

# IBPS PO Preliminary–IPP-2021-11001

## HINTS & SOLUTIONS

### ANSWER KEY

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

### HINTS & SOLUTIONS

1. (4)
2. (5)
3. (1)
4. (2)
5. (3)
6. (1)
7. (5)
8. (2)
9. (1)
10. (4)
11. (2) The use of “back” after “returned” is not required as it is **Superfluous**. The word “**return**” itself means “**go back, come back, give back**”.
12. (1) Replace ‘than’ by ‘as’ as in the case of **Positive Degree**, comparison between two persons or things follows the following syntax- “**as/so + Positive Degree + as**”.  
e.g. Ram is not **as/so handsome as** Mohan.  
Sita is **as beautiful as** Mohini.
13. (4) Replace ‘has’ by ‘have’ as in this case “The majority” is used as **Noun of Multitude** and Noun of Multitude is considered as Plural which takes **Plural Verb** and **Plural Pronoun**. Also, the last part of the sentence has used the Plural Pronoun “**they**”, so the Verb for “The majority” should also be **Plural**.
14. (3) Replace “there has not always been schools” by “there have not always been schools” as when “there” is used

- as **Introductory Subject** then the Verb it follows depends on the **Number** and **Person** of subsequent **Noun** and **Pronoun** it follows. In the first part of the sentence, the use of Verb “has” for the Subject “There” is **Singular** as it is followed by Singular Noun “**form**” but in the second part of the sentence, Subject “there” is followed by **Plural Noun** “**schools**”; so “there” should be followed by **Plural Verb**.
15. (5) All the given sentences are grammatically correct.
  16. (1) **Accretion** means growth or increase by the gradual accumulation of additional layers or matter.
  17. (4) **Pliable** means easily bent; flexible.
  18. (5) **Feudal** means absurdly outdated or old-fashioned.
  19. (2) **Precept** means a general rule intended to regulate behaviour or thought.
  20. (1) **Bonhomie** means cheerful friendliness; geniality.
  21. (5) Refer the first paragraph of the passage, “An environment that triggered large inflows of foreign capital and a surge in credit after 2003 encouraged banks to explore new areas and terms of lending, which are responsible for the large exposures that are now turning bad. Having encouraged that environment with its policies, the government pretended that the problem was not serious enough to warrant emergency action.” Hence all three statements are the possible reasons behind the crisis of NPAs.
  22. (3) Refer the third paragraph of the passage, “Realising that postponing bad debt recognition could result in the accumulation of stressed assets in bank balance sheets sufficient to create a systemic problem, the Reserve Bank of India (RBI) instituted an asset quality review in 2015 to reclassify assets and reverse the practice of treating all restructured assets as standard assets.” Hence both the statements (I) and (II) are correct in context of the passage.
  23. (2) Refer the last paragraph of the passage, “According to the Care Ratings figures referred to earlier, 24 PSBs accounted for 88.2 per cent of the total NPAs with the public and private banks.” Hence statement (2) is true in context of the passage.
  24. (2) Refer the last paragraph of the passage, “As the Economic Survey 2016-17 recognised, in normal circumstances this would have threatened the banks concerned with insolvency, perhaps triggered a run on the banks, forced their closure and even precipitated a systemic crisis. India is fortunate that a large part of its banking system is owned by the government.” Hence it can be inferred from the passage that the author is trying to figure that with the backing of the government Indian banks are able to sustain even the adverse conditions. Hence only statement (II) is correct in context of the passage.
  25. (3) “Wicked loans and bad banks” is the most appropriate title of the passage as “Wicked” and “bad” the adjectives added to loans and Indian banks portray the chinks in our centuries old banking system, which lacks nerve to crack a whip on defaulting bulls. Hence (3) is the correct option.
  26. (3) Refer the second last paragraph of the passage, “The problem is that this is not happening because a large number of projects to which money had been lent during the boom period that preceded 2011-12, when investment rates rose sharply, were not ones to which the banking system should have been exposed. As these projects are all entering the period when they find themselves unable to service their

debt, loans are turning non-performing in quick succession. This trail of defaults is ensuring that the NPA ratio is not stabilizing..." Hence both statements (II) and (III) are correct in context of the passage.

27. (2) **Warrant** means justify or necessitate (a course of action). **Vindicate** means show or prove to be right, reasonable, or justified. Hence both are similar in meanings.

