## IBPS PO PHASE - I-100 (SOLUTION)

REASONING
(1-5) :

| Person | Level | Row | Sport |
| :---: | :---: | :---: | :---: |
| P | National | 1 | Tennis |
| Q | State | 1 | Badminton |
| R | State | 4 | Badminton |
| S | National | 4 | Tennis |
| T | State | 3 | Tennis |
| U | State | 2 | Badminton |
| V | National | 2 | Tennis |
| W | National | 3 | Badminton |

1. (4)
2. (5)
3. (2)
4. (1)
5. (4)
(6-10) :

6. (1)
7. (2)
8. (4)
9. (2)
10. (3)
(11-15) :

| $\#$ | $\Rightarrow$ | $>$ |
| :--- | :--- | :--- |
| $*$ | $\Rightarrow$ | $<$ |
| $\$$ | $\Rightarrow$ | $\leq$ |
| $\%$ | $\Rightarrow$ | $\geq$ |
| $@$ | $\Rightarrow$ | $=$ |

11. (3) $\mathrm{A} \geq \mathrm{B}>\mathrm{C}=\mathrm{D} \leq \mathrm{E}<\mathrm{F}$
I. $\overline{\mathrm{A}}>\mathrm{C} \rightarrow$ True
II. $\mathrm{D} \leq \mathrm{F} \rightarrow$ False

Check all the option, $\mathrm{A}>\mathrm{C}, \mathrm{D} \leq \mathrm{F}-$ Definitely not true in option (3).
12. (2) Check all options and find in which both or at least one of $\mathrm{C} \leq \mathrm{E}$ and $\mathrm{B} \geq \mathrm{E}$ is True. ( Because 'or' is given between $\mathrm{C} \$ \mathrm{E}$ or B \% E.
$\mathrm{A}>\mathrm{B}<\mathrm{C} \leq \mathrm{D}=\mathrm{E}>\mathrm{F} \rightarrow$ in $\mathrm{C} \leq \mathrm{E}$ is true. In all other option, both are false.
13. (4) $\mathrm{A} \geq \mathrm{B} \geq \mathrm{C}<\mathrm{D}=\mathrm{E} \leq \mathrm{F}$
I. $\overline{\mathrm{A}}>\overline{\mathrm{D}} \rightarrow$ False
II. $\mathrm{C}<\mathrm{F} \rightarrow$ True
III. B > D $\rightarrow$ False
IV. $\mathrm{D}>\mathrm{F} \rightarrow$ False

Only (i), (ii) and (iv) not true.
14. (2) $\mathrm{A}<\mathrm{D} \leq \mathrm{B}<\mathrm{C}=\mathrm{E}>\mathrm{F}$
$\mathrm{A}<\mathrm{C} \rightarrow$ True
$\mathrm{E}>\mathrm{B} \rightarrow$ True
In option (2) both are true
15. (3) Check all the option and find in which both $\mathrm{A} \geq \mathrm{B}$ and $\mathrm{D}<\mathrm{F}$ are false. In option (3), both are false
$\mathrm{A}<\mathrm{B} \geq \mathrm{C}=\mathrm{D} \leq \mathrm{E} \leq \mathrm{F}$
$\mathrm{A} \geq \mathrm{B} \rightarrow$ False
D $<\mathrm{F} \rightarrow$ False
(16-18) :

16. (5)

17. (2)
18. (4)
(19-22) :
19. (5) from statement I and II


$$
\begin{aligned}
& \text { She } \rightarrow \text { Su, } \quad \text { her } \rightarrow \text { gg } \\
& \text { he } \rightarrow \text { fr, }
\end{aligned} \text { him } \rightarrow \text { or }
$$

So, both statement I and II together are neccessary to answer the question.
20. (2) Statement II along is sufficient to answer the question.
21. (5) From statement I and II
$\mathrm{F}>\mathrm{C}, \quad \mathrm{A}>\mathrm{C}$
$\mathrm{F}>\mathrm{B}, \quad \mathrm{E}>\mathrm{B}(\mathrm{E}$ is not highest)
$\mathrm{D}<\mathrm{B}$,
E $>\mathrm{A}$
Decending order of mark
F $>\mathrm{E}>\mathrm{A}>\mathrm{C}>\mathrm{B}>\mathrm{D}$
So both statement I and II together are neccesary to anser the question.
22. (3) From statement I :

Bhanu is 12 th from the right end, so Amit is 10 th from the right end so $(15-10+1)$
$\rightarrow 6$ th from left end.
From II : Chunky is 8 th from right end means before changing position, Amit was at 8th position from right, So (20-8 $+1)=13$ th from the left end.
either statement I alone or II alone give the answer the question.

