## 2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

## IBPS PO PHASE - I - 104 (SOLUTION)

## REASONING

(1-5) :

1. (5)

I. $\times$
II. $\times$
III. $V$
IV. $\times$
2. 

(1)

I.
II. $\times$
III. $V$
IV. $\times$
3.

I. $\times$
II. $\times$
III. $x$
IV.

I. $V$
II. $x$
III. $\times$
IV. $\times$
5. (5)

I. Doubt
II.
III. $\times$
IV. Doubt
(6-10) :

6. (3)
7. (2)
8. (1)
9. (1)
10. (4)
11. (2) From I. Possible diagrams:

or

Hence I alon is not sufficient to answer the question.
From II.


Hence, C is second to the left of E
Hence II alone is sufficient to answer the question.
12. (5) From both I and II.
$\mathrm{Z}>\mathrm{Y}>\mathrm{V}=\mathrm{W}>\mathrm{X}$
$(x+p)(x+5)(x+5)$
Hence $Z$ scores the highest runs.
13. (5) From both I and II


Hence, A is grandmother of E
14. (5) From both I and II.
$T$ V S X P _ Q
Q _ P X S V T
Hence $X$ is the middle of the row.
15. (1)
(16-20) :

| Floor | Person | Car |
| :---: | :---: | :---: |
| 6 | Anil | Fiat |
| 5 | Nikhil | Hyundai |
| 4 | Ranjan | Maruti |
| 3 | Manish | Mahindra / Tata |
| 2 | Karan | Ford |
| 1 | Arun | Tata / Mahindra |


| 16. (1) <br> 19. (1) <br> $\mathbf{( 2 1 - 2 5 ) ~ : ~}$ | 20. (4) (5) |
| :--- | :--- | :--- | :--- | :--- |



2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

26. (1)
27. (4)
(28-32) :

- $-\mathrm{P}>\mathrm{Q}$
(C) $-P \geq Q$
$\$-P=Q$
\# - $\mathrm{P}<\mathrm{Q}$
(a) $-\mathrm{P} \leq \mathrm{Q}$

28. (1) Statement :
$\mathrm{T}>\mathrm{U}>\mathrm{R}>\mathrm{Q}$
Conclusion :
I. $\mathrm{T}>\mathrm{Q}(\downarrow)$
II. $\mathrm{R}<\mathrm{T}(\times)$
29. (4) Statement :

B $>\mathrm{H}>\mathrm{J} \geq \mathrm{C}$
Conclusion :
I. $B \geq C(x)$
II. $\mathrm{C} \leq \mathrm{H}(\mathrm{x})$
30. (2) Statement :
$\mathrm{T}>\mathrm{Q} \geq \mathrm{X}<\mathrm{W}$
Conclusion :
I. $\mathrm{W}=\mathrm{Q}(-)$
II. $\mathrm{X}<\mathrm{T}(\downarrow)$
31. (5) Statement :
$Z=Y<A<B$
Conclusion :
I. $A>Z(\downarrow)$
II. Y < B (レ)
32. (3) Statement :
$\mathrm{K}>\mathrm{L}=\mathrm{O} \geq \mathrm{N}$
Conclusion :
I. $\mathrm{L}>\mathrm{N}$ 子Either I or II
II. $\mathrm{N}=\mathrm{L}$ .
II. $\mathrm{N}=\mathrm{L}\lrcorner$
(33-35) :
create your own ideas $\rightarrow$ ri cso bi sa (i)
always create new ideas $\rightarrow$ ka hte sa bi
new and better ideas $\rightarrow$ bi loc sh ka
think and insights $\rightarrow$ sit sh pet
From (i), (ii) and (iii), ideas $\rightarrow$ bi
From (i), (ii) and (v), create $\rightarrow$ sa
From (i), (v) and (vi), your/own $\rightarrow$ ri/cso
From (ii), (v) and (iii), new $\rightarrow \mathrm{ka}$ (viii)

From (ii), (v), (vi) and (viii), $\rightarrow$ always $\rightarrow$ hte (ix)
From (iii) and (iv), and $\rightarrow$ sh
From (iii), (v), (viii) and (x), better $\rightarrow$ loc (xi)
From (iv) and (x),
think/insights $\rightarrow$ sit/pet (xii)
33. (2) 34. (1) 35. (4)

MATHS
(36-40) :
36. (2) $\Rightarrow 95^{?} \approx 95^{4} \div 95^{1}$
$\Rightarrow 95^{?}=95^{4-1}=95^{3}$
$\Rightarrow$ ? $=3$
37. $(2) ? \approx \sqrt{10000}+\frac{3}{5} \times 1892$
$=100+1135.2$
$=1235.2 \approx 1230$
38.
(3) ? $\approx \frac{0.0004}{0.0001} \times 36=4 \times 36$
$=144 \approx 145$
39.

