

IBPS RRB Asst. Preliminary Grand Test –IRPP-170819

HINTS & SOLUTIONS

ANSWER KEY

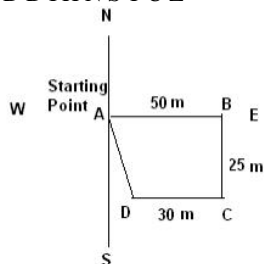
1.(2)	21.(2)	41.(3)	61.(4)
2.(5)	22.(3)	42.(1)	62.(1)
3.(2)	23.(1)	43.(2)	63.(3)
4.(4)	24.(5)	44.(3)	64.(2)
5.(3)	25.(1)	45.(2)	65.(1)
6.(5)	26.(3)	46.(3)	66.(2)
7.(3)	27.(1)	47.(3)	67.(2)
8.(4)	28.(5)	48.(1)	68.(2)
9.(5)	29.(4)	49.(2)	69.(4)
10.(2)	30.(2)	50.(1)	70.(3)
11.(2)	31.(2)	51.(5)	71.(2)
12.(4)	32.(1)	52.(3)	72.(3)
13.(1)	33.(3)	53.(2)	73.(4)
14.(3)	34.(4)	54.(1)	74.(1)
15.(5)	35.(3)	55.(2)	75.(3)
16.(3)	36.(1)	56.(3)	76.(4)
17.(1)	37.(2)	57.(3)	77.(2)
18.(4)	38.(3)	58.(4)	78.(3)
19.(5)	39.(4)	59.(1)	79.(2)
20.(2)	40.(5)	60.(2)	80.(3)

HINTS & SOLUTIONS

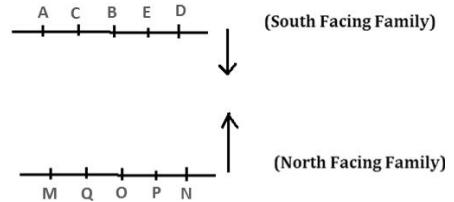
- 1.(2) if only conclusion II is true.
- 2.(5) 3.(2)
- 4.(4)
- 5.(3) if either conclusion I or conclusion II is true.
- 6.(5) 7.(3)
- 8.(4) © 47#2 © e) None of these
- 9.(5) The following changes will occur in order

CHEMISTRY
CEHIMRSTY
DDIHNSTUZ

10.(2)



11-15.

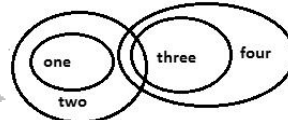


11.(2)
13.(1)
15.(5)
16-20.

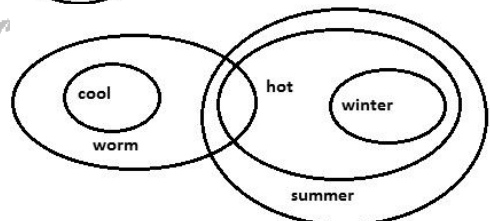
DAY	PERSON	COMPANY
Monday	K	B
Tuesday	R	C
Wednesday	J	D
Thursday	M	A
Friday	T	E
Saturday	L	F
Sunday	Q	G

16.(3)
18.(4)
20.(2)
21.(2)
22.(3)
23.(1)
24.(5)
25.(1)
26.(3)

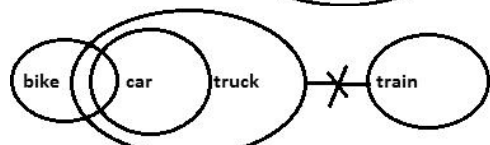
17.(1)
19.(5)
Only 385 will be divisible by 3 when added 2 on first digit of each number.
864 521 743 853 962
8-4=2
786, 614, 539, 487, 398
864, 152, 347, 845, 926



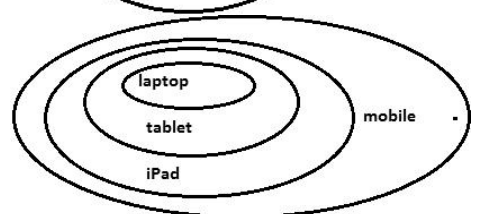
27.(1)



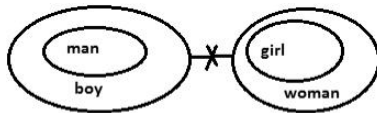
28.(5)



29.(4)



30.(2)



31-35.

Projects	Months
P	January
T	February
Q	March
R	April
L	May
S	June

31.(2)

32.(1)

33.(3)

34.(4)

35.(3)

36-40.

