## IBPS PO SPECIAL PHASE -I MOCK TEST - 250 (SOLUTION)

## REASONING

(1-5) :


1. (2)
2. (1)
3. (1)
4. (5)
5. (4)
(6-10) :
6. (2)
7. (1) From I : Suppose the marks obtained is $(10 x+y)$ a, two-digit number. \{Note that the possibility of getting 100 marks is ruled out because in case of 100 marks interchanges of digits will not decrease 100 by 81 .\}
Now, $10 x+y-(10 y+x)=81$
Therefore $x-y=\frac{81}{9}=9$
Thus, the unit's digit will be 9 less than the digit at ten's place. Hence, the only such digit is 90. Hence, marks obtained by Kishore $=90$

From II: There are several such numbers sum of digits of which and the difference of the digits are same, ie $10,20,30,40,50,60,70,80$ and 90.
8. (3) From I: We get 1st day of the next month is Saturday. This implies that last day of the month under consideration is Friday. And thus we get :

| Date | Ist | 8th | 15th | 22nd | 29th | 31st |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day | Fri | Fri | Fri | Fri | Fri | Sun |

Hence, the total number of days in the month $=29$.
From II: With the information of the last day of the month and the first day of the month (as mentioned in question part), we can find out the number of days in the month by the same method as discussed above, i.e, 31 days.
9. (3)
10. (4) It is not mentioned that Nidhi is towards left of Ranjan or right of Ranjan.
(11-15):
11. (4)


## Conclusions :

$\begin{array}{ll}\text { I. } & - \\ \text { II. } & \llcorner \\ \text { III } & - \\ \text { IV. } & -\end{array}$ Either I or IV

12. (5)


## Conclusions :

I. $\sqrt{ }$
II. V
III.
IV. $\sqrt{ }$
13. (4)


Conclusions :
$\begin{array}{ll}\text { I. } & - \\ \text { II. } & - \\ \text { III } & - \\ \text { IV. } & -\square \text { Either III or IV }\end{array}$
14. (4)


## Conclusions :

I.

II - - Either I or IV
III -_DEither II or III
IV.
15. (2)


Conclusions :
I. $V$
II. $V$
III. $\sqrt{ }$
IV. -
(16-20) :

16. (2)
17. (4)
18. (1)
19. (3)
20. (4)

## $K D$ <br> Campus <br> KD Campus

(21-22) :

21. (5) 3 km
22. (4)
(23-27) :
23. (5) $\mathrm{T}<\mathrm{P} \leq \mathrm{U}, \mathrm{L}>\mathrm{U} \leq \mathrm{K}, \mathrm{P} \geq \mathrm{R}$
I. $\mathrm{R} \leq \mathrm{P} \leq \mathrm{U} \leq \mathrm{K}$
$\mathrm{K} \geq \mathrm{R} \rightarrow$ True
II. $\mathrm{R} \leq \mathrm{P} \leq \mathrm{U}<\mathrm{L}$
$\mathrm{L}>\mathrm{R} \rightarrow$ True
Both conclusions I and II are true.
24. (3) $\mathrm{H}=\mathrm{I} \leq \mathrm{R}, \mathrm{M} \geq \mathrm{R}<\mathrm{S}$
$\mathrm{I} \leq \mathrm{R} \leq \mathrm{M}$
I. $\mathrm{M}=\mathrm{I} \rightarrow$ Doubt
II. $\mathrm{M}>\mathrm{I} \rightarrow$ Doubt

Either conclusion I or II is true.
25. (2) $\mathrm{D}>\mathrm{H} \geq \mathrm{N}, \mathrm{S}>\mathrm{I} \leq \mathrm{H}$
I. $\quad \mathrm{S}>\mathrm{I} \leq \mathrm{H} \geq \mathrm{N}$
$\mathrm{N} \leq \mathrm{S} \rightarrow$ False
II. $\mathrm{I} \leq \mathrm{H}<\mathrm{D}$

