

**IBPS RRB PO Preliminary Grand Test –IRPP-170813**

**HINTS & SOLUTIONS**

**ANSWER KEY**

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

**HINTS & SOLUTIONS**

- 1.(3)  $42 \div 7 - 8 + 6 \times 4 = 6 - 8 + 24 = 22.$   
 2.(4)  $C +6 \quad I +6 \quad O +6 \quad U$   
 $E +6 \quad K +6 \quad Q +6 \quad W$   
 $A +6 \quad G +6 \quad M +6 \quad S$   
 3.(3) 5 9 1 6 4 8 2 3  
 In descending order → 98654321.  
 4.(2) Code for here is na.  
 5.(3)  
 6-10.

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

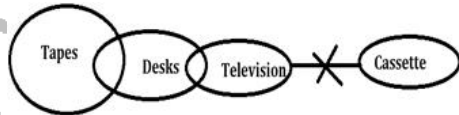
- 6.(3)  
 8.(4)  
 10.(2)

- 7.(1)  
 9.(5)

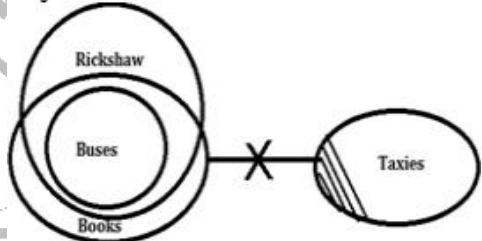
11-15.

| PERSON | DEPARTMENT | SPECIALISATION |
|--------|------------|----------------|
| P      | Management | Micromax       |
| Q      | Content    | Sony           |
| R      | Account    | One plus       |
| S      | Admin      | HTC / Lenovo   |
| T      | HR         | Lenovo / HTC   |
| V      | DTP        | Samsung        |
| X      | Blogger    | Lava           |

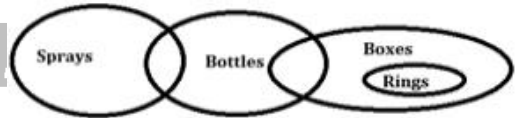
- 11.(3)  
 13.(3)  
 15.(1)  
 16.(3)



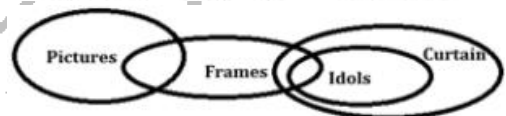
17.(2)



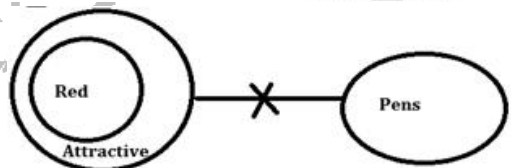
18.(4)



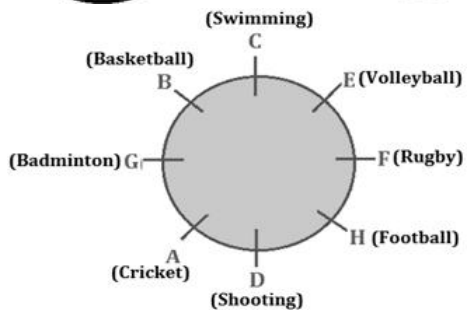
19.(2)



20.(4)



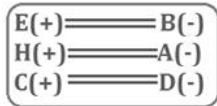
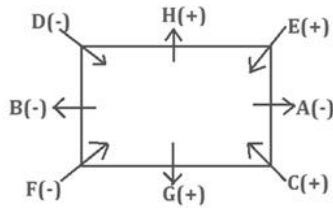
21-25.



- 21.(4)  
 23.(1)  
 25.(3)

- 22.(5)  
 24.(4)

26-30.



- 26.(5) 27.(3)  
 28.(3) 29.(1)  
 30.(5)

- 31-34. > → %  
 ≥ → \$  
 = → #  
 < → ©  
 ≤ → @

- 31.(5) 32.(2)  
 33.(1) 34.(1)  
 35.(5)  
 36.(2)

First half in reverse order :-  
 5 ● PM \$ G Δ 6 × 4 □ C B  
 Second half in reverse order :-  
 Z A × 9 S 7 I V ÷ ⊕ + R %  
 Right = 3<sup>rd</sup>  
 Right = 16<sup>th</sup>  
 Right = 13<sup>th</sup>

- 37.(1) Right = 4<sup>th</sup>  
 Left = 5<sup>th</sup>  
 Left = 9<sup>th</sup>

- 38.(4) 2<sup>nd</sup> = C  
 11<sup>th</sup> = P  
 20<sup>th</sup> = I  
 22<sup>nd</sup> = S

We can't form any meaningful word.