> 39. (1) $?$ ? $=12345 \times \frac{137}{100}$ $=$ 40. $\quad \begin{aligned}(3) & ? \\ & =3739+65 \approx 17000 \\ & =3739+4428 \\ & =8167 \approx 8200\end{aligned}$
(41-45) :
41. (5) Number of people in Teaching profession
$\frac{30}{100} \times 25000=7500$
Number of people in Medical profession
$=\frac{10}{100} \times 25000=2500$
$\backslash$ Required $\%=\frac{7500}{2500} \times 100=300 \%$
42. (3) Total numbers of males in Banking and Medical professions
$=25000 \times \frac{20}{100} \times \frac{60}{100}+25000 \times \frac{10}{100} \times$
$\frac{40}{100}=3000+1000=4000$
The total number of females in Medical and Banking profession $=10 \%$ of $60 \%$ of $25000+20 \%$ of $40 \%$ of $25000=1500+$ $2000=3500$
$\backslash$ Required ratio $=\frac{4000}{3500}=\frac{8}{7}=8: 7$
43. (3) Females in Engineering professions
$25000 \times \frac{25}{100} \times \frac{70}{100}=4375$
Males in Banking profession


2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
$25000 \times \frac{20}{100} \times \frac{60}{100}=3000$
Required $\%=\left(\frac{4375}{3000} \times 100\right) \%=145.83 \approx$
$146 \%$
44. (3) Number of males in Banking and Medical $=20 \%$ of $60 \%$ of $25000+10 \%$ of $40 \%$ of $25000=3000+1000=4000$ Number of females in Law and Teaching
$\frac{15}{100} \times \frac{20}{100} \times 25000+\frac{30}{100} \times \frac{60}{100} \times$ $25000=5250$
\ Required ratio $=\frac{4000}{5250}=\frac{16}{21}=16: 21$
45. (1) Number of females in Engineering profession $=25 \%$ of $70 \%$ of $25000=4375$ Number of males in Law profession $=15 \%$ of $80 \%$ of $25000=3000$

Required $\%=\left(\frac{4375-3000}{3000} \times 100\right) \%$
$=45.83 \approx 46 \%$
(46-50) :
46. (1) The given number series is based on the following pattern.
$1^{1}=1 ; 2^{2}=4$
$3^{3}=27 ; 4^{4}=256$
$5^{5}=3125 ; 6^{6}=46656 \neq 46658$
Hence, 46658 is the wrong number.
47. (4) The given number series is based on the following pattern.
$18000 \div 5=3600$
$3600 \div 5=720$
$720 \div 5=144 \neq 142.2$
$144 \div 5=28.3$
$28.8 \div 5=5.76$
Hence, 142.2 is the wrong number.
48. (5) The given number series is based on the following pattern.
$12+15^{2}=12+225=237$
$237+13^{2}=237+169=406$
$406+11^{2}=406+121=527$
$527+9^{2}=608=527+81=608 \neq 604$
$608+7^{2}=608+49=657$
Hence, 604 is the wrong number.
49. (3) The given number series is based on the following pattern.
$3 \times 7+2 \times 7=21+14=35$
$35 \times 6+3 \times 6=210+18$
$=228 \neq 226$
$228 \times 5+4 \times 5=1140+20=1160$
$1160 \times 4+5 \times 4=4640+20=4660$
$4660 \times 3+6 \times 3=13980+18=13998$
Hence, 226 is the wrong number
50. (2) The given number series is based on the following pattern.
$18 \times 7-7=126-7=119$
$119 \times 6-6=714-708$
$708 \times 5-5=3540-5=3535 \neq 3534$
$3535 \times 4-4=14140-4=14136$
$14136 \times 3-3=42405$
Hence, 3534 is the wrong number.
51. (2) Clearly,
$9 \times 360$ children $=18 \times 72$ men
$=12 \times 162$ women
$\Rightarrow 45$ children $=18$ men $=27$ women
$\Rightarrow 5$ children $=2$ men $=3$ women
Now, 4 men +12 women +10 children
$=4$ men +8 men +4 men $=16$ men
$\because 18$ men can complete the work in 72 days.
$\therefore \quad 16$ men can complete the same work
$=\frac{18 \times 72}{16}=81$ days
52. (3) Let the speed of boat in still water be $x$ kmph and that of current be $y \mathrm{kmph}$.
$\therefore \quad x+y=\frac{4.8}{\frac{8}{60}}=\frac{4.8 \times 60}{8}$
$\Rightarrow x+y=36$
and, $x-y=\frac{4.8}{\frac{9}{60}}=\frac{4.8 \times 60}{9}$
$\Rightarrow x-y=32$
By equation (i) - (ii),
$x+y-x+y=36-32=4$
$\Rightarrow 2 y=4 \Rightarrow y=\frac{4}{2}=2 \mathrm{kmph}$
53. (3) Let the amount be ₹ $x$