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(23-27) :

| Floor | People | City |
| :---: | :---: | :---: |
| 7 | Sonia | Chennai |
| 6 | Queen | Patna |
| 5 | Varsha | Lucknow |
| 4 | Pammi | Mumbai |
| 3 | Usha | Kolkata |
| 2 | Tanvi | Bangluru |
| 1 | Rahul | Delhi |

23. (1)
24. (2)
25. (4)
26. (1)
27. (2)
(28-29) :

28. (4)
29. (2)
(30-35) :

30. (4)
31. (1)
32. (3)
33. (3)
34. (2)
35. (2)

## MATHS

(36-40) :
36. (2) $63251 \times 82=? \times 42105$

$$
\Rightarrow ?=\frac{63251 \times 82}{42105}=123.182 \approx 123
$$

37. (4) $\sqrt{84111}=290.01 \approx 290$
38. (1) $(54.78)^{2}=3000.84 \approx 3000$
39. (5) $(7171+3854+1195) \div(892+214+543)$ $=12220 \div 1649=7.41 \approx 7$
40. (3) $?=\left(\frac{816 \times 562}{100}\right)+1449$
$=4585.92+1449=6034.92 \approx 6035$

## (41-45) :

41. (3) Total no. of teachers in Banglore
$=3360 \times \frac{80}{100}=2688$
$\therefore$ No. of female teachers
$=2688-1800=888$
No. of female teachers in the next year
$=888 \times \frac{150}{100}=1332$
and the no. of female employees in
Bangalore $=\frac{3360}{14} \times 6=1440$
$\therefore$ Required $\%=\left(\frac{1332}{1440} \times 100\right) \%$
= 92.5 \%
42. (1) No. of female employees in Bengal
$=\frac{2054}{13} \times 6=948$
$\therefore$ Required $\%\left(\frac{948}{2054} \times 100\right) \%=46.15 \%$
No. of female employees in UP
$=\frac{2880}{16} \times 5=900$
$\therefore$ Required $\%=\left(\frac{900}{2880} \times 100\right) \%=31.25 \%$

No. of female employees in Banglore
$=\frac{3360}{14} \times 6=1440$
$\therefore$ Required $\%=\left(\frac{1440}{3360} \times 100\right) \%=42.85 \%$
No. of female employees in MP
$=\frac{2788}{41} \times 21=1428$
$\therefore$ Required $\%=\left(\frac{1428}{2788} \times 100\right) \%=51.21 \%$
No. of female employees in Delhi
$=\frac{2568}{12} \times 7=1498$
$\therefore$ Required $\%=\left(\frac{1498}{2568} \times 100\right) \%=58.33 \%$
$\therefore$ Required answer is Bengal.

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43. (4) Total no. of male employees in UP and Banglore together
$=\frac{2880}{16} \times 11+\frac{3360}{14} \times 8$
$=1980+1920=3900$
Total no. of teachers in UP and Banglore together
$=2880 \times \frac{65}{100}+3360 \times \frac{80}{100}$
$=1872+2688=4560$
$\therefore$ Required ratio $=3900: 4560=65: 76$
44. (1) Average no. of teachers in Delhi, UP and Bihar together
$=\frac{2568 \times \frac{75}{100}+2880 \times \frac{65}{100}+3575 \times \frac{60}{100}}{3}$
$=\frac{1926+1872+2145}{3}=1981$
Average no. of teachers in MP, Mumbai and Bangalore together
$=\frac{2788 \times \frac{75}{100}+3720 \times \frac{55}{100}+3360 \times \frac{80}{100}}{3}$
$=\frac{2091+2046+2688}{3}=2275$
$\therefore$ Required difference $=2275-1981=294$
45. (1) Average no. of employees per office in

Bihar $=\frac{3575}{22}=162.5$
Bagalore $=\frac{3360}{21}=160$
Mumbai $=\frac{3720}{24}=155$
Delhi $=\frac{2568}{16}=160.5$
$\mathrm{MP}=\frac{2788}{17}=164$
$\therefore$ Required answer is Bihar.