- 39.(3) In each group the second element is one gap after the first element while third element is two gaps after second element. The first element of next group is just before the third element of the previous group, i.e. % + V.

- 40.(5) X 6 Δ G \$ M P ● 5 % R + ⊕ ÷ V I 7 5 9  
 9 Midway 9

- 41.(3) The students can fail in 1, 2, 3, 4, 5, 6, 7, 8 subjects.  
 So the number of ways he can fail is  
 ${}^8C_1 + {}^8C_2 + {}^8C_3 + {}^8C_4 + {}^8C_5 + {}^8C_6 + {}^8C_7 + {}^8C_8$   
 $= 8 + 28 + 56 + 70 + 56 + 28 + 8 + 1 = 255$

- 42.(3) Interest = 960 - 800 = 160  
 Time =  $\frac{160 \times 100}{5 \times 800} = 4$  years  
 Now, t = 4, r = 5%, Amount = 600  
 Sum =  $\frac{100 + 600}{100 + 5 \times 4} = 500$

- 43.(5) Let distance be = X,  
 $\frac{x}{10-3} - \frac{x}{10+3} = 12$   
 X = 182 km

- 44.(1) Required time =  $\sqrt{A \times B} = \sqrt{6 \times 1.5} = 3$  where A and B is extra time taken individually by both than the time taken by both to do work

- 45.(5) Difference =  $P \frac{r^2}{10000}$   
 $3.6 = P \times \frac{36}{10000}$   
 P = 1000

- 46.(2) CP of 150 calculators = 150 × 250 = Rs. 37500  
 Total CP = 37500 + 2500 = Rs. 40000  
 MP of 150 calculators = 150 × 320 = Rs. 48000.  
 SP after discount = 48000 ×  $\frac{95}{100}$  = Rs. 45600.  
 ∴ Percentage profit =  $\frac{45600 - 40000}{40000} \times 100 = 14\%$

- 47.(4) Let the amount deposited at the rate of 18% per annum be x.  
 $\Rightarrow \frac{(25000 - x) \times 15}{100} + \frac{18x}{100} = 4050$

- 48.(4) ⇒ x = Rs. 10000  
 Let the sum be Rs. x.

- Then,  $\left[ x \left( 1 + \frac{5}{100} \right)^4 - x \right] - \left[ \frac{x \times 10 \times 2}{100} \right] = 124.05$

- Solving the above equation, we get x = Rs. 8000.  
 49.(2) Let the amount of pure copper = x kg.

- Pure copper + copper in 1<sup>st</sup> alloy + copper in 2<sup>nd</sup> alloy = Copper in 3<sup>rd</sup> alloy  
 $\Rightarrow x + \frac{4}{5} \times 10 + \frac{1}{4} \times 16 = \frac{3}{5} (10 + 16 + x)$   
 $\Rightarrow 12 + x = \frac{3}{5} (26 + x)$   
 $\Rightarrow x = 9$  kg.  
 ∴ weight of new alloy = 10 + 16 + 9 = 35 kg.

- 50.(1) Ramesh alone finished  $\frac{1}{2}$  of the work in 10 days.

- Remaining  $\frac{1}{2}$  was finished by Ramesh and Dinesh together in 2 days.  
 Therefore, they both together can finish the complete job in 4 days.

- 51.(2) The total no. of visitors in the age group less than or equal to 20 years visited in the park –

- $= 120000 \times \frac{65}{100} = 78000$

- So, no. of female visitors  
 $= \frac{60}{100} \times 78000 = 46800$

- No. of male visitors less than 20 years of age  
 $= 78000 - 46800 = 31200$   
 Total female visitors

- $= 120000 \times \frac{7}{12} = 70000$

- Total male visitors  
 $= 120,000 - 70,000 = 50,000$

- No. of females of age more than 20 years  
 $= 70,000 - 46800 = 23200$

- No. of males of age more than 20 years  
 $= 50000 - 31200 = 18800$

- Required difference = 23200 - 18800 = 4400  
 No. of visitors in Nov 2012 = 65000

- 52.(5) Total no. of visitors in all the given months = 441000  
 ∴ Required % =  $\frac{65}{441} \times 100 = 14.74\%$

