 = 990

Year 2008 ⇒ (6.6 + 4.2) × 100 = 1080

Year 2009 ⇒ (7.9 + 6.3) × 100 = 1420

Year 2010 ⇒ (10.8 + 6.9) × 100 = 1770

112. (3) Required average number of female athletes

= $\dfrac{(4.2 + 6.2 + 4.0 + 9.4 + 5.0 + 7.2)}{6} \times 100$

= $\dfrac{36 \times 100}{6}$ = 600

113. (2) Percentage decrease = $\dfrac{(6.9 - 4.8)}{6.9} \times 100$

≈ 30

114. (2) Required percentage = $\dfrac{9.2}{(11.4 + 8.4)} \times 100$

= $\dfrac{9.2 \times 100}{19.8}$

= 46% (approx)

115. (5) Difference between the number of male and female participants :

Country A ⇒ (6.6 - 4.2) × 100 = 240

Country B ⇒ (8.4 - 6.2) × 100 = 220

Country C ⇒ (6.9 - 3.3) × 100 = 360

Country D ⇒ (8.4 - 6.3) × 100 = 210

Country E ⇒ (7.8 - 5.2) × 100 = 260

116. (2) Required ratio = 72 : 240 : 432

= 3 : 10 : 18

117. (1) Required Percentage = $\dfrac{240}{216} \times 100$ ≈ 111

118. (1) Average number of male passengers

= $\dfrac{162 + 72 + 240 + 144}{4}$ = $\dfrac{618}{4}$ = 154.5

119. (4) Required difference = 144 - 72 = 72

120. (5) Total number of male passengers from Britan and female passengers from India together = 162 + 288 = 450

1	A	51	B	101	B	151	C
2	C	52	D	102	C	152	B
3	C	53	D	103	A	153	A
4	E	54	B	104	C	154	D
5	B	55	D	105	C	155	D
6	D	56	D	106	A	156	E
7	D	57	A	107	B	157	A
8	D	58	E	108	D	158	A
9	C	59	A	109	B	159	E
10	A	60	B	110	D	160	E
11	E	61	A	111	E	161	B
12	C	62	B	112	C	162	E
13	A	63	E	113	B	163	E
14	D	64	B	114	B	164	A
15	A	65	A	115	E	165	C
16	B	66	C	116	B	166	D
17	C	67	D	117	A	167	D
18	E	68	E	118	A	168	B
19	E	69	C	119	D	169	A
20	E	70	E	120	E	170	C
21	A	71	D	121	C	171	C
22	C	72	C	122	C	172	B
23	D	73	C	123	A	173	C
24	E	74	D	124	C	174	C
25	D	75	A	125	C	175	A
26	C	76	B	126	C	176	D
27	E	77	E	127	A	177	C
28	E	78	C	128	D	178	D
29	B	79	C	129	A	179	B
30	C	80	B	130	A	180	C
31	C	81	C	131	A	181	E
32	E	82	C	132	D	182	C
33	A	83	E	133	D	183	C
34	D	84	D	134	A	184	D
35	A	85	B	135	B	185	E
36	B	86	B	136	A	186	D
37	B	87	D	137	A	187	C
38	E	88	D	138	D	188	B
39	D	89	A	139	A	189	E
40	A	90	A	140	A	190	C
41	B	91	B	141	B	191	D
42	A	92	D	142	B	192	B
43	D	93	A	143	B	193	C
44	E	94	B	144	A	194	D
45	C	95	E	145	B	195	B
46	A	96	A	146	B	196	C
47	B	97	C	147	D	197	B
48	C	98	A	148	D	198	B
49	C	99	A	149	C	199	D
50	B	100	C	150	B	200	D

CONTINUE REASONING
PAGE-2

36. B. Here, there are two alternating patterns, with every other number following a different pattern. The first pattern begins with 13 and adds 2 to each number to arrive at the next; the alternating pattern begins with 29 and subtracts 3 each time.

37. B. In this simple addition with repetition series, each number in the series repeats itself, and then increases by 12 to arrive at the next number.

38. E. This is a simple subtraction series, in which 3 is subtracted from each number to arrive at the next.

39. D. This is a simple subtraction series, in which 4 is subtracted from each number to arrive at the next.

40. A This is an alternating repetition series. The number 32 alternates with a series in which each number decreases by 2.

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