I $<\mathrm{D} \rightarrow$ True
Only conclusion II is true.
26. (2) $\mathrm{P} \leq \mathrm{O}<\mathrm{I}, \mathrm{P}>\mathrm{Y}>\mathrm{W}$
I. $\mathrm{I}>\mathrm{O} \geq \mathrm{P}>\mathrm{Y}$
$\mathrm{Y} \leq \mathrm{I} \rightarrow$ False
II. $\mathrm{O} \geq \mathrm{P}>\mathrm{Y}>\mathrm{W}$
$\mathrm{O}>\mathrm{W} \rightarrow$ True
Only conclusion II is true.
27. (5) $\mathrm{A} \geq \mathrm{B}>\mathrm{C}>\mathrm{F}, \mathrm{Z}<\mathrm{C} \leq \mathrm{D}<\mathrm{E}$
I. $\mathrm{A} \geq \mathrm{B}>\mathrm{C}>\mathrm{Z}$
$A>Z \rightarrow$ True
II. $\mathrm{F} \leq \mathrm{C} \leq \mathrm{D}<\mathrm{E}$
$\mathrm{F}<\mathrm{E} \rightarrow$ True
Both conclusion I and II are true.

## Campus <br> KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
(28-32) :

| Day | Play |
| :---: | :---: |
| Monday | Dream |
| Tuesday | Rail Gadi |
| Wednesday | Hind |
| Thursday | Bay |
| Friday | Saajan |
| Saturday | Romeo |
| Sunday | Travellers |

28. (3)
29. (1)
30. (2)
31. (3)
32. (5)
(33-34) :


Three fathers (G, A, C), two brothers (A and E), two sisters (B and F), one husband (C), one wife (B), two brothers-in-law (A and C), two daughters ( $B$ and $F$ ), three sons ( $A, D$ and $E$ ), three cousins ( $D, E$ and $F$ ), two nephews ( $D$ and $E$ ), one grandfather $(G)$ and one niece ( $F$ )
33. (2)
34. (1)
35. (3)

## Maths

(36-40) :
36. (2) $\sqrt[3]{?}=(756 \times 67) \div 804$
$(?)^{\frac{1}{3}}=50652 \div 804$
$(?)^{\frac{1}{3}}=63$
$\therefore \quad ?=(63)^{3}=250047$
37. (4) $(73425-33267-22418-17650) \times \sqrt{11025}=$ ?
$=(90 \times 105)=9450$
38. (1) $14.2 \%$ of $5500+15.6 \%$ of $?=1795$
$\frac{14.2}{100} \times 5500+\frac{15.6}{100} \times ?=1795$
$781+\frac{15.6}{100} \times ?=1795$
$\frac{15.6}{100} \times ?=1795-781$
$?=\frac{1014 \times 100}{15.6}=6500$

39. (1) $475+\frac{64}{100} \times 950=900+$ ?
$475+608-900=?$
$?=1083-900=183$
40. (1) $(0.09)^{2} \div(0.0081) \times(0.3)^{2}=(0.3)^{?-3}$
$(0.3)^{4} \div(0.3)^{4} \times(0.3)^{2}=(0.3)^{?-3}$
$(0.3)^{2}=(0.3)^{?-3}$
? $-3=2$
$\therefore \quad ?=2+3=5$

## (41-45) :

41. (3) Total no of student in:
B. $\mathbf{A}=42+50+40+45+48+52=277$
$\mathbf{M B A}=50+45+42+52+60=301$
$\mathbf{B S C}=38+46+54+50+48+54=290$
M.Com $=58+45+46+40+55+42=286$
$\therefore$ Required answer is B.A
42. (3) Total no. of students in MCA department $=48+58+58+46+44+54=308$
$\therefore$ Required $\%=\left(\frac{308}{290} \times 100\right) \%=106.20 \% \approx 106 \%$
43. (5) Required ratio $=(48+58):(46+40)$
$=106: 96=53: 48$
44. (5) Required average $=\frac{277}{6}=46.16 \approx 46$
45. (4) Required $\%=\left(\frac{55}{40} \times 100\right) \%=137.5 \%$
(46-50) :
46. (2) The pattern of the number series is :

$$
\begin{aligned}
& 732-3=729=9^{3} \\
& 1244-732=512=8^{3} \\
& 1587-1244=343=7^{3} \\
& 1803-1587=216=6^{3} \\
& 1928-1803=125=5^{3} \\
\therefore \quad & ?=1928+4^{3}=1928+64=\mathbf{1 9 9 2}
\end{aligned}
$$