28. (4) **Precipitate** means cause (an event or situation, typically one that is undesirable) to happen suddenly, unexpectedly, or prematurely. **Expedite** means make (an action or process) happen sooner or be accomplished more quickly. Hence both are similar in meanings.

29. (5) **Stringent** means (of regulations, requirements, or conditions) strict, precise, and exacting. Hence "**flexible**" is the word most opposite in meaning to it.

**Somber** means having or conveying a feeling of deep seriousness and sadness.

**Poignant** means evoking a keen sense of sadness or regret.

**Unrelenting** means not giving way to kindness or compassion.

30. (3) **Requisite** means made necessary by particular circumstances or regulations. **Peripheral** means of secondary or minor importance; marginal. Hence both are opposite in meanings.

**Prepossession** means a prejudice or a preconceived idea about something.

**Stipulation** means a condition or requirement that is specified or demanded as part of an agreement.

31. (1) On (i)  $6x - 4y = 40$  .....(i)  $\times 6$   
 $6x - 5y = 22$  .....(ii)  $\times 4$   
 $38y = 152$

$$\therefore y = \frac{152}{38} = 4$$

Putting the value of y in equation (i), we have

$$4x + 3 \times 4 = 40$$

$$\text{Or, } 4x = 40 - 12 = 28$$

$$\therefore x = 7$$

Hence,  $x > y$

32. (2)  $2x^2 - 4x - \sqrt{13}x + 2\sqrt{13} = 0$  ..... (i)

$$\text{Or, } 2x(x - 2) - \sqrt{13}(x - 2) = 0$$

$$\text{Or, } (x - 2)(2x - \sqrt{13}) = 0$$

$$\therefore x = 2, \frac{\sqrt{13}}{2}$$

$10y^2 - 18y - 5\sqrt{13}y + 9\sqrt{13} = 0$  ..... (ii)

$$\text{Or, } 2y(5y - 9) - \sqrt{13}(5y - 9) = 0$$

$$\text{Or, } (2y - \sqrt{13})(5y - 9) = 0$$

$$\therefore y = \frac{9}{5}, \frac{\sqrt{13}}{2}$$

Hence,  $x \geq y$

33. (5)  $6x^2 + 17 - 3x^2 - 20 = 0$  ..... (i)

$$\text{Or, } 3x^2 = 3$$

$$\therefore x = \pm 1$$

$5y^2 - 12 - 9y^2 + 16 = 0$  ..... (ii)

$$\text{Or, } 4y^2 = 4$$

$$\therefore y = \pm 1$$

Hence  $x = y$

34. (2)  $13x + 17 = 134$  ..... (i)

$$\therefore x = \frac{117}{13} = 9$$

$$(361)^{1/2} y^2 - 270 = 1269$$

$$\text{Or, } 19y^2 = 1269 + 270 = 1539$$

$$y^2 = \frac{1539}{19} = 81$$

Therefore  $y = \pm 9$

Hence,  $x \geq y$

35. (4)  $64x^2 = 256$  ..... (i)  
 Or,  $x^2 = 4 \therefore x = \pm 2$   
 $14y^3 - 12y^3 = 16$  ..... (ii)  
 Or,  $2y^3 = 16$   
 $\therefore y^3 = 8 \therefore y = 2$   
 Hence  $x \leq y$

36. (2) Let length = x

$$\text{Width} = \frac{65}{100}(x) = \frac{13}{20}x$$

Area of the rectangle = length  $\times$  breadth = 2340

$$\Rightarrow x \times \frac{13}{20}x = 2340$$

$$\Rightarrow x^2 = 3600 \Rightarrow x = 60$$

$$\text{Length} = 60, \text{Width} = \frac{65}{100} \times 60 = 39$$

$$\text{Difference between length and width} = 60 - 39 = 21 \text{ metre}$$

37. (4)

38. (5)

39. (3) Cylinder diameter = 22,  $r_1 = 11$ ,  $h_1 = 13.75$  m

Volume of the cylinder

$$= \pi r^2 h = \frac{22}{7} \times 11 \times 11 \times 13.75 = 5228.92857$$

Let  $r_1$  and  $r_2$  are the internal and external radius of embankment.