Icecream – ja Tasty – sa
 Is/very - la/ta Hot – da
 Icecream - ja Drinks/are – pa/ra
 Tea – fa

36.(1)

37.(2)

38.(3)

39.(4)

40.(5)

41.(3)

Let edge of square = x
 $\therefore 144x^2 = 400(x-2)^2$
 $9x^2 = 25(x^2 + 4 - 4x)$
 $9x^2 = 25x^2 + 100 - 100x$
 $16x^2 - 100x + 100 = 0$
 $\Rightarrow 4x^2 - 25x + 25 = 0$
 $4x^2 - 20x - 5x + 25 = 0$
 $4x(x-5) - 5(x-5) = 0$
 $x = 5, \frac{5}{4}$

\therefore edge = 5 cm

\therefore initially area = $144 \times 25 = 3600 \text{ cm}^2$

42.(1)

Required weight = $(49 \times 6 + 52 \times 6) - 50 \times 11$
 $= 606 - 550$
 $= 56 \text{ kg}$

43.(2)

Let Boys = x , Girls = y .
 $\therefore 23.25 = \frac{(30x+20y)}{x+y}$
 $23.25x + 23.25y = 30x + 20y$
 $6.75x = 3.25y$
 $\frac{x}{y} = \frac{13}{27}$

44.(3)

Cost Price = $1080 \times \frac{88}{100} \times \frac{100}{108} = 880$.

45.(2)

Let fixed charges = x
 Other charges = y
 $\therefore x + 10y = 6000$ (i)
 $x + 25y = 25 \times 360$
 $x + 25y = 9000$ (ii)
 By solving equation (i) and (ii)
 $15y = 3000 \Rightarrow y = 200$
 $\therefore x + 2000 = 6000$
 $x = 4000$
 Expense of 40 guests = $4000 + 40 \times 200$
 $= 4000 + 8000$
 $= 12000$

46.(3)

Raju = 10 days
 Vicky = 12 days
 Tinku = 15 days
 Part of the work by all of them in 1 day = $\frac{6+5+4}{60} = \frac{1}{4}$
 2 days work = $\frac{1}{2}$
 Work Remaining = $1 - \frac{1}{2} = \frac{1}{2}$
 Let the work be completed in x days
 $\frac{x}{15} + \frac{x-3}{12} = \frac{1}{2} \Rightarrow \frac{4x+5x-15}{60} = \frac{1}{2}$
 $\Rightarrow 9x - 15 = 30$
 $\Rightarrow 9x = 45 \Rightarrow x = 5$
 \therefore Total days = $5 + 2 = 7$ days

47.(3)

$$66 = \frac{2200 \times t \times 2}{100} \Rightarrow t = \frac{3}{2} = 1\frac{1}{2}$$

48.(1)

Ratio of their investment = 54000 : 90000 = 3 : 5
 B's profit = 3600 - 1800 = 1800
 A's profit = $\frac{1800}{5} \times 3 = 360 \times 3 = 1080$
 \therefore A's commission = 1800 - 1080 = 720
 \therefore % commission = $\frac{720}{3600} \times 100 = 20\%$

49.(2)

CP = $\frac{100}{92} \times 1380$
 Required price = $\frac{108}{100} \times \frac{100}{92} \times 1380 = 1620$

50.(1)

Let no. of rows = x
 NO. of chairs in each row = $3x$
 $\therefore 3x^2 = 2187$
 $x^2 = 729$
 $x = 27$

51.(5)

Part of the property, widow get = $1 - \left(\frac{5}{11} + \frac{30}{121}\right)$

$$= 1 - \frac{85}{121}$$

$$= \frac{36}{121}$$

$\frac{36}{121}$ of the part = 3600

\therefore Full property = $3600 \times \frac{121}{36} = 12100$

\therefore Share of elder son = $\frac{5}{11} \times 12100$

$$= 5 \times 1100$$

$$= 5500$$

Share of younger son = $\frac{30}{121} \times 12100 = 3000$

52.(3)

Let initial investments be $5x$ and $7x$.
 Let B invested money for y months

$$\frac{5x \times 7}{7x \times y} = \frac{1}{2}$$

$$70 = 7y$$

$\therefore y = 10$ months

53.(2)

$$\frac{4}{5} = 80\%$$

$(80 - 45) = 35\%$ of the no. = 56

65% of the no. = $\frac{56}{35} \times 65 = 104$

54.(1)

Labour's Cost Price = $\frac{4}{9} \times 900 = 400$

Profit on Labour = $\frac{20}{100} \times 400 = 80$

\therefore Marked price = 900 + 80 = 980

55.(2)

In 1 hour, Subhash can copy = $\frac{50}{10} = 5$ pages

In 1 hour, both can copy = $\frac{300}{40} = 7.5$ pages

\therefore In 1 hour Prakash can copy = $7.5 - 5 = 2.5$ pages

\therefore Required time = $\frac{30}{2.5} = 12$ hrs.

56.(3)

+5, -10, +15, -20.

Therefore, $94 + 25 = 119$.