## (46-50) :

46. (5) The pattern of the number series is:
$389-117=272$
$525-389=136$
$593-525=68$
$627-593=34$
$?=627+17=644$
47. (4) The pattern of the number series is:
$7+1 \times 4=11$
$11+(1+2) \times 4=11+3 \times 4=23$
$23+(3+4) \times 4=23+7 \times 4=51$
$51+(7+6) \times 4=51+13 \times 4=103$
$103+(13+8) \times 4=103+21 \times 4=\mathbf{1 8 7}$
48. (4) The pattern of the number series is:
$18+9=27$
$27+(9+13)=49$
$49+(9+26)=84$
$84+(9+39)=132$
$132+(9+52)=193$
49. (2) The pattern of the number series is:
$33+10=43$
$43+(10+12)=65$
$65+(10+24)=99$
$99+(10+36)=145$
$145+(10+48)=203$
50. (5) The pattern of the number series is:
$655-439=216=6^{3}$
$439-314=125=5^{3}$
$314-250=64=4^{3}$
$250-223=27=3^{3}$
$\therefore \quad$ ? $=223-2^{3}=223-8=215$
51. (2) Let the length of candles be 1 unit and after $t$ hours, the ratio of their length be $3: 4$. ATQ,
$\frac{1-\frac{1}{7} t}{1-\frac{1}{9} t}=\frac{3}{4} \Rightarrow \frac{7-t}{9-t} \times \frac{9}{7}=\frac{3}{4}$
$\Rightarrow \mathrm{t}=4 \frac{1}{5} \mathrm{hr}=4 \mathrm{hr} 12$ minutes
52. (2) ATQ,

Let time $=x$ minutes
1 page has 23 lines
$\therefore \frac{(100-8) \times 20}{10}$
$=\frac{\left(100 \times \frac{128}{100} \times 8\right) \times 23 \times 40}{x}$
$\Rightarrow x=450 \mathrm{~min}=7 \mathrm{hr} 30 \mathrm{~min}$
53. (3) Required no. of way $=\frac{11!}{3!\times 4!\times 2!\times 2!}$
$=63900$
54. (3) Let the speed of Car be $x \mathrm{~km} / \mathrm{h}$ and actual time taken is $t \mathrm{hrs}$.

In first case, distance $=(x+6)(t-6) \mathrm{km}$
In second case, distance $=(x-6)(t+6)$
Also distance $=x t$ from (i) and (ii)
$(x+6)(t-4)=(x-6)(t+6)$
(iii)
$\Rightarrow \frac{x+6}{x-6}=\frac{t+6}{t-4} \Rightarrow \frac{x}{6}=\frac{2 t+2}{10} \Rightarrow \frac{x}{6}=\frac{t+1}{5}$
$\Rightarrow 5 x=6 t+6 \Rightarrow 5 x-6 t=6 \Rightarrow t=\frac{5 x-6}{6}$

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Putting the value of ' $t$ ' in eqn. (iii) we get,
$x=30 \mathrm{~km} / \mathrm{hr}$
$\therefore \quad t=25 \mathrm{hr}$
Thus, distance $=30 \times 24=720$
55. (1) Let the price per kg of Orange, Mangoes, Bananas and Grapes be ₹ O, ₹ M, ₹ B and
₹ G respectively.
Given that
$5 \mathrm{O}+2 \mathrm{M}=310$
$3 \mathrm{M}+3.5 \mathrm{~B}=230$
$1.5 \mathrm{~B}+5 \mathrm{G}=610$
Now, (i), (ii), (iii) we get
$5 \mathrm{O}+5 \mathrm{M}+5 \mathrm{~B}+5 \mathrm{G}=700$
$\therefore 10 \mathrm{O}+10 \mathrm{M}+10 \mathrm{~B}+10 \mathrm{G}=2 \times 700$
= ₹ 1400
(56-60) :
56. (1) S.P of HCL Laptops
$=32000+4000=₹ 36000$
and profit $\%=\left(\frac{4000}{32000} \times 100\right) \%$
= $12.5 \%$
57. (3) C.P of Apple Laptop
$=\frac{33000}{110} \times 100=₹ 30,000$
$\therefore$ C.P of Dell Laptop
$=30000 \times \frac{3}{5}=₹ 18,000$
Now, Profit $=22000-18000=₹ 4,000$
$\therefore$ Profit $\%=\left(\frac{4000}{18000} \times 100\right) \%=22 \frac{2}{9} \%$
58. (5) Profit of Lenovo Laptop
$=3500+500=₹ 4,000$
$\therefore$ Profit $\%=\left(\frac{4000}{28000} \times 100\right) \%=14 \frac{2}{7} \%$
and $\mathrm{SP}=28000+4000=₹ 32,000$
59. (3) Profit earned on Acer Laptop
$=53000 \times \frac{14}{100}=₹ 7,420$
60. (2) S.P of HP Laptop

$$
\begin{aligned}
& =35000+3500=₹ 38,500 \\
& \therefore \text { Required ratio }=35000: 38500 \\
& =10: 11
\end{aligned}
$$