Let  $h_1$  and  $h_2$  are the heights of the well and embankment.

$$r_2 = r_1 + \text{embankment}, r_2 = r_1 + 8.25 = 11 + 8.25 = 19.251.$$

Volume of embankment = volume of the well

$$(r_2^2 - r_1^2)h_2 = \pi r_1^2 h_1$$

$$\pi((19.25)^2 - (11)^2) \times h_2 = \pi \times (11)^2 \times 13.25$$

$$h_2 = 6.66 \text{ m}$$

40. (4) Volume of cylinder =  $\pi r^2 h$ ; Volume of Sphere =  $\frac{4}{3} \pi r^3$

Let no. of spheres = 'n',  $r = 3$  cm (cylinders),

$$r = 4.5(\text{sphere})$$

$$\Rightarrow \pi r^2 h = \frac{4}{3} \pi r^3 \times n$$

$$\Rightarrow 3 \times 3 \times 94.5 = \frac{4}{3} \times 4.5 \times 4.5 \times 4.5 \times n \Rightarrow n = '7'$$

41. (5)

Total population is A = 12 lakh

Total population is B = 13 lakh

Total population is C = 13 lakh

Total population is D = 13 lakh

Total population is E = 14 lakh

Lowest or min. Population is in A city

42. (4)

Total population in A [after increment] = 7 lakh  $\times$  1.1 + 5 lakh = 12.7 lakh

Total population in B [after increment] = 5 lakh  $\times$  1.2 + 8 lakh = 14 lakh

Desired difference = 1.3 lakh

43. (3)

Average no. of males in B, C, D is =  $\frac{5 \text{ lakh} + 7 \text{ lakh} + 10 \text{ lakh}}{3}$

$$= \frac{22 \text{ lakh}}{3}$$

Average no. of females in C, D, E =  $\frac{6 \text{ lakh} + 3 \text{ lakh} + 6 \text{ lakh}}{3}$

$$= \frac{15 \text{ lakh}}{3}$$

$$\text{Deserved ratio} = \frac{22/3}{15/3} = \frac{22}{15}$$

44. (2) Total no. of females  
 $= (5 + 8 + 6 + 3 + 6)$  lakh  
 $= 28$  lakh  
 Total population  $= (12 + 13 + 13 + 13 + 14)$  lakh  
 $= 65$  lakh  
 $\% \text{ of females} = \frac{28}{65} \times 100 \approx 43\%$

45. (4) Increment is in the total population, since we don't know increment in population of male or female, so we can't find out the ratio.

46-50. No. of English Books sold by Shop C  
 $= 27000 - (23000) = 4000$   
 No. of English books sold by shop F  $= 20000 - 15000 = 5000$   
 No. of computer books sold by shop D  
 $= 29000 - 22000 = 7000$   
 No. of GA books sold by shop D  $= 33000 - 24000 = 9000$   
 Total GA books sold  $= 27000$   
 Total QA books sold by shop E  $= 50000 - 41000 = 9000$   
 Total Reasoning books sold by shop E  
 $= 32000 - 30000 = 2000$   
 Total Reasoning Books sold by shop F  
 $= 35000 - 26000 = 9000$   
 Total Reasoning books sold  $= 31000$   
 Total BA books sold by shop A  $= 30000 - 25000 = 5000$   
 Total BA books sold  $= 26000$

46. (4) Total Books sold

English	→	20000
GA	→	27000
QA	→	50000
Comp.	→	29000
<b>Reasoning</b>	<b>→</b>	<b>31000</b>
BA	→	26000

Second highest is Reasoning Book.

47. (2) From the table,  
 Clearly shop D sold  $\frac{9000}{33000} \times 100 = \frac{300}{11} = 27.28\%$

48. (5) Desired avg.  $= \frac{27000 + 29000 + 31000}{3}$   
 $= \frac{87000}{3} = 29000$

49. (5) No. of reasoning books returned  $= 19 \times 40 = 760$   
 Desired  $\% = \frac{760 \times 100}{26000} = 2.92\%$

50. (3)  $14\% \rightarrow 840$   
 $\therefore 40\% \rightarrow \frac{840}{14} \times 40 = 2400$

51. (1)  $3 \times 2 + 2 = 8$   
 $8 \times 4 + 2 = 34$   
 $34 \times 6 + 2 = 206$   
 $206 \times 8 + 2 = 1650$   
 $1650 \times 10 + 2 = \boxed{16502}$

52. (3)  $4 + 6 = 10$   
 $10 + 8 = 18$   
 $18 + 10 = 28$   
 $28 + 12 = 40$   
 $40 + 14 = \boxed{54}$

