# IBPS RRB Clerk 2022 

 Most Expected Quant Questions for Prelims DOWNLOAD PDF1.The ratio of the angles of a triangle is $2: 3: 5$. What is the sum of the smallest and the largest angles?
A. $120^{\circ}$
B. $122^{\circ}$
C. $144^{\circ}$
D. $126^{\circ}$
E. None of these
2.In two alloys, copper and zinc are present in the ratios of 4:1 and 1:3. 10 kg of 1 st alloy 16 kg of 2 nd alloy and some of pure copper are melted together. An alloy was obtained in which the ratio of copper to zinc was 3:2. Find the weight of the new alloy.
A. 34 kg
B. 35 kg
C. 36 kg
D. 22 kg
E. 24 kg
3.Ram and Shyam are travelling from point Giridih to Madhupur, which are 60 km apart. Travelling at a certain speed Ram takes one hour more than Shyam to reach point Madhupur. If Ram doubles his speed he will take 30 minutes less than Shyam to reach point Madhupur. At what speed was Ram driving from point Giridih to Madhupur?
A. $18 \mathrm{~km} / \mathrm{h}$
B. $22 \mathrm{~km} / \mathrm{h}$
C. $20 \mathrm{~km} / \mathrm{h}$
D. $32 \mathrm{~km} / \mathrm{h}$
E. $39 \mathrm{~km} / \mathrm{h}$

Directions: In the following questions two equations numbered I and II are given. You have to solve both the equations and Give answer
4. I. $5 \mathrm{a}^{15}\left(\mathrm{a}^{-12}\right)=320$
II. $\frac{1}{24} b^{13}=\frac{1}{192} b^{15}$
A. $a<b$
B. $a>b$
C. $\mathrm{a}=\mathrm{b}$ or relationship cannot be established
D. $a \geq b$
E. $a \leq b$


Direction: In the following question two equations are given in variables $X$ and Y . You have to solve these equations and determine the relation between $X$ and $Y$.
$X^{2}$
5. (i) $+19 \mathrm{X}+88=0$
$Y^{2}$
(ii) $+17 Y+70=0$
A. $X<Y$
B. $X>Y$
C. $X \geq Y$
D. $X \leq Y$
E. $X=Y$ or no relation can be established

Direction: In the following question two equations are given in variables x and $y$. You have to solve these equations and determine relation between $x$ and y .
6. I. $x^{2}+9 x+18=0$
II. $y^{2}-13 y+40=0$
A. $x<y$
B. $x>y$
C. $\mathrm{x} \leq y$
D. $x \geq y$
E. $x=y$ or relationship between $x$ and $y$ cannot be determined

Direction: Study the information given below and answer the questions based on it.
The following tabular graph represents the number of people living in five villages in 2017. Use the information to answer the following question.
(Total people in a village=Male+ Female+ Children)

| Village | Male + Children | Female + Children | Male + Female |
| :---: | :---: | :---: | :---: |
| A | 190 | 140 | 230 |
| B | 220 | 140 | 240 |
| C | 180 | 240 | 260 |
| D | 180 | 140 | 200 |
| E | 280 | 180 | 340 |

7. Find the difference between the total number of male from village $A$ and the total number of female from village E .
A. 80
B. 20
C. 60
D. 40

E. 100
8.The ratio of total number of married male to the total number of unmarried male from village $B$ and village $D$ together is $9: 5$. Find the number of unmarried male.
A. 100
B. 180
C. 80
D. 140
E. 120
9.If in 2018, the total number of people is increased by $20 \%$ from village $C$ and the number of males is increased by $30 \%$ and the number of females is increased by $10 \%$ from village $C$ in 2018. Then, what is the total number of children in village $C$ in 2018?
A. 108
B. 36
C. 54
D. 102
E. 76

Direction: Find the wrong term in the given series.
10. 17, 45, 172, 850, 5086, 35602
A. 172
B. 850
C. 17
D. 5086
E. 45

Direction: Find the wrong term in the given series.
11. 13, 36, 70, 118, 179, 258
A. 70
B. 13
C. 179
D. 118
E. 258

Direction: Find the wrong term in the given series.
12. 180, $364,528,648,701,660$
A. 364
B. 180
C. 528
D. 648

