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

## IBPS PO PHASE - I - 107 (SOLUTION)

REASONING
(1-5) :

| FLOOR | PERSON | YEAR |
| :---: | :---: | :---: |
| 8 | O | 1995 |
| 7 | Q | 1991 |
| 6 | R | 1986 |
| 5 | M | 2000 |
| 4 | S | 1990 |
| 3 | N | 1987 |
| 2 | P | 1992 |
| 1 | T | 1989 |

1. (3)
2. (2)
3. 

(4)
4. (4)
5. (1)
(6-11) :

| RING | COLOUR | Material | Shape |
| :---: | :---: | :---: | :---: |
| M | Orange | Ruby | Square |
| N | Green | Garnet/Pearl | Hexagonal |
| O | Black | Sapphire | Oval |
| P | White | Diamond | Pentagon |
| Q | Pink | Emerald | Oval |
| R | White | Garnet/Pearl | Rectangle |
| S | Black | Topaz | Circle |

6. (5)
7. (5)
8. (2)
9. 
10. (3)
11. (2)
12. 

(4)
(12-16) :

$$
\begin{aligned}
& \text { © } \rightarrow> \\
& \& \\
& =\rightarrow \\
& =\rightarrow \\
& * \rightarrow \\
& \# \rightarrow \leq
\end{aligned}
$$

12. (3)
(3) $\mathrm{P}>\mathrm{Q}=\mathrm{S} \geq \mathrm{R}$
$\left.\begin{array}{l}\text { I. } \rightarrow \mathrm{Q}>\mathrm{R} \\ \text { I. } \rightarrow \mathrm{Q}=\mathrm{R}\end{array}\right]$ either
Either conclusion I or II is true.
13. (4) $\mathrm{A}<\mathrm{B}>\mathrm{C} \geq \mathrm{D}$
I. $\mathrm{A}=\mathrm{D} \rightarrow$ false
II. $\mathrm{A} \leq \mathrm{C} \rightarrow$ false

Neither conclusion I nor II is true.
14. (1) $R \leq U=V<N$
I. $\rightarrow \mathrm{R}<\mathrm{N} \rightarrow$ true
II. $\rightarrow \mathrm{U} \geq \mathrm{N} \rightarrow$ false only conclusion I is true.
15. (2) $\mathrm{M} \geq \mathrm{O}>\mathrm{P}$., $\mathrm{M} \geq \mathrm{N}$
I. $\rightarrow \mathrm{N}=\mathrm{O} \rightarrow$ false
II. $\rightarrow \mathrm{M}>\mathrm{P} \rightarrow$ true
only conclusion II is true.
16. (1)
(17-21) :
17. (3)

From I : It means the sun is to the left of David and since it is morning. the left of David is east. Hence, David is facing south.
From II : Sun is to the left of David Hence, he is facing south.
18. (4)
19. (5) From I : A D $\qquad$ B
From II : D _ _ M: M $\qquad$
We get from I and II
AD _ _M__ CB
Thus, there are eight station between A and B
20. (3) $\mathrm{P}^{+}-\mathrm{M}^{+}$

L S
Then $M$ is uncle of $L$.
From-statement II - If is clear R is uncle of L
21. (5)
(22-26) :

22. (2)
23. (1)
24.
(5)
25. (5)
26. (1)
(27-31) :


## Campus <br> KD Campus

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

32. (4)
33.
(3) 34 .
(4)
35. (3)