47. (4) The pattern of the number series is:

$$
\begin{aligned}
& 16 \times 1.5=24 \\
& 24 \times 2.5=60 \\
& 60 \times 3.5=210 \\
& 210 \times 4.5=945
\end{aligned}
$$

48. (1) The pattern of the number series is:
$(45030 \div 5)-6=9000$
$(9000 \div 5)-5=1795$
$(1795 \div 5)-4=355$
$(355 \div 5)-3=68$
$(68 \div 5)-2=13.6-2=11.6$

## Kampus <br> KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
49. (1) The pattern of the number series is:

$$
\begin{aligned}
& 5 \times 1+1 \times 7=12 \\
& 12 \times 2+2 \times 6=36 \\
& 36 \times 3+3 \times 5=123 \\
& 123 \times 4+4 \times 4=492+16=\mathbf{5 0 8} \\
& 508 \times 5+5 \times 3=2540+15=2555
\end{aligned}
$$

50. (4) The pattern of the number series is :
$8 \times 0.5+7=4+7=11$
$11 \times 1+6=17$
$17 \times 1.5+5=25.5+5=\mathbf{3 0 . 5}$
$30.5 \times 2+4=61+4=65$
51. (4) Simple interest $=\frac{35500 \times 15 \times 2}{100}=₹ 10650$

Principal for another investment $=35500+10650=₹ 46150$
$\therefore$ C.I. $=46150\left[\left(1+\frac{20}{100}\right)^{3}-1\right]=46150\left[\left(\frac{6}{5}\right)^{3}-1\right]$
$=46150\left(\frac{216-125}{125}\right)=\frac{46150 \times 91}{125}=33597.20$
Total interest earned $=₹(10650+33597.20)=₹ 44247.20$
52. (1) Percentage of milk in the first mixture $=\frac{5}{6} \times 100=\frac{250}{3} \%$

Percentage of milk in second mixture $=\frac{7}{9} \times 100=\frac{700}{9} \%$
Using Alligation method,


So, required ratio $=\frac{20}{9}: \frac{10}{3}=2: 3$
53. (1) Let the two parts be ₹ $x$ and ₹ $(1301-x)$
$x\left(1+\frac{4}{100}\right)^{7}=(1301-x) \times\left(1+\frac{4}{100}\right)^{9}$
$\frac{x}{(1301-\mathrm{x})}=\left(1+\frac{4}{100}\right)^{2}$
$625 x=676(1301-x)$
$1301 x=676 \times 1301$
$x=₹ 676$
So, the two parts are ₹ 676 and
$(1301-676)=₹ 625$