E. 701
13.Two numbers are such that the sum of twice the first number and thrice the second number is 36 and the sum of thrice the first number and twice the second number is 39 . Which is the smallest number?
A. 9
B. 5
C. 7
D. 3
E. 6
14. A contractor agreed to complete a work in 90 days. He engaged 48 men for the work and after doing the work for 50 days he came to know that threefifths of the work has already been completed. How many men should he remove to finish the work in the agreed time?
A. 4 men
B. 8 men
C. 6 men
D. 10 men
E. None of these
15.The average of six consecutive even integers is 37 . Find the average of the next five consecutive odd integers.
A. 47
B. 43
C. 45
D. 41
E. None of these

Direction: In the following question two equations are given in variables $X$ and $Y$. You have to solve these equations and determine relation between $X$ and $Y$.
16. I. $x^{2}-8 x+15=0$
II. $2 y^{2}-19 y+45=0$
A. $x \leq y$
B. $x>y$
C. $x<y$
D. $x \geq y$
E. $x=y$ or no relationship can be established

Direction: In the following question two equations are given in variables $X$ and $Y$. You have to solve these equations and determine relation between $X$ and $Y$.

17. I. $x^{2}+361=442$
II. $\mathrm{y}^{2}+\sqrt{289}=\sqrt{676}$
A. $x>y$
B. $x \geq y$
C. $x \leq y$
D. $x<y$
E. $x=y$ or no relationship can be established

Direction:In the following two equations numbered 1 and 2 are given. You have to solve both the equations and determine which option is correct
18. I. $5 x^{2}-6 x+1=0$
II. $7 y^{2}-6 y-1=0$
A. $x>y$
B. $x<y$
C. $x \geq y$
D. $x \leq y$
E. $x=y$ or no relation can be established

Direction: What approximate value should come in place of question mark (?) in the following question? (You are not expected to calculate the exact value.)
19. $3.5 \%$ of $180 \div 0.6 \%$ of $250=$ ?
A. 12
B. 4
C. 1
D. 9
E. 25

Direction: What approximate value should come in place of question mark (?) in the following question? (You are not expected to calculate the exact value.)
20. $459.008+3.0056 \times 88.862=$ ?
A. 738
B. 725
C. 695
D. 752
E. 666

Direction: What approximate value should come in place of question mark (?) in the following question? (You are not expected to calculate the exact value.)

21. $\sqrt{2498} \times \sqrt{626} \div \sqrt{99}=$ ?
A. 110
B. 90
C. 200
D. 160
E. 125

Direction:What value should come in place of the question mark (?) in the following question?
22.

$$
62.5 \% \text { of } 4096-\frac{3}{11} \times 198=? \% \text { of } 200
$$

A. 256
B. 1253
C. 1369
D. 759
E. 1143

Direction: What value will come in place of the question mark (?) in the following question?
23.
$27 \%$ of $794-?^{2} \%$ of $256=150.38$
A. 5
B. 9
C. 15
D. 25
E. 24

Direction: What value should come in place of question mark (?) in the following question?
24.

$$
70 \% \text { of } 695-? \% \text { of } 700=-738.5
$$

A. 125
B. 225
C. 175
D. 220
E. 150

Direction:These questions are based on the following data. Study it carefully and answer the questions that follow.
In a school having 18000 students boys and girls are in the ratio 3 : 5 respectively. The students like Tea, Coffee or both. $12 \%$ of the boys like only Tea, $22 \%$ of the girls like only Coffee. $24 \%$ of the total students like only Tea

and the number of boys liking both the beverages is six times the number of boys liking only Tea.
25. Total how many boys like Tea?
A. 4260
B. 5670
C. 5975
D. 4235
E. None of these
26. How many girls like only Tea?
A. 3485
B. 3050
C. 3864
D. 3510
E. None of these
27.Total how many students like Coffee?
A. 13680
B. 17110
C. 12025
D. 12053
E. None of these
28.Pipes $A$ and $B$ together can fill the tank in 36 minutes. Both the pipes are opened simultaneously and after 30 minutes pipe $B$ is closed. If the tank is filled in 40 minutes, then in how much time can pipe $B$ alone fill the tank?
A. 45 minutes
B. 60 minutes
C. 75 minutes
D. 90 minutes
E. 85 minutes
29.In a pattern $\mathrm{A}, \mathrm{B}$ and C are working together to complete a job in 15 days, where C only worked for the first 6 days when 37/100 of the job was done and further work was completed by A \& B. Also, the work done by $A$ in 4 days is equal to the work done by $B$ in 3 days. How many days would be required by the $B$ to complete the entire work?
A. 44 days
B. 35 days
C. 25 days
D. 10 days
E. None of these