## MATHS

(36-40) :
36. (3) ? $=(81)^{-\frac{1}{2}}-(64)^{-\frac{2}{3}}$
$=\left(\frac{1}{81}\right)^{\frac{1}{2}}-\left(\frac{1}{64}\right)^{\frac{2}{3}}=\frac{1}{9}-\frac{1}{16}=\frac{16-9}{144}=\frac{7}{144}$
37. (4) $(?)^{2}=331.8 \div 23.7+(-21)^{2}-94$
$\Rightarrow ?^{2} \approx 14+441-94=361$
$\Rightarrow ?=\sqrt{361}=19$
38. (5) $\frac{576 \times 34}{100}+\frac{842 \times 18}{100}=\frac{400 \times ?}{100}+83.4$
$\Rightarrow 195.84+151.56=4 \times ?+83.4$
$\Rightarrow 347.4=4 \times ?+83.4$
$\Rightarrow 4 \times ?=347.4-83.4=264$
$\Rightarrow ?=\frac{264}{4}=66$
39. (1) $?=\frac{\sqrt{29241}}{\sqrt{361}} \times \frac{47}{9}$

$$
=\frac{171}{19} \times \frac{47}{9}=47
$$

40. (2) $\Rightarrow \frac{13}{4}+\frac{44}{7}+?=13+\frac{3}{28}$

$$
\begin{aligned}
& \Rightarrow \frac{91+176}{28}+?=13+\frac{3}{28} \\
& \Rightarrow \frac{267}{28}+?=13+\frac{3}{28} \\
& \Rightarrow \frac{264}{28}+?=13 \\
& \Rightarrow \frac{364-264}{28}=? \\
& \Rightarrow ?=\frac{25}{7}=3 \frac{4}{7}
\end{aligned}
$$

(41-45) :
41. (2) Total CP of Bike $=150000+15000$

$$
=₹ 1,65,000
$$

$$
\mathrm{S} \mathrm{P}=165000 \times \frac{110}{100}
$$

$$
=₹ 1,81,500
$$

42. (4) S.P of Laptop

$$
\begin{aligned}
& =27000+5000+3000 \\
& =₹ 35,000
\end{aligned}
$$

C.P. of computer

$$
\begin{aligned}
& =25500+2500 \\
& =₹ 28,000
\end{aligned}
$$

$\therefore$ Required $\%=\left(\frac{35000}{28000} \times 100\right) \%$

$$
=125 \%
$$

43. (2) Loss on Camera
$=40000+4200-35000$
= ₹ 9200
Loss on Computer $=₹ 2500$
$\therefore$ Required\% $=9200: 2500$

$$
=92: 25
$$

44. (3) S.P. of Mobile $=4000+2000+3000$

$$
=₹ 45,000
$$

S.P. of Laptop $=27000+5000+3000$
$=₹ 35,000$
$\therefore$ Required defference
$=45000-35000$
$=₹ 10,000$
45. (4) Total C. P of Hard disk

$$
=2000+500=₹ 2500
$$

$\therefore \quad$ S. P. of Hard disk

$$
=2500 \times \frac{95}{100}=₹ 2375
$$

## Campus <br> KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
S. P of Computer $=₹ 25,500$
$\therefore$ Required les\%
$=\left(\frac{(25500-2375)}{25500} \times 100\right)$
$=90.68 \% \approx 91 \%$
(46-50) :
46. (3) The number series is based on following pattern:
$8 \times \frac{1}{2}=4$
$4 \times 1=4$
$4 \times 1.5=6$
$6 \times 2=12$
$12 \times 2.5=\mathbf{3 0} \neq 28$
$30 \times 3=90$
47. (2) The number series is based on following pattern:
$17+0.25 \times(1)^{2}=17.25$
$17.25+0.25 \times(2)^{2}=18.25$
$18.25+0.25 \times(3)^{2}=\mathbf{2 0 . 5 0} \neq 20.75$
$20.50+0.25 \times(4)^{2}=24.50$
$24.50+0.25 \times(5)^{2}=30.75$
48. (1) The number series is based on following pattern:
$438+(7)^{2}=487$
$487-(6)^{2}=451 \neq 447$
$451+(5)^{2}=476$
$476-(4)^{2}=460$
$460+(3)^{2}=469$
49. (5) The number series is based on following pattern:
$2 \times 2+3=7$
$7 \times 2+5=19 \neq 18$
$19 \times 2+7=45$
$45 \times 2+9=99$
$99 \times 2+11=209$
$209 \times 2+13=431$
50. (4) The number series is based on following pattern:
$6 \times 1+1 \times 2=8$
$8 \times 2-2 \times 3=10$
$10 \times 3+3 \times 4=42$
$42 \times 4-4 \times 5=148 \neq 146$
$148 \times 5+5 \times 6=770$
$770 \times 6-6 \times 7=4578$
51.