Investment is done as given below.
Amount left $=x-\frac{40}{100} x=\frac{60 x}{100}$
$\frac{40}{100} x$ at $15 \%$ p.a
$\frac{50}{100}$ of $\frac{60 x}{100}=\frac{30 x}{100}$ at $10 \%$ p.a
Rest amount

## Campus <br> KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
$=x-\frac{40 x}{100}-\frac{30 x}{100}=\frac{30 x}{100}$ at $18 \% \mathrm{p} . \mathrm{a}$
Interest earned by each at end of 1 year
By 1 st $\Rightarrow \frac{15}{100} \times \frac{40 x}{100}=\frac{60}{1000} x$
By 2 nd $\Rightarrow \frac{10}{100} \times \frac{30 x}{100}=\frac{30}{1000} x$

By 3 rd $\Rightarrow \frac{18}{100} \times \frac{30 x}{100}=\frac{54}{1000} x$
Total interest $=\frac{144}{1000} x$
$\therefore \quad$ Rate $\%=\left(\frac{\frac{144 x}{1000}}{x} \times 100\right)=14.4 \%$
54. (1) C's present age $=85-7=78$ years

B's present age $=78-12=66$ years
$\therefore \quad$ A's present age $=\frac{3}{11} \times 66=18$ years
$\therefore \quad$ A's father's present age $=25+18=43$ years
55. (3) According to question,

CP of 20 articles $=\mathrm{SP}$ of $x$ articles $=1$ (let)
$\therefore \quad$ CP of 1 articles $=\frac{1}{20}$
SP of 1 articles $=\frac{1}{x}$
Profit per cent $=\frac{\frac{1}{x}-\frac{1}{20}}{\frac{1}{20}}=\frac{25}{100}$

$$
\begin{aligned}
& \Rightarrow \quad \frac{20-x}{x}=\frac{1}{4} \\
& \Rightarrow 80-4 x=x \\
& \Rightarrow 5 x=80 \\
& \Rightarrow x=16
\end{aligned}
$$

(56-60) :
56. (5) Total number $=\frac{90000}{100}\left[\frac{14.3 \times 7}{18}+\right.$

$$
\begin{aligned}
\frac{16.2 \times 5}{9} & \left.+\frac{18.4 \times 3}{10}+\frac{16.8 \times 3}{9}+\frac{12.6 \times 2}{5}+\frac{21.7 \times 2}{10}\right] \\
& =5005+8100+4968+5040+4536 \\
& +3906=31555
\end{aligned}
$$

57. 