30.Vikash leaves from Delhi to Noida at 9:00 Am and Rahul leaves from Noida at 10:20 Am for Delhi. At 11:05 Am they meet at a hotel and after their meeting, they again started and take the same time to reach their destination. Find the time taken by both of them for reaching their destination?
A. 75 Minutes
B. 85 Min
C. 95 min
D. 45 min
E. 100 min

Direction: What approximate value should come in place of the question marks (?) in the following questions? (Note: you are not expected to calculate the exact value.)
31. $(14.97)^{2}-224.85+459.008+3.0056 \times 88.862=$ ?
A. 738
B. 725
C. 695
D. 752
E. 666

Direction: What approximate value will come in place of question marks in the given questions.
32. $5881^{\div 14.99+589.01-111.99=}=$ ?
A. 870
B. 920
C. 840
D. 810
E. 770

Direction: What approximate value will come in place of the question mark (?) in the following question? (You are not expected to calculate the exact value)

$$
\frac{13.91 \times 25.03+58.08}{4.04}=?
$$

33. 

A. 84
B. 120
C. 102
D. 108
E. 114


Direction: What approximate value will come in place of the question mark (?) in the following question? (You are not expected to calculate the exact value.)
34. $87.5 \%$ of $480+\frac{4}{21} \times 3675-960 \div 7.51-?=3575.01 \div 10.99$
A. 560
B. 577
C. 627
D. 667
E. 693

Direction: What approximate value will come in place of the question mark (?) in the following question? (You are not expected to calculate the exact value)
35. $(30.9)^{2}-(29.02)^{2}-\{634.3-(400.7+194.62)\}=3 ?$
A. 3
B. 2
C. 5
D. 4
E. 6

Direction: Study the following graph carefully to answer these questions.
The pie-chart given below shows the percentage-distribution of Number of passengers in various trains.(P, Q, R, S, T)


Total passengers $=2.5$ lakhs
36. Which of the following train has highest number of passengers going to Delhi?
A. $P$
B. $S$

C. R
D. Q
E. T
37.What is the number of passengers from train $R$ going to Delhi?
A. 55000
B. 45000
C. 50000
D. 60000
E. None of these
38. What is the approximate percentage of Total passenger traveling by train $R$ with respect to the total passenger of train $P$ and $T$ together?
A. $48 \%$
B. $41 \%$
C. $26 \%$
D. $53 \%$
E. 63\%
39. What is the difference between the number of passenger of train $S$ and passenger of train R ?
A. 12500
B. 7500
C. 10000
D. 5000
E. cannot be determined
40. What is the total number of passengers who are going to Delhi by trains $\mathrm{Q}, \mathrm{R}$, and T together?
A. 35000
B. 27500
C. 82500
D. 100000
E. None of these

## \#\#\#ANSWERS\#\#\#

1. Ans. D.
$2 x+3 x+5 x=180^{\circ}$
$10 x=180^{\circ}$
$x=\frac{180^{\circ}}{10}=18^{0}$
$\therefore$ required sum $=2 x+5 x=7 x$
$=7 \times 18=126^{0}$
2. Ans. B.

Let the amount of pure copper $=x \mathrm{~kg}$.
Pure copper + copper in 1st alloy + copper in 2nd alloy
= Copper in 3rd alloy
$x+4 / 5 * 10+1 / 4 * 16=3 / 5(10+16+x)$
$12+x=3 / 5(26+x)$
$x=9 \mathrm{~kg}$.
$\therefore$ weight of new alloy $=10+16+9=35 \mathrm{~kg}$.
3. Ans. C.