## Campus <br> KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
54. (3) $\left(\frac{1}{20}+\frac{1}{30}-\frac{1}{t}\right) \times 60=-1$
' -1 ' is taken because the work is negative. T is the time taken by the waste pipe to empty the tank alone. We will $t=10$
So, capacity $=10 \times 8=80$ litres
55. (4) Ratio of profit between Sunil, Manish and Bhupesh
$=30000 \times 24: 120000 \times 18: 180000 \times 12=1: 3: 3$
$\therefore \quad$ Share of Manish in the profit $=\frac{210000}{7} \times 3=₹ 90,000$
(56-60):
56. (5) Required $\%=\left(\frac{48}{40} \times 100\right) \%=120 \%$
57. (5) Required ratio $=(61+54):(54+48)=115: 102$
58. (5) Required average price per product $=\frac{\binom{43 \times 16+44 \times 15+45 \times 14.5+48 \times 16}{+55 \times 18+55 \times 15}}{43+44+45+48+55+55} \times 1000$
$=\left(\frac{688+660+652.5+768+990+825}{290}\right) \times 1000=\left(\frac{4583.5}{290}\right) \times 1000=₹ 15,805.17$
59. (1) Required difference $=(60 \times 75) \times 1000-(44 \times 15) \times 1000$
$=4500000-660000=₹ 3840000=₹ 38.4$ lakh
60. (5) Total amount $=57 \times 5.6 \times 1000+45 \times 50 \times 1000=319200+2250000$
$=₹ 2281900=₹ 22.819$ Lakh
61. (4) $\frac{3}{5} \%$ of the total distance $=40 \times 3+60 \times 4.5=120+270=390 \mathrm{~km}$

Total distance $=\frac{390}{3} \times 5=650 \mathrm{~km}$
Remaining distance $=650-390=260 \mathrm{~km}$
$\therefore$ Speed $=\frac{260}{4}=65 \mathrm{~km} / \mathrm{hr}$
62. (1) Let the two-digit no. be $10 x+y$.

Now, $\frac{1}{4}(10 x+y)-\frac{1}{5}(10 x+y)=4$
$50 x+5 y-40 x-4 y=80$
$10 x+y=80$
63. (3) Let the labelled price be ₹ 100

Reduced price $=(100-20) \%$ of $100=₹ 80$
$10 \%$ additional discount $=10 \%$ of $80=₹ 8$
Net CP $=80-8=₹ 72$
Therefore, Raju's cost price $=\frac{1400}{100} \times 72=₹ 1008$
Quicker Method:
$-20-10+\frac{20 \times 10}{100}=28 \%$ discount
$\therefore \mathrm{CP}=72 \%$ of $1400=₹ 1008$


2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
(64-65):
64. (3) There are 9 women and 5 men. A committee of 12 , consising of at least 5 women, can be formed by choosing:
(i) 5 women and 7 men
(ii) 6 women and 6 men
(iii) 7 women and 5 men
(iv) 8 women and 4 men
(v) 9 women and 3 men

Total number of ways of forrzing the committee
$={ }^{9} \mathrm{C}_{5} \times{ }^{8} \mathrm{C}_{7}+{ }^{9} \mathrm{C}_{6} \times{ }^{8} \mathrm{C}_{6}+{ }^{9} \mathrm{C}_{7} \times{ }^{8} \mathrm{C}_{5}+{ }^{9} \mathrm{C}_{8} \times{ }^{8} \mathrm{C}_{4}+{ }^{9} \mathrm{C}_{9} \times{ }^{8} \mathrm{C}_{3}$
$=126 \times 8+84 \times 28+36 \times 56+9 \times 70+1 \times 56=6062$
65. (4) Women are in majority in (iii), (iv) and (v) cases as discussed in question 134.
$\therefore$ Total number of such commitees $={ }^{9} \mathrm{C}_{7} \times{ }^{8} \mathrm{C}_{5}+{ }^{9} \mathrm{C}_{8} \times{ }^{8} \mathrm{C}_{4}+{ }^{9} \mathrm{C}_{9} \times{ }^{8} \mathrm{C}_{3}$
$=36 \times 56+9 \times 70+1 \times 56=2702$
(66-70):
66. (1) $4 x+3 y=40$ (i) $\times 6$
$6 x-5 y=22$
(ii) $\times 4$
$24 x+18 y=240$
$+24 x-20 y=+88$
$-\quad+\quad-$