(1) $\mathrm{T}_{\mathrm{o}}=90000 \times \frac{16.8}{100} \times \frac{4}{9}=6720$
$\mathrm{T}_{\mathrm{P}}=90000 \times \frac{12.6}{100} \times \frac{2}{5}=4536$
\ Required difference $=6720-4536$ $=2184$
58.
(5) $M_{1-0}=90000 \times \frac{16.8}{100} \times \frac{4}{9} 6720$
$M_{3-L}=90000 \times \frac{14.3}{100} \times \frac{4}{18}=2860$
$\backslash$ Required $\%=\left(\frac{6720}{2860} \times 100\right)$
$=234.96 \% \approx 235 \%$
59. (5) Total $_{\mathrm{Q}}=\frac{90000}{100} \times 21.7=19530$
$\operatorname{Total}_{\mathrm{M}}=\frac{90000}{100} \times 16.2=14580$
$\operatorname{Reqd} \%=\left(\frac{19530-14580}{14580}\right) \times 100$
$=\frac{495000}{14580}=33.95 \% \approx 34 \%$
60.
(2) $\operatorname{Total}_{\mathrm{N}}=\frac{90000}{100} \times 18.4=16560$
$M_{2-\mathrm{o}}=\frac{90000}{100} \times 16.8 \times \frac{3}{9}=5040$
\ Required ratio $=\frac{16560}{5040}=\frac{23}{7}=23: 7$
61. (4) According to question,

Mohan + Rohan + 2Shyam = 59
Shyam + Rohan + 3Mohan $=68$
Mohan + 3Shyam + 3Rohan $=108$
Subtract equation (iii) from thrice the equation (ii), we get
3Shyam + 3Rohan + 9Mohan - Mohan

- 3Shyam - 3Rohan $=204-108$
$\Rightarrow 8$ Mohan $=96 \Rightarrow$ Mohan $=\frac{96}{8}=12$ years

62. (4) Let the money borrowed be ₹ $x$ and rate be $r \%$.
and Time $=2$ years

$$
\begin{aligned}
\therefore & 4000=\frac{x \times r \times 2}{100} \Rightarrow r x=200000 \\
& \text { and } x\left(1+\frac{r}{100}\right)^{2}=x+4200
\end{aligned}
$$

## Campus <br> KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
$\Rightarrow x+\frac{x r^{2}}{10000}+\frac{2 x r}{100}=4200+x$
$\Rightarrow 20 r+4000=4200$
$\Rightarrow r=10 \%$
63. (4)

$\mathrm{BC}=\mathrm{BX}+\mathrm{XC}=3 x+2 x=5 x \mathrm{~cm}$
$\mathrm{CD}=\mathrm{CY}+\mathrm{YD}=2 y+y=3 y \mathrm{~cm}$
$\therefore 5 x \times 3 y=120$
$\Rightarrow x y=8(=4 \times 2)$
$B C=20 \mathrm{~cm}$
$C D=6 \mathrm{~cm}$
$B X=\frac{3}{5} \times 20=12 \mathrm{~cm}$
$\mathrm{YD}=\frac{1}{3} \times 6=2 \mathrm{~cm}$
$Z D=\frac{1}{4} \times 20=5 \mathrm{~cm}$
$\therefore$ Area of the shaded region
$=120-\Delta \mathrm{ABX}-\Delta \mathrm{ZYD}$
$=120-\frac{1}{2} \times 12 \times 6-\frac{1}{2} \times 2 \times 5$
$=120-36-5=79$ sq.cm.
64. (1) Equivalent capital of Sonu for 3 year
$=₹(60,000 \times 1+80,000 \times 2)$
$=₹(60,000+1,60,000)=₹ 2,20,000$
Equivalent capital of Monu for 3 year
$=₹\left(90,000 \times 2 \frac{1}{2}\right)$
$=₹\left(90,000 \times \frac{5}{2}\right)=₹ 2,25,000$
Ratio of their capitals $=220000: 225000$
$=44: 45$
Sum of ratios $=44+45=89$
Total profit = ₹ $71,20,000$
Sonu's share
$=₹\left(\frac{44}{89} \times 71,20,000\right)=₹ 35,20,000$
65. (4) Salma's monthly salary
$=₹\left(\frac{2170 \times 100}{7}\right)=₹ 31000$
Percentage monthly investment by Sujata $=7+18+6=31 \%$
Salma's annual investment
$=12 \times \frac{31}{100} \times 31000=₹ 1,15,320$
(66-70) :
66. (4) I. $x^{2}+5 x+6=0$
$\Rightarrow x^{2}+2 x+3 x+6=0$
$\Rightarrow x(x+2)+3(x+2)=0$
$\Rightarrow(x+3)(x+2)=0$
$\therefore x=-3$ or -2
II. $y^{2}+3 y+2=0$
$\Rightarrow y^{2}+2 y+y+2=0$
$\Rightarrow y(y+2)+1(y+2)=0$
$\Rightarrow(y+1)(y+2)=0$
$\therefore y=-1$ or -2
Clearly, $\mathrm{x} \leq \mathrm{y}$
67. (2) I. $x^{2}-10 x+24=0$
$\Rightarrow x^{2}-6 x-4 x+24=0$
$\Rightarrow x(x-6)-4(x-6)=0$
$\Rightarrow(x-4)(x-6)=0$
$\therefore x=4$ or 6
II. $y^{2}-9 y+20=0$
$\Rightarrow y^{2}-5 y-4 y+20=0$
$\Rightarrow y(y-5)-4(y-5)=0$
$\Rightarrow(y-4)(y-5)=0$
$\therefore y=4$ or 5
$\therefore x \geq y$
68. (4) I. $x^{2}=961= \pm 31$
II. $y=\sqrt{961}=31$