Let Ram's speed is $x \mathrm{~km} / \mathrm{h}$ and Shyam speed be $\mathrm{y} \mathrm{km} / \mathrm{h}$
$(60 / x)-(60 / y)=1 \ldots \ldots$ (1)
$(60 / y)-(60 / 2 x)=1 / 2$
Solving (1) and (2) we get:
$\mathrm{x}=20 \mathrm{~km} / \mathrm{h}$
4. Ans. B.
I. $a^{15-12=3}=\frac{320}{5}=64$
$\therefore \mathrm{a}=4$
II. $\frac{1}{\mathrm{~b}^{15-13}}=\frac{24}{192} \Rightarrow \frac{1}{\mathrm{~b}^{2}}=\frac{1}{8}$
$\therefore \mathrm{b}= \pm 2 \sqrt{2}$
Hence, $\mathrm{a}>\mathrm{b}$
5. Ans. E.

$$
X^{2}
$$

(i) $+19 \mathrm{X}+88=0$
$X^{2}$
$+8 X+11 X+88=0$
$X(X+8)+11(X+8)=0$
$(X+11)(X+8)=0$
$X=-11,-8$
$Y^{2}$
(ii) $+17 Y+70=0$
$Y^{2}$
$+7 Y+10 Y+70=0$
$Y(Y+7)+10(Y+7)=0$
$(Y+7)(Y+10)=0$
$Y=-10,-7$
6. Ans. A.
I. $x^{2}+9 x+18=0$
$\Rightarrow x^{2}+6 x+3 x+18=0$
$\Rightarrow x(x+6)+3(x+6)=0$
$\Rightarrow(x+6)(x+3)=0$
$\Rightarrow x=-6,-3$
II. $y^{2}-13 y+40=0$
$\Rightarrow y^{2}-8 y-5 y+40=0$
$\Rightarrow y(y-8)-5(y-8)=0$
$\Rightarrow(y-8)(y-5)=0$
$\Rightarrow y=8,5$
Hence, $x<y$.
7. Ans. B.

| Village | Total people | Male | Female | Children |
| :--- | :--- | :--- | :--- | :--- |
| A | 280 | 140 | 90 | 50 |
| B | 300 | 160 | 80 | 60 |
| C | 340 | 100 | 160 | 80 |
| D | 260 | 120 | 80 | 60 |
| E | 400 | 220 | 120 | 60 |

## From village $A$,

Let M represents male, F represent female and C represents children. So,
$\mathrm{M}+\mathrm{C}=190$
$\mathrm{F}+\mathrm{C}=140$
$\mathrm{M}+\mathrm{F}=230$
$2(\mathrm{M}+\mathrm{F}+\mathrm{C})=190+140+230=560$
$\mathrm{M}+\mathrm{F}+\mathrm{C}=560 / 2=280$
Total number of males $=(\mathrm{M}+\mathrm{F}+\mathrm{C})-(\mathrm{F}+\mathrm{C})$
$=280-140=140$
Total number of females $=(M+F+C)-(M+C)$
$=280-190=90$
Total number of children $=(M+F+C)-(M+F)$
$=280-230=50$
IBPS RRB PO/Clerk Pre 2022
A Score Booster Course

## From village E ,

$\mathrm{M}+\mathrm{C}=280$
$\mathrm{F}+\mathrm{C}=180$
$\mathrm{M}+\mathrm{F}=340$
$2(\mathrm{M}+\mathrm{F}+\mathrm{C})=280+180+340=800$
$\mathrm{M}+\mathrm{F}+\mathrm{C}=800 / 2=400$
Total number of females $=(M+F+C)-(M+C)$
$=400-280=120$
Difference=Male from village A-female from village $E$
$=140-120=20$
Hence, option B is the correct answer.
8. Ans. A.

| Village | Total people | Male | Female | Children |
| :--- | :--- | :--- | :--- | :--- |
| A | 280 | 140 | 90 | 50 |
| B | 300 | 160 | 80 | 60 |
| C | 340 | 100 | 160 | 80 |
| D | 260 | 120 | 80 | 60 |
| E | 400 | 220 | 120 | 60 |