61. (3) P do the work for 3 days +3 days $=6$ days, $Q$ work for 3 days and $R$ work for 3 days.
$\frac{6}{18}+\frac{3}{12}+\frac{3}{R}=1$
$\frac{3}{R}=1-\frac{1}{3}-\frac{1}{4}$

Three days work of $\mathrm{R}=\frac{3}{R}=\frac{12-4-3}{12}$
$\therefore \mathrm{P}: \mathrm{Q}: \mathrm{R}=\frac{6}{18}: \frac{3}{12}: \frac{5}{12}$
Ratio of share $=12: 9: 15=4: 3: 5$
Share of $R=\frac{5}{12} \times 24000=₹ 10,000$
62. (2) Labelled price $=₹ 1600$

As, the reduction price is $10 \%$ lower than the labelled price,
Reduced price $=90 \%$ of $1600=$ ₹ 1440
Now, the price at which Priti bought it is $20 \%$ lower than the reduced price, the selling price $=84 \%$ of $1440=₹ 1152$
63. (2)
$\frac{\text { Ram }}{\text { Sohan }}=\frac{100}{90}$ also $\frac{\text { Sohan }}{\text { Sunil }}=\frac{100}{75}$
then, $\frac{\text { Ram }}{\text { Sunil }}=\frac{40}{27}$
So in a race of 40 m , Ram beats Sunil by 13 m
In a race of 100 m , Ram beats Sunil by 32.5 m

So, Sunil cover 32.5 m in 10 sec .
Speed of Sunil $=3.25 \mathrm{~m} / \mathrm{sec}$
Perimeter of circle $=3.25 \times 100=325 \mathrm{~m}$
Area $=\frac{325^{2}}{4 \pi}=8401$ (approximately)
64. (5) $d=\frac{t_{1}-t_{2}}{60} \times \frac{s_{1} s_{2}}{\left(s_{2}-s_{1}\right)}$
$=\frac{14-8}{60} \times \frac{45 \times 50}{50-45}$
$=\frac{6}{60} \times \frac{45 \times 50}{5}=45 \mathrm{~km}$
65. (4) Total balls initially in the bag $=4+5+6$ $=15$
There are 4 red balls
If on first draw, red balls comes out then
6 more red balls are added
$\therefore$ The probability of red balls on first draw
$=\frac{4}{15}$
Due to withdraw of one red balls now there are only 3 red balls is left.
Also, there is no replacement done so, total number of balls becomes 14 .
After adding 6 new red balls total number of balls becomes $=14+6=20$
And total number of red balls $=3+6=9$ Now, if on the 2nd draw, red balls is drawn, then,

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$\therefore \quad$ The probability of red balls on 2nd draw
$=\frac{9}{20}$
As there is no replacement done so, total number of balls becomes 19
And total number of red balls $=9-1=8$
Now, if on the 3rd draw, red balls is drawn then
$\therefore$ The probability of red balls on 3rd draw $=\frac{8}{19}$
$\therefore \quad$ Final probability if on both the draws red balls is drawn $=\frac{4}{15} \times \frac{9}{20} \times \frac{8}{19}=\frac{24}{475}$