Clearly, $\mathrm{x} \leq \mathrm{y}$
69. (5) I. $x^{2}-x-72=0$
$\Rightarrow x^{2}-9 x+8 x-72=0$
$\Rightarrow x(x-9)+8(x-9)=0$
$\Rightarrow(x+8)(x-9)=0$
$\therefore x=-8$ or 9
II. $y^{2}=64$
$\Rightarrow y= \pm 8$
70. (5) I. $x^{2}=463+321=784$
$\therefore x= \pm 28$
II. $y^{2}=308+421=729$
$\therefore y= \pm 27$

## ENGLISH LANGUAGE

(81-85) : CFABDE
81. (1)
82. (3)
83. (1)
84. (5)
85. (2)
96. (5) No error
97. (4) Replace 'nice' by 'nicer'.
98. (4) Replace 'another' by 'other'.
99. (2) Replace 'a' by 'an'.
100. (2) Replace it with 'on you staying here' or 'on that you stay'.

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

| Word | Meaning in English | Meaning in Hindi |
| :---: | :---: | :---: |
| Latent | (of a quality or state) existing but not yet developed | गु प्त, अन तर्ध नहित |
| At the helm of affairs | In the position of being in control of something | किसे के नियां प में है |
| Foremost | Most prominent in rank, importance, or position | ग्र प१, समा` परि \\ \hline Dazzling & Extremely bright & बहु त चमकी ला \\ \hline Sabotaging & Deliberately destroy, damage, or obstruct (something), especially for political or military advantage & रा जौ तिकला \({ }^{9} \dagger\) के लिए नु कस न करना \\ \hline Subtle & (especially of a change or distinction) so delicate or precise as to be difficult to analyze or describe & गू ढ़. , चा ला क \\ \hline Come in handy & To be useful & मद दगा र हा` ना |
| Veil | Something that stops you from learning the truth about a situation | नक ब, पदा |
| By and large | Generally, but not completely | कु ल मिला कर |
| Adaptability | The quality of being able to change or be changed in order to deal successfully with new situations | अनु कू लनखी लता |
| Vicinity | The area near or surrounding a particular place | पड. ${ }^{\text {' }}$ स |
| Chronic | Persisting for a long time or constantly recurring | चिरका लिक, स्थ 7 T य |
| Revile | Criticize in an abusive or angrily insulting manner | ${ }^{\text {¢ }} \mathrm{T}$ ला - बु रा कहना |
| Engrossed | Absorb all the attention or interest of | तल ली न |
| Ingrained | Firmly fixed or established; difficult to change |  |
| Mired | stucked deep in a difficult or unpleasant situation | ज्ञ. तकष स हु आ |
| Concurrence | Agreement | सरमति |
| Dissemination | The act of spreading information or knowledge so that it reaches many people | सू चना पौ ला ना |
| Congruence | Agreement or harmony; compatibility | अनु स्सता |
| Precipitate | Done, made, or acting suddenly or without careful consideration |  |

## IBPS PO PHASE - I - 104 (ANSWER KEY)

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

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003