Let M represents male, F represents female and C represents children.
From village $B$,
$\mathrm{M}+\mathrm{C}=220$
$\mathrm{F}+\mathrm{C}=140$
$\mathrm{M}+\mathrm{F}=240$
$2(\mathrm{M}+\mathrm{F}+\mathrm{C})=220+140+240=600$
$\mathrm{M}+\mathrm{F}+\mathrm{C}=600 / 2=300$
Total number of male $=(\mathrm{M}+\mathrm{F}+\mathrm{C})-(\mathrm{F}+\mathrm{C})$
$=300-140=160$
From village D,
$\mathrm{M}+\mathrm{C}=180$
$\mathrm{F}+\mathrm{C}=140$
$\mathrm{M}+\mathrm{F}=200$
$2(\mathrm{M}+\mathrm{F}+\mathrm{C})=180+140+200=$
$\mathrm{M}+\mathrm{F}+\mathrm{C}=520 / 2=260$
Total number of male $=(\mathrm{M}+\mathrm{F}+\mathrm{C})-(\mathrm{F}+\mathrm{C})$
$=260-140=120$
Total male B+D=160+120=280
Ratio of married to unmarried=9:5
So total unmarried male $=280 * 5 / 14=100$
Hence, option A is the correct answer.
9. Ans. D.


| Village | Total people | Male | Female | Children |
| :--- | :--- | :--- | :--- | :--- |
| A | 280 | 140 | 90 | 50 |
| B | 300 | 160 | 80 | 60 |
| C | 340 | 100 | 160 | 80 |
| D | 260 | 120 | 80 | 60 |
| E | 400 | 220 | 120 | 60 |

Let M represents male, F represents female and C represents children.

## From village $\mathbf{C}$ in 2017,

$\mathrm{M}+\mathrm{C}=180$
$\mathrm{F}+\mathrm{C}=240$
$\mathrm{M}+\mathrm{F}=260$
$2(\mathrm{M}+\mathrm{F}+\mathrm{C})=180+240+260=680$
$\mathrm{M}+\mathrm{F}+\mathrm{C}=680 / 2=340$
Total number of males $=(\mathrm{M}+\mathrm{F}+\mathrm{C})-(\mathrm{F}+\mathrm{C})$
$=340-240=100$
Total number of females $=(M+F+C)-(M+C)$
$=340-180=160$
Total number of children $=(M+F+C)-(M+F)$
$=340-260=80$
In 2018,
The number of males,
$100 * 130 / 100=130$
The number of females,
$160 * 110 / 100=176$
Total people increasesd by,
$340 * 120 / 100=408$
Total number of children $=408-(130+176)$
$=408-306=102$
10. Ans. D.

The Pattern of series is $\times 3-6, \times 4-8, \times 5-10, \times 6-12, \times 7-14 \ldots$
So series is : 17, 45, 172, 850, (5088), 35602
5086 is wrong number in the series.
11. Ans. D.

The pattern is $+\left(5^{2}-2\right),+\left(6^{2}-2\right),+\left(7^{2}-2\right),+\left(8^{2}-2\right), \ldots$
So the series is: $13,36,70,(\mathbf{1 1 7}), 179,258$
118 is wrong number in the series.
12. Ans. E.
the pattern of the series is:
$(12 \times 7.5) \times 2,(14 \times 6.5) \times 4,(16 \times 5.5) \times 6,(18 \times 4.5) \times 8,(20 \times 3.5) \times$ $10,(22 \times 2.5) \times 12$
So series is : 180, 364, 528, 648, 700, 660
701 is wrong number in the series

13. Ans. E.

Let the two numbers be $x$ and $y$
$2 x+3 y=36---------(1)$
$3 x+2 y=39----------(2)$
Equn 1*3 and 2*2
$6 x+9 y=108$
$6 x+4 y=78$
Subtracting both the equations
$5 y=30$
$Y=6$
Putting the value in equation 1
$3 x+12=39$
$3 x=27$
X=9
14. Ans. B.

Let each worker does 1 unit per day.
Since $3 / 5^{\text {th }}$ work is completed in 50 days
$\Rightarrow$ total units of work $=48 * 50 *[5 / 3]=4000$ units.
Remaining work $=4000 *[2 / 5]=1600$ units. 1600 units can be completed in remaining 40 days by $1600 / 40=40$ men. Men to lay off $=48-40=8$ men.
15. Ans. A.