53.(1) No. of female visitors to the park in the month of October  
 $2012 = \frac{2}{5} \times 75 = 30$  thousand

No. of female visitors to the park in the month of  
 December 2012 =  $\frac{4}{7} \times 126 = 72$  thousand

Ratio = 30 : 72 = 5 : 12

54.(1) Total no. of male visitors in Sep - 2012 and Oct 2012  
 together =  $\frac{4}{11} \times 55000 + \frac{3}{5} \times 75000 = 65000$

Total no. of male visitors in Nov - 2012 and Dec 2012  
 together =  $\frac{5}{8} \times 65000 + \frac{3}{7} \times 126000 = 94625$

Required difference = 94625 - 65000 = 29625

55.(3) Required average no. of visitors

$$= \frac{1}{2} \left( \frac{120000 \times 65}{100} + \frac{126000 \times 60}{100} \right)$$

$$= \frac{1}{2} (75600 + 78000) = \frac{153600}{2} = 76800$$

56.(2) Revenues of all three companies in FY 2009-10

$$= \frac{10309 + 11286 + 9094}{3} = 10229.66 \text{ crore}$$

Again,

Revenues of all three companies in FY 2010-11

$$= \frac{12615 + 12663 + 11972}{3} = 1241.66 \text{ crore}$$

Therefore difference in revenues = 2187 crore.

57.(3)

58.(4) Revenue of all three pharma companies in FY 2009-10  
 = 9094 + 11286 + 10309 = 30689 crore

Revenue of all three pharma companies in FY 2010-11  
 = 11972 + 12663 + 12615 = 37250 crore

Therefore difference = 37250 - 30689 = 6561 crore.

59.(4) According to question,

$$\text{Required \%} = \frac{11972}{12615 + 12663 + 11972} \times 100$$

$$= \frac{11972}{37250} \times 100 = 32.14\%$$

60.(1) Expenditure of Ranbaxy Laboratories in FY 2010-11

$$= \frac{12615}{1.15} = 10969.56$$

$$\text{Expenditure in FY 2009-10} = \frac{10309}{1.1} = 9371.81$$

Difference in expenditure in the given year  
 = 10969.56 - 9371.81  
 = 1597.75  $\approx$  1598.

61.(1)  $12 \times 2 + 1, 25 \times 2 - 1, 49 \times 2 + 1, 99 \times 2 - 1, 197 \times 2 + 1,$   
 $392 \times 2 - 1 = 789$

62.(4) There are two series -

$$34 + 3 = 37, 37 + 3 = 40, 40 + 3 = 43$$

$$\text{And } 7 \times 2 = 14, 14 \times 2 = 28, 28 \times 2 = 56$$

63.(1)  $1^2 + 1, 2^2 - 1, 3^2 + 1, 4^2 - 1, 5^2 + 1, 6^2 - 1, 7^2 + 1,$   
 $8^2 - 1 = 63$

64.(4) There are two individual series

$$2 + 4 = 6, 6 + 4 = 10, 10 + 4 = 14$$

$$3 - 3 = 0, 0 - 3 = -3, -3 - 3 = -6$$

65.(4)  $5 \times 2 = 10, 10 + 3 = 13, 13 \times 2 = 26, 26 + 3 = 29,$   
 $29 \times 2 = 58, 58 + 3 = 61, 61 \times 2 = 122.$

66.(3)  $x = 7, y = 8$

Therefore,  $x < y.$

67.(1)  $x = \frac{-7}{2}, -5$

$$y = -6, \frac{-13}{2}; x > y$$

68.(5)  $x = -5, 4, y = 6, -5$

Relation cannot be defined.

69.(4)  $x = \pm 27, y = 27$

Therefore,  $x \leq y.$

70.(3)  $x = -2, \frac{-2}{3}$

$$y = 4, \frac{3}{4}$$

$\therefore x < y$

71.(5)  $\frac{12}{100} \times 885 = \frac{?}{6}$

$$? = 637.2$$

72.(2)  $?^2 = 69696$

$$? = 264$$

73.(2)

74.(5)  $? = 4207 - 3007$

$$? = 1200$$

75.(2)  $44.4 - 16.4 = 28.$

76.(3)  $(2)^{7.2 + 4.8 - 4} = (2)^{?}$

$$? = 8$$

77.(2)  $187 - 18 = 169$

78.(1)  $28 \times 11.25 = 315$

79.(2)  $? = \frac{64896}{312 \times 26}$

$$? = 8$$

80.(3)  $14 \times 2 \times 8 \times 5 = 1120$