$$
38 y=152
$$

$\therefore \quad y=\frac{152}{38}=4$
Putting the value of $y$ in equation (i),
we have
$4 x+3 \times 4=40$
or, $4 x=40-12=28$
$\therefore x=7$
Hence, $x>y$
67. (2) $2 x^{2}-4 x-\sqrt{13} x+2 \sqrt{13}=0$
$2 x(x-2)-\sqrt{13}(x-2)=0$
$(x-2)(2 x-\sqrt{13})=0$
$\therefore x=2, \frac{\sqrt{13}}{2}$
Note that $\frac{\sqrt{13}}{2}=1.802775638$
$10 y^{2}-18 y-5 \sqrt{13} y+9 \sqrt{13}=0$
$2 y(5 y-9)-\sqrt{13}(5 y-9)=0$
$(2 y-\sqrt{13})(5 y-9)=0$
$\therefore \quad y=\frac{9}{5}, \frac{\sqrt{13}}{2}$
Hence, $x \geq y$

## $\frac{K D}{\text { Campus }}$ <br> KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
68. (5) $6 x^{2}+17-3 x^{2}-20=0 \ldots$ (i)

$$
3 x^{2}=3
$$

$\therefore x \pm 1$
$5 y^{2}-12-9 y^{2}+16=0$
$4 y^{2}=4$
$\therefore \quad y \pm 1$
Hence, the relationship between $x$ and $y$ can't be established
69. (2) $13 x+17=134 \ldots$ (i)

$$
\begin{align*}
\therefore \quad & x=\frac{117}{13}=9 \\
& (361)^{1 / 2} y^{2}-270=1269 \ldots  \tag{ii}\\
& 19 y^{2}=1269+270=1539 \\
& y^{2}=\frac{1539}{19}=81 \\
\therefore \quad & y \pm 9 \\
& \text { Hence, } x \geq y \tag{i}
\end{align*}
$$

70. (4) $64 x^{2}=256$.
$x^{2}=4$
$\therefore x= \pm 2$
$14 y^{3}-12 y^{3}=16 \ldots$ (ii)
$2 y^{3}=16$
$y^{3}=8$
$\therefore y=2$
Hence, $x \leq y$

## ENGLISH LANGUAGE

91. (1) 'witness' repalce with 'witnessed'.
92. (3) 'added' replace with 'add'.
93. (1) 'had' replace with 'has'.
94. (1) 'protest' replace with 'pratests'.
95. (5) No error.
96. (1) 'Being that' Replace with 'since'.
97. (5) No error.
98. (5) No error.
99. (1) 'are trying' replace with 'have been

| Words | Meaning in English | Meaning in Hindi |
| :---: | :---: | :---: |
| Clandestine | Keep secret | गु ${ }^{\text {T }}$ |
| Defunct | no large existing/obsolete |  |
| Dump | To store at an unwanted place something that is not | अवा छितची जा का fि प $T$ लतू जाह पर एकि $T$ त करना |
| Lethary | a lack of energy and enthusiasm | सु स ती |
| Reconnasissance | Investigation, surveillance | निगरा नी |
| Regime | Especially an authoritarian one/system | प्र प T ली |
| Indigenous | Native | दे प才 |
| Pile up | An accumulation of a specified thing | ढे. र लगा ना |
| Deploy | To post/move (Troops) into position for miltary action | तै ना त करना |
| Proliferation | rapid increase in number | संख में वृ द्धि |
| Doctrine | Ideology | सिद्ध ${ }^{\circ}$ त |
| Ally | To make a group with | स्य ' ग करना |
| Curtail | Reduce in extent or quantity | कट $T^{*}$ ती करना |
| Explotation | Toment/The action of treating someone unfairly in order to benefit from their work | प T ${ }^{\text {¢ }}$ ण प करना |
| Devastation | Great destruction or damage | विना प / तबा ही |
| Aggression | hostile/voilent behaviour | उ ग $\overline{\text { ¢ यमहा र }}$ |
| Assertion | Strong statement | जो रदा र क2 $\mathrm{T}^{\text {न }}$ |
| Ignorance | Lack of knowledge | अज्ञ T नता |

## Campus <br> KD Campus

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

## IBPS PO SPECIAL PHASE -I MOCK TEST - 250 (ANSWER KEY)

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