Let six consecutive even integers be $\mathrm{X}-5, \mathrm{X}-3, \mathrm{X}-1, \mathrm{X}+1, \mathrm{X}+3, \mathrm{X}+5$
Average $=6 X / 6=X=37 \Rightarrow$ Numbers are 32, 34, 36, 38, 40 and 42.
Next five odd integers are 43, 45, 47, 49, and 51. Average $=47$
16. Ans. E.
I. $x^{2}-8 x+15=0$
$x^{2}-5 x-3 x+15=0$
$x(x-5)-3(x-5)=0$
$(x-3)(x-5)=0$
$x=3,5$
II. $2 y^{2}-19 y+45=0$
$2 y^{2}-10 y-9 y+45=0$
$2 y(y-5)-9(y-5)=0$
$(2 y-9)(y-5)=0$
$y=5,4.5$
No relation can be established. Hence, the answer is option E .
17. Ans. E.
I. $x^{2}+361=442$
$\Rightarrow x^{2}=442-361$
$\Rightarrow x^{2}=81$
$\Rightarrow x=+9,-9$

IBPS RRB PO/Clerk Pre 2022
II. $\mathrm{y}^{2}+\sqrt{289}=\sqrt{676}$
$\Rightarrow y^{2}+17=26$
$\Rightarrow y^{2}=9$
$\Rightarrow y=+3,-3$
Hence no relationship can be established.
18. Ans. E.

From I : $5 x^{2}-6 x+1=0$
$(5 x-1)(x-1)=0$
$x=1 / 5$ or 1 .
From II : $7 y^{2}-6 y-1=0$
$(7 y+1)(y-1)=0$
$y=-1 / 7$ or 1 .
No relationship can be established.
19. Ans. B.
$3.5 \%$ of $180 \div 0.6 \%$ of 250
$=(3.5 \times 1.8) \div(1500 / 1000)$
$=6.3^{\div} 1.5$
$=4.2 \approx 4$
20. Ans. B.

Approx Value $=459+3 \times 89$
$=459+267$
$=726$
$=725$
21. Ans. E.
$\frac{50 \times 25}{10}=$ ?
? $=125$ (approx).
22. Ans. B.

$$
\begin{aligned}
& \frac{4096 \times 5}{8}-\frac{198 \times 3}{11}=? \% \text { of } 200 \\
& 512 \times 5-18 \times 3=? \% \text { of } 200 \\
& 2560-54=? \% \text { of } 200 \\
& 2506=? \% \text { of } 200 \\
& ?=\frac{2506}{2} \\
& ?=1253
\end{aligned}
$$

23. Ans. A.
$27 \%$ of $794-?^{2} \%$ of $256=150.38$
$\frac{794 \times 27}{100}-?^{2} \%$ of $256=150.38$
$214.38-?^{2} \% \operatorname{og} 256=150.38$
$214.38-150.38=?^{2} \%$ of 256
$\frac{64 \times 100}{256}=?^{2}$
$?=\sqrt{\frac{64 \times 100}{256}}$
$?=\frac{80}{16}$
? $=5$
24. Ans. C.
$70 \%$ of $695-? \%$ of $700=-738.5$
$\frac{695 \times 70}{100}-? \%$ of $700=-738.5$
$486.5-? \%$ of $700=-738.5$
?\%of $700=486.5+738.5$
$?=\frac{1225}{7}$
$?=175$
25. Ans. B.

The following table can be drawn from the above informations:-
No of girls having tea can be found = Total no of students having tea - boys having tea.
Girls having both $=$ total no of girls - (Girls like tea + girls like coffee)

|  | Boys | Girls | Total |
| :--- | :--- | :--- | :--- |
| Tea | 810 | 3510 | 4320 |
| Coffee | 1080 | 2475 | 3555 |
| Both | 4860 | 5265 | 10125 |
| Total | 6750 | 11250 | 18000 |

Boys who like tea $=$ boys like only tea + like both $=810+4860=5670$ 26. Ans. D.

|  | Boys | Girls | Total |
| :--- | :--- | :--- | :--- |
| Tea | 810 | 3510 | 4320 |
| Coffee | 1080 | 2475 | 3555 |
| Both | 4860 | 5265 | 10125 |
| Total | 6750 | 11250 | 18000 |