Hence, $\frac{24}{475}$ is the probability of all the 3 balls drawn are of red ball.
(66-70) :
66. (2) I. $5 x^{2}-87 x-378=0$
$\Rightarrow 5 x^{2}-105 x+18 x-378=0$
$\Rightarrow 5 x(x-21)+18(x-21)=0$
$\Rightarrow(5 x+18)(x-21)=0$
$\Rightarrow x=-\frac{18}{5}, 21$
II. $3 y^{2}-49 y+200=0$
$\Rightarrow 3 x^{2}-24 y-25 y+200=0$
$\Rightarrow 3 y(y-8)-25(y-8)=0$
$\Rightarrow(3 y-25)(y-8)=0$
$\Rightarrow y=\frac{25}{3}, 8$
Clearly, $x<y$
67. (2) I. $(x+1)(x+18)=-66$
$\Rightarrow x^{2}+18 x+x+18+66=0$
$\Rightarrow x^{2}+19 x+84=0$
$\Rightarrow x^{2}+12 x+7 x+84=0$
$\Rightarrow x(x+12)+7(x+12)=0$
$\Rightarrow(x+7)(x+12)=0$
$\Rightarrow x=-7,-12$
II. $\sqrt{(y-3)(y-27)}=9$
$\Rightarrow(y-3)(y-27)=81$
$\Rightarrow y^{2}-27 y-3 y+81-81=0$
$\Rightarrow y^{2}-30 y=0$
$\Rightarrow y(y-30)=0$
$\Rightarrow y=0,30$
Clearly, $x<y$
68. (1) I. $\frac{15}{x}+\frac{16}{y}=1$
II. $\frac{3}{x}-\frac{7}{y}=5$
equation (i) - (ii) $\times 5$, we let
$\frac{15}{x}+\frac{16}{y}-\frac{15}{x}+\frac{35}{y}=1-25$
$\Rightarrow \frac{51}{y}=-24 \Rightarrow y=\frac{-51}{24}$
Put the value of $y$ in equation (i), we get
$\frac{15}{x}+\frac{16}{-51} \times 24=1$
$\Rightarrow \frac{15}{x}=1+\frac{128}{17} \Rightarrow \frac{15}{x}=\frac{145}{17}$
$\Rightarrow x=\frac{15 \times 17}{145}=\frac{255}{145}$
Clearly, $x>y$
69. (2) I. $17 x^{2}+48 x=9$
$\Rightarrow 17 x^{2}+48 x-9=0$
$\Rightarrow 17 x^{2}+51 x-3 x-9=0$
$\Rightarrow 17 x(x+3)-3(x+3)=0$
$\Rightarrow(17 x-3)(x+3)=0$
$\Rightarrow x=\frac{3}{17},-3$
II. $13 y^{2}+12=32 y$
$\Rightarrow 13 y^{2}-32 y+12=0$
$\Rightarrow 13 y^{2}-26 y-6 y+12=0$
$\Rightarrow 13 y(y-2)-6(y-2)=0$
$\Rightarrow(13 y-6)(y-2)=0$
$\Rightarrow y=\frac{6}{13}, 2$
Clearly, $x<y$
70. (5) I. $4 x+7 y=209$
II. $12 x-14 y=-38$
equation (i) $\times 2+$ (ii), we get
$8 x+14 y+12 x-14 y=418-38$
$\Rightarrow 20 x=380 \Rightarrow x=19$
Now, put the value of $x$ in equation (ii)
$12 \times 19-14 y=-38$
$\Rightarrow 14 y=228+38$
$\Rightarrow 14 y=266 \Rightarrow y=\frac{266}{14}=19$
$\therefore$ Clearly, $x=y$

## ENGLISH LANGUAGE

(86-90) :
86. (3) 'will be going' replace with 'went' because sentence is in past tense.
87. (2) 'as like' replace with 'like'.
88. (5) 'No error'.
89. (4) 'to be performed' (passive) replace 'to perform' (Active)
90. (1) 'to make' replace with 'make'.

## VOCABULARIES

## Words

Ailment
Apathetic
Carry out
Conspicuous
Deprived（of）
Disposal

Enlist
Envigour
Hostile
Hygienic
Indigenous
Inexplicable
Muster

Sanitation
Trivial
Entrench

## Meaning in English

an illness，Typically a minor one，Disease having no interest
to complete or fulfill，to execute
easily seen，Remarkable
without the basic necessities
act of getting rid of something
to obtain something as help or support
to make something lively or energetic
aggressive，full of animosity
clean and disease free
native or belonging to own country
that cannot be explained
to succeed in creating in self or in others （courage，will）
system intended to protect health
Unimportant（matter，issue）
To make something establish strongly

Meaning in Hindi
रा ग
उ दा से न，रूच का अभ $T T$
पू रा करना
स पठ
सु विध $T$ ही न
ठि का ने लगा ने य छु ट का रा प ने की प्र वि $\overline{\text { 万 }}$ य

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## Campus <br> KD Campus

## IBPS PO PHASE - I - 100 (ANSWER KEY)

1. (4)
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83. (1)
84. (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