> C.I - S.I $=\mathrm{P}\left(\frac{R}{100}\right)^{2}$
> $\Rightarrow 16=\mathrm{P} \times\left(\frac{10}{100}\right)^{2}$
> $\Rightarrow \mathrm{P}=₹ 1600$

When interest compounded half-yearly,
C.I $=1600\left[\left(1+\frac{5}{100}\right)^{4}-1\right]$

$$
=1600 \times\left(\frac{194481}{160000}-1\right)
$$

$$
=1600 \times \frac{34481}{160000}=₹ 344.81
$$

$S . I=\frac{1600 \times 2 \times 10}{100}=₹ 320$
$\therefore$ Required difference
$=344.81-320=₹ 24.81$
52. (2) Nisha takes 25 days to complete the work.
Alka is $25 \%$ efficient than Nisha
So, she takes $25 \times \frac{4}{5}=25$ days.
Let Alka $x$ days to complete the work. ATQ,

$$
\begin{aligned}
& \frac{x}{20}+5\left(\frac{1}{20}+\frac{1}{25}\right)=1 \\
\Rightarrow & \frac{x}{20}+5 \times \frac{9}{100}=1 \\
\Rightarrow & \frac{x}{20}=1-\frac{9}{20} \\
\Rightarrow & \frac{x}{20}=\frac{11}{20} \\
\Rightarrow & x=11 \text { days }
\end{aligned}
$$

53. (1) Let the duration of Journey be $x$ hours. ATQ,

$$
\begin{aligned}
& \frac{600}{x}-\frac{600}{x+\frac{1}{2}}=200 \\
\Rightarrow & \frac{600}{x}-\frac{1200}{2 x+1}=200
\end{aligned}
$$

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
$\Rightarrow 2 x^{2}+x-3=0$
$\Rightarrow 2 x^{2}-2 x+3 x-3=0$
$\Rightarrow 2 x(x-1)+3(x-1)=0$
$\Rightarrow(2 x+3)(x-1)=0$
$\Rightarrow x=\frac{-3}{2}, 1$
Ignore the -ve vanue of $x$.
$\therefore$ Time $=1$ hour
54. (4) Here,
$\frac{\text { Wheat }}{\text { Oil }}=\frac{4}{9}$
$\frac{\text { Oil }}{\text { Tea }}=\frac{1.5}{14}=\frac{3}{28}$
$\frac{\text { Tea }}{\text { Coffee }}=\frac{5}{2}$
$\therefore$ Ratio of Wheat, Oil, Tea and Coffee
$=20: 45: 420: 168$
Cost of coffee per kg $=\frac{462}{11}=₹ 42$
$\therefore$ Cost of 2.5 kg wheat
$=\frac{42}{168} \times 20 \times 2.5=₹ 12.5$
55. (5) Required probality

$$
\begin{aligned}
& =\frac{6 c_{1} \times 24 c_{1}}{30 c_{2}}+\frac{6 c_{2}}{30 c_{2}} \\
& =\frac{6 \times 24}{435}+\frac{15}{435} \\
& =\frac{48}{145}
\end{aligned}
$$