57.(3)

$\times 0.4, \times 0.4$

Therefore, $156.8 \times 0.4 = 62.72$.

58.(4)

$\times 1 + 2, \times 2 + 3, \times 3 + 4, \times 4 + 5$

Therefore, $441 \times 5 + 6 = 2211$.

59.(1)

$11^3, 13^3, 17^3, 19^3$

Therefore, $23^3 = 12167$.

$+ 5 + 5, + 5 + 5, + 5 + 5$

$$\therefore \frac{12}{5} + 5 = 2.4 + 5$$

$$= 7.4$$

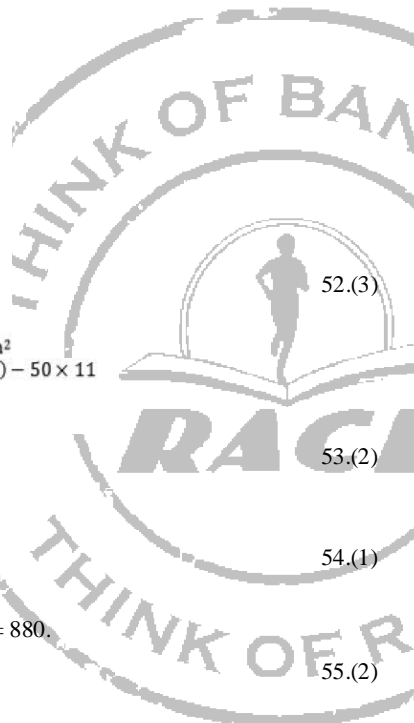
60.(2)

61.(4)

Total sale of Monkey toys = 2490

Total toys sale in Delhi = 2885

Req.% = $\frac{2490}{2885} \times 100 = 86\%$ (approx)



$$62.(1) \text{ Average} = \frac{2580}{5} = 516$$

$$63.(3) \text{ Average of Goat toys} = \frac{3850}{5} = 770$$

$$\text{Average Lion toys} = \frac{1490}{5} = 298$$

$$\text{Difference} = 770 - 298 = 472$$

$$64.(2) \text{ Ratio} = \frac{1480}{2490} = \frac{148}{249} = 148 : 249.$$

$$65.(1) \text{ Income} = 2580 \times 250 = \text{Rs. } 645000$$

$$66.(2) \text{ Ratio} = \frac{\frac{45}{100} \times 925}{\frac{60}{100} \times 650} = \frac{45}{60} \times \frac{925}{650}$$

$$= 111 : 104$$

$$67.(2) \frac{25}{100} \times 880 + \frac{56}{100} \times 1125 + \frac{60}{100} \times 650$$

$$= 220 + 630 + 390$$

$$= 1240$$

$$68.(2) \text{ Required \%} = \frac{\frac{40}{100} \times 1050}{1125} \times 100 = 37.34\%$$

69.(4)

$$70.(3) \frac{\left(\frac{55}{100} \times 925\right) + \left(\frac{40}{100} \times 1050\right) + \left(\frac{75}{100} \times 880\right) + \left(\frac{56}{100} \times 1125\right) + \left(\frac{60}{100} \times 650\right) + \left(\frac{35}{100} \times 985\right)}{6}$$

$$= \frac{508.75 + 420 + 660 + 630 + 390 + 344.75}{6}$$

$$= \frac{2953.5}{6} \approx 490.$$

$$71.(2) (?)^2 = \sqrt{50+31} = 9 \Rightarrow ? = 3$$

$$72.(3) ? = (1+1+1) \left(\frac{4}{7} + \frac{3}{5} + \frac{1}{3} \right) = 3 + \frac{158}{105} = 4 \frac{53}{105}$$

$$73.(4) 64^2 = 64^{12} \div (4^3)^5$$

Therefore, ? = 7.

$$74.(1) ? = (1+1-1-1) + \left(\frac{1}{4} + \frac{1}{6} - \frac{1}{8} - \frac{1}{12} \right) = \frac{5}{24}$$

$$75.(3) (4^2)^3 \div (4^3)^4 \times (4^4)^4 = (4)^{?+4}$$

Or, $(4)^{6-12+16} = (4)^{?+4}$

Or, ? = 6.

$$76.(4) ? = \frac{25}{100} \times \frac{30}{100} \times \frac{2}{5} \times 2000 = 60.$$

$$77.(2) ? = \frac{31.9 - 11.2}{0.9} \Rightarrow ? = 23.$$

$$78.(3) ? = \frac{5907 - 9}{8} = \frac{5898}{8} = 737.25.$$

$$79.(2) ? = \sqrt{128+81-40} = \sqrt{169} \Rightarrow ? = 13.$$

$$80.(3) ? = 4\sqrt{8} \times 15\sqrt{8} - 98 = 480 - 98 = 382.$$