53. (4)  $2^3 - 1 = 7$   
 $4^3 - 3 = 61$   
 $6^3 - 5 = 211$   
 $8^3 - 7 = 505$   
 $10^3 - 9 = 991$   
 $12^3 - 11 = 1717$

54. (2)  $(842 + 8) \div 2 = 425$   
 $(425 + 16) \div 3 = 147$   
 $(147 + 24) \div 4 = 42.75$   
 $(42.75 + 32) \div 5 = \boxed{14.95}$

55. (1)  $8 \times 1.1 = 8.8$   
 $16 \times 2.2 = 35.2$   
 $24 \times 3.2 = 76.8$   
 $32 \times 4.2 = 134.4$   
 $40 \times 5.2 = 208$   
 $48 \times 6.2 = 297.6$

56. (2) P —  $45000 \times 12$   
 Q —  $54000 \times 6$   
 R —  $30000 \times 8$   
 Ratio of their profit  $= 45 : 27 : 20$   
 $\therefore$  Total profit earned  $= \frac{92}{45} \times 13500$   
 $= 27600$

57. (4) Principal  $= \frac{S.I. \times 100}{\text{Time} \times \text{Rate}}$   
 $= \frac{7200 \times 100}{6 \times 12} = \text{Rs. } 10000$   
 $\therefore C.I. = P \left[ \left( 1 + \frac{R}{100} \right)^T - 1 \right]$   
 $= 10000 \left[ \left( 1 + \frac{5}{100} \right)^2 - 1 \right]$   
 $= 10000 \left[ \left( \frac{21}{20} \right)^2 - 1 \right]$   
 $= 10000 \left( \frac{441}{400} - 1 \right)$   
 $= \frac{10000 \times 41}{400} = \text{Rs. } 1025$

58. (1) Suppose the fraction is  $\frac{x}{y}$

$$\therefore \frac{x+3x}{y+y} = \frac{30}{19}$$

$$\frac{4x}{2y} = \frac{30}{19}$$

$$76x = 60y$$

$$\frac{x}{y} = \frac{60}{76} = \frac{15}{19}$$

59. (1) Suppose the age of daughter  $= x$  yr  
 Age of Meena  $= 8x$  yr

After 8 yr,

$$\frac{8x+8}{x+8} = \frac{10}{3}$$

$$24x + 24 = 10x + 80$$

$$24x - 10x = 80 - 24$$

$$14x = 56$$

$$x = 4$$

So, the age of Meena  $= 8x = 8 \times 4 = 32$  yr

60. (3) Difference of ratio of B and C  $= 2$  unit  
 $\therefore 2$  unit  $= 4000$  or 1 unit  $= \text{Rs. } 2000$   
 Now, total amount received by A and B together  $= 8 \times 2000 = \text{Rs. } 16,000$

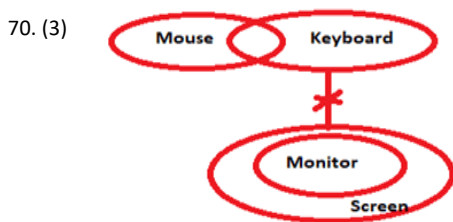
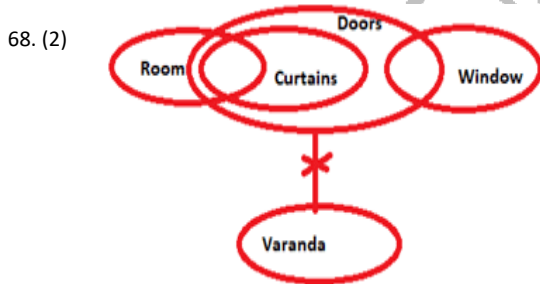
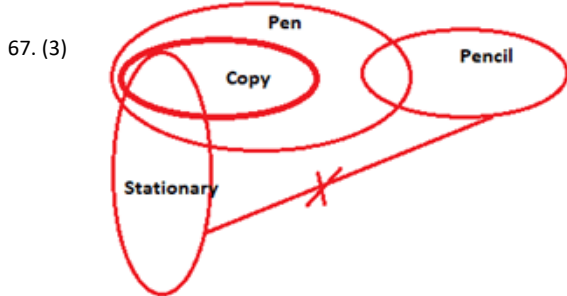
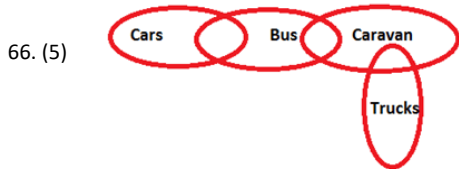
61. (4)  $? \times 116 = 4003 \times 77 - 21015$   
 Or,  $? \times 116 = 308231 - 21015 = 287216$   
 Or,  $? \times 116 = 287216$   
 $\therefore ? = \frac{287216}{116} = 2476$