(56-60) :
56. (1) No. of male who likes Physics
$=1800 \times \frac{17}{100} \times \frac{7}{9}=238$
Total no. of students who like
Chemistry $=1800 \times \frac{23}{100}=414$
Required \% $=\left(\frac{238}{414} \times 100\right) \%$

$$
=57.48 \% \approx 57 \%
$$

57. (2) Required total
$=1800 \times\left(\frac{23+12+27}{100}\right)$
$=1800 \times \frac{62}{100}=1116$
58. (2) Total no. of students who like English and Physics together
$=1800 \times\left(\frac{27+17}{100}\right)=792$
Total no. of students who like Mathematics and Biology together
$=1800 \times\left(\frac{13+12}{100}\right)=450$
$\therefore$ Required difference
$=792-450=342$
59. (5) Required ratio
= $13: 8$
60. (3) No. of students who like Mathematics
$=1800 \times \frac{13}{100} \times \frac{150}{100}$
$=351$
No. of students who like Hindi
$=1800 \times \frac{8}{100} \times \frac{75}{100}=108$
$\therefore$ Required total

$$
=351+108=459
$$

61. (2) Let both trains meet $t$ hours after first train leaves Delhi. By then first train have been running for $t$ hours and second train have been running for $(t-3)$ hours
Distence travelled by first train
$=150 t \mathrm{~km}$
Distance travelled by second train
$=200(t-3) \mathrm{km}$
ATQ,
Total distance covered $=2375 \mathrm{~km}$
$\Rightarrow 150 t+200(t-3)=2375$
$\Rightarrow 350 t=2375+600$
$\Rightarrow 350 t=2975$
$\Rightarrow t=8.5$ hours
$\therefore$ Required time at both trains meet $=6 \mathrm{AM}+8.5$ hours

$$
=2: 30 \mathrm{PM}
$$

62. (2) Distance travelled by a wheel in one revolution $=$ Circumference of the whell
$=2 \pi r=\pi d$
The wheel of a circle completes 3500 revolution to complete a distance of 7.7 $\mathrm{km}=7700 \mathrm{~m}$.
$\therefore$ Distance travelled in one revolution
$=\frac{7700}{3500}=\frac{11}{5} \mathrm{~m}$.

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
$\Rightarrow \pi d=\frac{11}{5}$
$\Rightarrow \frac{22}{7} \times d=\frac{11}{5}$
$\Rightarrow d=0.7 \mathrm{~m}$
We need to double the distance covered in 3500 revolution.
$\therefore$ Distance covered in one revolution should be doubled.
$\therefore \quad$ New diameter of wheel should be $2 \times 0.7$ $=1.4 \mathrm{~m}$.
63. (2) M.P of an article $=₹ 50,000$

Discount given $=5 \%$ on M.P
$\therefore \quad$ S. P $=50000 \times \frac{95}{100}$
= ₹ 47,500
S.P of members

$$
\begin{aligned}
& =47,500 \times \frac{85}{100} \\
& =₹ 40,375
\end{aligned}
$$

and additional discount for cash payment

$$
\begin{aligned}
& =40,375 \times \frac{97}{100} \\
& =₹ 39,163.75
\end{aligned}
$$

$\therefore$ Gain $=39,163.75-39000=₹ 163.75$
64. (1) The part of tank filled by pipe A and B in 1 hour
$=\left(\frac{1}{6}+\frac{1}{10}\right)=\frac{4}{15}$
The part of tank filled by pipe B and C in 1 hour
$=\left(\frac{1}{10}+\frac{1}{15}\right)=\frac{1}{6}$
So, the part of tank filled up in 2 hrs

$$
=\frac{4}{15}+\frac{1}{6}=\frac{13}{30}
$$

Then, in 4 hours $=2 \times \frac{13}{30}$

$$
=\quad \frac{13}{15}
$$

$\therefore$ Empty part $1-\frac{13}{15}=\frac{2}{15}$
So, the empty part of tank will be filled up by pipe $A$ and $B$.
$\therefore$ Required time $=\left(\frac{2}{15} \times \frac{15}{4}\right)$