Total girls like only Tea $=3510$
27. Ans. A.

|  | Boys | Girls | Total |
| :--- | :--- | :--- | :--- |
| Tea | 810 | 3510 | 4320 |
| Coffee | 1080 | 2475 | 3555 |
| Both | 4860 | 5265 | 10125 |
| Total | 6750 | 11250 | 18000 |

Students who like coffee $=3555+10125=13680$
28. Ans. D.
$A$ and $B$ can fill the tank in 36 minutes
Let the time taken by pipe $A$ to fill the tank $=x$ minutes
Ans, the time taken by pipe $B$ to fill the tank $=y$ minutes
So, $\frac{1}{x}+\frac{1}{y}=\frac{1}{36}$
So, part of the tank filled in 30 minutes $=\frac{30}{36}=\frac{5}{6}$
Remaining part $=1-\frac{5}{6}=\frac{1}{6}$
So, ${ }^{\frac{\mathbf{1}}{} \mathrm{Th}}$ part of the tank is filled by A alone in 10 minutes
So total time taken by $A$ to fill the tank $=60$ minutes
And, time taken by $B$ to fill $=\frac{1}{36}-\frac{1}{60}=\frac{10}{360}-\frac{6}{360}=\frac{4}{360}=\frac{1}{90}$
So, pipe B can fill the tank in 90 minutes.
So, option (d) is the correct answer.
29. Ans. C.

Let the work done by $\mathrm{A}, \mathrm{B}$ and C in 1 day be $\mathrm{a}, \mathrm{b}$ and c respectively For first 2 days,
$6(a+b+c)=37 / 100$
After C left the work, for remaining 9 days A and B worked
$9(a+b)=63 / 100$.
Further,
$4 \mathrm{a}=3 \mathrm{~b}$
Solving equations (2) and (3),

$3(a+b)=21 / 100$
$3 a+3 b=21 / 100$
$3 a+4 a=21 / 100$
$7 \mathrm{a}=21 / 100$
$a=3 \%$
b $=4 \%$
B completes $4 \%$ of the work per day i.e. $4 / 100$
Days taken to complete the entire work $=100 / 4=25$ days
30. Ans. A.

Total time taken by vikash for meeting point $\rightarrow 125$ minutes
Time taken by Rahul for meeting point $\rightarrow 45$ minutes
And they takes equal time so,
Time - Sqrt(125*45)
$\mathrm{T}=75$ Minutes
31. Ans. B.
? $=225-225+459+3.0056 \times 88.862$
? $=459+3 \times 88.86$
? = 726
? ${ }^{\sim} 725$
32. Ans. A.
$=5880 \div 15+590-112$
$=392+478$
$=870$
33. Ans. C.

By approximation, we get:
$14 \times 25+58$
$\frac{4}{4}=$ ?
$\Rightarrow ?=\frac{408}{4}$
$\Rightarrow$ ? $=102$
34. Ans. D.

By Approximation, we get
$\frac{7}{8} \times 480+\frac{4}{21} \times 3675-\frac{960}{7.5}-?=\frac{3575}{11}$
$\Rightarrow 420+700-128-$ ? $=325$
$\Rightarrow$ ? $=667$
35. Ans. D.
$(30.9)^{2}-(29.02)^{2}-\{634.3-(400.7+194.62)\}=3 ?$
$(31)^{2}-(29)^{2}-\{634-(400+195)\}=3$ ?
$961-841-\{634-595\}=3$ ?
$120-39=3$ ?
$81=3$ ?

? $=4$
36. Ans. B.
$S$ has the maximum percentage i.e. $24 \%$
37. Ans. A.

Number of passengers of Train R $=22 \%$ of 2.5 lakh $=.55$ lakh
38. Ans. E.

Required percentage $=(22 / 35) * 100=62.85 \%$
39. Ans. D.

Required difference $=(24 \%-22 \%)$ of 2.5 lakhs $=5000$
40. Ans. E.

Required answer $=(19+22+18) \%$ of 2.5 lakhs $=59 \%$ of 2.5 lakhs $=1.475$ lakhs