62. (1)  $[(5\sqrt{7} + \sqrt{7}) \times (4\sqrt{7} + 8\sqrt{7})] - (19)^2$   
 $= [20 \times 7 + 4 \times 7 + 8 \times 7 + 40 \times 7] - 361$   
 $= [140 + 28 + 56 + 280] - 361$   
 $= 504 - 361 = 143$

63. (2)  $? = (4444 \div 40) + (645 \div 25) + (3991 \div 26)$   
 $= \frac{4444}{40} + \frac{645}{25} + \frac{3991}{26}$   
 $= 111.1 + 25.8 + 153.5 = 290.4$

64. (5)  $(?)^2 + (37)^2 = \sqrt{33124} \times \sqrt{2601} - (83)^2$   
 Or,  $(?)^2 + (37)^2 = 182 \times 51 - (83)^2$   
 Or,  $(?)^2 + 1369 = 9282 - 6889 = 2393$   
 Or,  $(?)^2 = 2393 - 1369 = 1024$   
 $\therefore ? = \sqrt{1024} = 32$

$$\begin{aligned}
 65. (2) \quad ? &= 5 \frac{17}{37} \times 4 \frac{51}{52} \times 11 \frac{1}{7} + 2 \frac{3}{4} \\
 &= \frac{202}{37} \times \frac{259}{52} \times \frac{78}{7} + \frac{11}{4} \\
 &= \frac{37}{37} \times \frac{52}{7} \times \frac{259}{2} + \frac{11}{4} \\
 &= 101 \times 3 + \frac{11}{4} = 303 + \frac{11}{4} = \frac{1212+11}{4} \\
 &= \frac{1223}{4} = 305.75
 \end{aligned}$$



71. (3)  
72. (5)  
73. (3)  
74. (3)  
75. (1)

76-80. It is given that the number of fruits are bought on Wednesday is 13. The number of fruits which are bought on Thursday is more than 13 and an odd number so it is 21. M buys fruits either on Saturday or Sunday. so there can be two possibilities (1) or (2).

Days	Friend	Fruits
Monday		
Tuesday		
Wednesday		13
Thursday		21
Friday		
Saturday	M	
Sunday		

Days	Friend	Fruits
Monday		
Tuesday		
Wednesday		13
Thursday		21
Friday		
Saturday		
Sunday	M	

It is given that The difference of the fruits which are bought on Monday and Friday is a multiple of 7 so the number of fruits can be 7, 14 or 28. It is also given that the sum of fruits which are bought on Wednesday and Saturday is one more than the number of fruits which are bought on Friday. So the sum can be 8, 15 or 29. The sum of number of fruits which are bought on Wednesday and Saturday can be only 29 so The number of fruits which are bought on Saturday is 16. Hence the number of fruits which are bought on Friday is 28 and which are bought on Monday is 7 or 14.

Days	Friend	Fruits
Monday		7/14
Tuesday		
Wednesday		13
Thursday		21
Friday		28
Saturday	M	16
Sunday		

Days	Friend	Fruits
Monday		7/14
Tuesday		
Wednesday		13
Thursday		21
Friday		28
Saturday		16
Sunday	M	

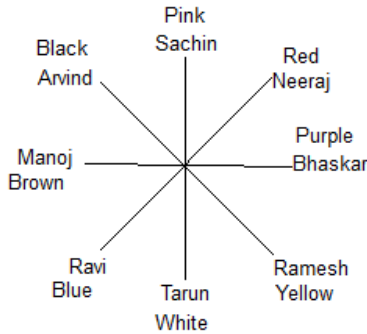
It is given that N buys fruits on the day just above the day on which 10 fruits are bought. so N buys fruits on Monday in (1) case. It is given that There are two persons who bought fruits between N and S and the difference between the fruits bought by N and S is less than five. In (1) case, it can't be possible so (1) possibility will be cancelled out.

In (2) case, N buys fruits on Saturday and the number of fruits which are bought on Sunday is 10. R cannot buy fruits on Saturday as there are three persons who bought fruits between R and P. It is given that There are two persons who buy fruits between R and the person who buys 7 fruits. so 14 fruits are bought on Monday and 7 fruits are bought on Tuesday. R buys fruits on Friday. O does not buy 7 fruits so O buys fruits on Thursday.