$$
=\frac{1}{2} \text { hours }
$$

$\therefore$ Total time taken $=4+\frac{1}{2}=4+\frac{1}{2}$ hours
65. (2) Total capital in 1 year
$=2 \times 12+3 \times 12+3 \times 7$
$=81$ unit
Total investment in 1 year
$=\frac{4050}{15} \times 100=₹ 27,000$
ATQ,
81 unit $\rightarrow 27000$
$\therefore 3$ unit $\rightarrow \frac{27000}{81} \times 3$

$$
\text { = ₹ } 1000
$$

(66-70) :
66. (4) I. $x^{2}-1296=0$

$$
\Rightarrow \quad x^{2}=1296
$$

$$
\Rightarrow x=+36,-36
$$

II. $y^{3}=46656$
$\Rightarrow y=36$
cleary, $x \leq y$
67. (5) I. $37 x^{2}-49 x-186=0$
$\Rightarrow 37 x^{2}-111 x+62 x-186=0$
$\Rightarrow 37 x(x-3)+62(x-3)=0$
$\Rightarrow(37 x+62)(x-3)=0$
$\Rightarrow x=\frac{-62}{37}, 3$
II. $148 y^{2}+61 y-155=0$
$\Rightarrow 148 y^{2}-124 y+185 y-155=0$
$\Rightarrow 4 y(37 y-31)+5(37 y-31)=0$
$\Rightarrow(4 y+5)(37 y-31)=0$
$\Rightarrow y=\frac{-5}{4}, \frac{31}{37}$
68. (1) I. $84 x^{2}+188 x+105=0$
$\Rightarrow 84 x^{2}+98 x+90 x+105=0$
$\Rightarrow 14 x(6 x+7)+15(6 x+7)=0$
$\Rightarrow(14 x+15)(6 x+7)=0$
$\Rightarrow x=\frac{-15}{14}, \frac{-7}{6}$
II. $42 y^{2}+151 y+135=0$
$\Rightarrow 42 y^{2}+70 y+81 y+135=0$
$\Rightarrow 14 y(3 y+5)+27(3 y+5)=0$
$\Rightarrow(14 y+27)(3 y+5)=0$
$\Rightarrow y=\frac{-27}{14}, \frac{-5}{3}$
Clery, $x>y$
69. (2) I. $x^{2}-1369=0$
$\Rightarrow x^{2}=1369$
$\Rightarrow x=+37,-37$
II. $y^{3}+50653=0$
$\Rightarrow y^{3}=-50653$
$\Rightarrow y=-37$
Clery, $x \geq y$



## Word

Borter
Viability
Facilitate
Redeem
Tangible
Forfeit
Perennial
Mundane
Flagged
Litigation
Appellate

Berkshire

Demonstrate

Torrential
Imminent

## Meaning in English

exchange of goods
practicality
to make easy
compensate for fault
perceptible by touch
to lose
lasting or existing for a long or apparently infinite time
of this earthy world rather than a heavenly or spiritual one
paved with plat stone slabs
the process of taking legal action
Concerned with or dealing with application for decision to be reversed (Related to court)
any of a breed of medium-size black swine with white marking
clearly show the existence or Truth of by giving proof or evidence
(of rain) falling rapidily on in copious quantities
about to happen

## Meaning in Hindi

वस्स विनिमय
० य वहा रिकता
आ स न बना दे ना
गलती के लिएक्षा तिपू नि
वा स तविक
ख $\dagger^{\prime}$ दे ना
सा र्व का लिक
सा सा रिक
प थ रकी टु कड. $\top^{\prime}$ की बमी पाड. ड १
मु कदमा
अपे लसं बं धे

सम ' द निश T न वा ले छा'
के सू अर
स बित करना

मू सला हा र
जो तु रू तहा टि तहां ने

## IBPS PO PHASE - I - 107 (ANSWER KEY)

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

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

Note:- Whatapp with Mock Test No. and Question No. at 7053606571 for any of te doubts. Join the group and you may also share your suggestions and experience of sunday Mock Test.

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