Days	Friend	Fruits
Monday	P	14
Tuesday	Q	7
Wednesday	S	13
Thursday	O	21
Friday	R	28
Saturday	N	16
Sunday	M	10

76. (2)  
77. (4)  
78. (4)  
79. (3)  
80. (2)

81 – 85.

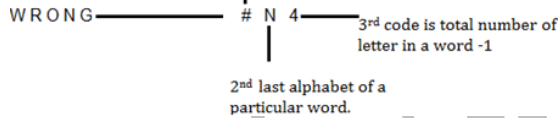


- 81. (4)
- 82. (3)
- 83. (4)
- 84. (2)
- 85. (1)
- 86 - 90.

This coding decoding question is based on the new pattern. In this, question the words are coded as per following rules.

- (i) First element of code is based on vowel starting word. If any word started with Vowel alphabet then symbol is used @, and for consonant starting word # is used.
- (ii) 2nd code is 2nd last alphabet of a particular word.
- (iii) 3rd code is total number of letter in a word -1.

If any word started with Vowel alphabet then symbol is used @, and for consonant, starting word # is used.



- 86. (5)
- 87. (1)
- 88. (4)
- 89. (2)
- 90. (5)
- 91-95.

In this floor based arrangement, we can see that, Q sits one of the odd numbered floor above the floor number 5 and his age is 31yr. There are 2 floors between Q and the person whose age is 55yr. Both vacant floors are even numbered floors. Floor number 8 is not the vacant floor. The number of floors between Q and T is same as between Q and P. P's age is perfect square.

**Note:** In above given condition, Q can be seated at 7th floor or 9th floor, but there is one condition that, the number of floors between Q and T is same as between Q and P. From this, Q cannot be sit at 9th floor. So Q will sit at 7th floor. Since both vacant floor is even numbered floor and 8th floor is not vacant, so vacant floor will be 2nd and 6th floor. Now there are two cases, in which T and P can be seated at 9th and 5th floor.

Case 1			Case 2		
Floors	Person	Age	Floors	Person	Age
9	T		9	P	25/81/9
8			8		
7	Q	31	7	Q	31
6	Vacant		6	Vacant	
5	P	25/81/9	5	T	
4		55	4		55
3			3		
2	Vacant		2	Vacant	
1			1		

Now, there is a condition, in which, difference between the age of the person who lives on top floor and ground floor is

15yrs. There is 1 person live between Q and S, whose age is an odd number. So S will be at 4th floor.

But for the difference purpose, there is only one case whose age is 24 and 9 yrs. So At top and bottom floor, those persons live whose age is 24 and 9 yrs and the age of U is square of the age of R who does not live an even numbered floor. There is only one case that is 9rs and 81 yrs. Then R will be 9 yrs old and U's age will be 81 yrs old. From this, the **case 2 will be eliminated**. Only Case 1 will continue. And R can't be live at top most floor since only T live at top floor that means R will live at bottom most floor and T will be 24 yrs old. So T can't be 9yrs old.

Floors	Person	Age
9	T	24
8		
7	Q	31
6	Vacant	
5	P	25/81
4	S	55
3		
2	Vacant	
1	R	9

U's age is 81yr and V's age is 27yr, but both can live on either 8th or 3rd floor and then P will be 25 yrs old.

Floors	Person	Age
9	T	24
8	V/U	27/81
7	Q	31
6	Vacant	
5	P	25
4	S	55
3	U/V	81/27
2	Vacant	
1	R	9

- 91. (4)
- 92. (1)
- 93. (3)
- 94. (5)
- 95. (3)
- 96. (4)

$$Z > W ? U \geq N = V$$

When we put  $\geq$  instead of ? sign then

$$Z > W \geq U \geq N = V$$

In this expression  $Z > U$  and  $V \leq W$  both are true.

- 97. (5)

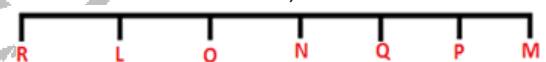
$$\text{Height : } O > N > P > Z > Q > M$$

$$\text{Weight : } P > M > O > N > Q > Z$$

- 98. (2)

Rank-wise order from 1 to 6 is,  $B > D > A > F > C > E$ .

- 99 - 100.



- 99. (2)

- 100. (4)