Important arithmetic questions for IBPS PO Pre 2020
1.Age of Ravi is 5 times of his son, after 15 years the ratio of age of Ravi and son is $13: 5$, find the age of Ravi after 10 years?(E)
1.50 years 2.60 years
3.90 years $\quad 4.78$ years
5.68 years
1.(2) Let the age of son be $x$ years

Age of Ravi will be $5 x$ years

According to the question,
$(x+15) /(5 x+15)=5 / 13$
$\Rightarrow 13 x+195=25 x+75$
$\Rightarrow 12 x=120$
$\Rightarrow x=10$
$\therefore$ present age of Ravi $=5 \times 10=50$ year
After ten years it will be 60 year.
2. Mohan lend Rs 10000 to Sohan on simple rate of interest at 10 percent per annum. In how much time amount become 4 times?( $M$ )

| 1.10 years | 2.5 years |
| :--- | :--- |
| 3.30 years | 4.8 years |

5.12 years
2.(3) $30000=\frac{10000 \times 10 \times T}{100}$
$\mathrm{T}=30$ year
3. If a train running at a speed of $60 \mathrm{~km} / \mathrm{h}$ crosses trees which are each 50 m away, then how many trees will it cross in 5 hours?(E)
$1.4500 \quad 2.4800$
$3.3700 \quad 4.3600$
5.6000
3.(5) Speed of train $=60 \mathrm{~km} / \mathrm{h}$

Distance covered in 5 hours $=60 \times 5=300 \mathrm{~km}=300000 \mathrm{~m}$

Distance between two trees $=50 \mathrm{~m}$

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$\therefore$ No. of tree crossed $=300000 / 50=6000$
4. A boat covers 90 km upstream distance in 9 hours, the speed of the water is $6 \mathrm{~km} / \mathrm{hr}$. What is speed of boat?(E)
$1.40 \mathrm{~km} / \mathrm{hr} \quad 2.20 \mathrm{~km} / \mathrm{hr}$
$3.30 \mathrm{~km} / \mathrm{hr} \quad 4.16 \mathrm{~km} / \mathrm{hr}$
$5.25 \mathrm{~km} / \mathrm{hr}$
4.(4) Let the speed of boat be $x \mathrm{~km} / \mathrm{hr}$

Speed of the boat upstream =90/9km / hr = $10 \mathrm{~km} / \mathrm{hr}$
$\Rightarrow x-6=10$
$\Rightarrow \mathrm{x}=16 \mathrm{~km} / \mathrm{hr}$
$\therefore$ Speed of boat is $16 \mathrm{~km} / \mathrm{hr}$
5. A, B and C stared a business with investment of Rs. 10000, Rs. 12000, and Rs. 14000, in the 1st year profit is Rs. 9000. What is $A^{\prime} s$ share in the profit?(M)
1.Rs $2500 \quad$ 2.Rs 2650
3.Rs 2800
4.Rs 2720
5. None of these
6.(1) The amount invested by A, B and C are respectively Rs. 10000, Rs. 12000 , and Rs. 14000

Ratio in the investment $=10000: 12000: 14000=5: 6: 7$

Share of $B$ in the profit $=\frac{5}{18} \times 9000=2500$
$\therefore$ A's profit share in the profit is Rs. 2500.
6. $A$ is thrice as good a workman as $B$ and therefore is able to finish a job in 40 days less than Working together time, then they can complete the work together in?
$1.15 \quad 2.12$
3.10
4.8
5. None of these
6.(1) efficiencies of $A$ and $B$ is $3 x$ and $1 x$ respectively.

And ratio of number of days taken by $A$ and $B$ is $1 x$ and $3 x$ respectively.
ATQ, $(3 x-1 x)=40$
$X=20$ so number of days taken by $A$ and $B$ to complete the work is 20 and 60 .

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Let the total number of unit of work is 60 .(LCM of 20 and 60)

Days taken by them to complete the work together=60/4=15 days
7. Compound interest on certain sum after 2 years is Rs. 1000 and Rs. 1200 for third year. What is rate of interest?(E)
1.10\% 2.15\%
3.20\% 4.18\%
5.25\%
7.(3) Interest of second year = Rs. 1000

Interest for third year = Rs. 1200

Interest on 1000 for one year $=$ Rs. 200

Rate of interest $=(200 / 1000) \times 100=20 \%$
$\therefore$ rate of interest is $20 \%$
8. A boat goes 16 km downstream and comes back in 3 hrs . Find the speed of the stream if the speed of the boat in still water is $12 \mathrm{~km} / \mathrm{hr}$.?(E)

1. $4 \mathrm{~km} / \mathrm{hr}$
2. $2 \mathrm{~km} / \mathrm{hr}$
3. $3 \mathrm{~km} / \mathrm{hr}$
4. $5 \mathrm{~km} / \mathrm{hr}$
$5.6 \mathrm{~km} / \mathrm{hr}$
8.(1)Let the speed of boat is $x \mathrm{~km} / \mathrm{hr}$.

ATQ, $\frac{16}{12+x}+\frac{16}{12-x}=3$
$X=4 \mathrm{~km} / \mathrm{hr}$

Directions(9-13):-What should come in place of the question mark '?' in the following number series?(M)

## 9.6, 9, 15, 27, ?, 99

1.51
2.54
3.50
4.49
5.52
9.(1)The series follows the following pattern:
$6+3=9$

Important arithmetic questions for IBPS PO Pre 2020
$9+6=15$
$15+12=27$
$27+24=51$
10. 1296, 324, 81, 27, 9, ?, 2.25
1.2.5 2.2
3.4.5 4.3
5.5
10.(3)The series follows the following pattern:
$1296 \div 4=324$
$324 \div 4=81$
$81 \div 3=27$
$27 \div 3=9$
$9 \div 2=4.5$
$4.5 \div 2=2.25$
11. 102, 107, 114, 123, ?, 147
$1.130 \quad 2.134$
$3.138 \quad 4.142$
5.133
11.(2)The series follows the following pattern:
$102+5=107$
$107+7=114$
$114+9=123$
$123+11=134$
$134+13=147$
$\therefore$ The missing term in the series is 134 .
12. 150, ?, 161, 176, 200, 235
1.154
2.158
3.145
4.160

Important arithmetic questions for IBPS PO Pre 2020
5.153
12.(5)The pattern followed by the series is
$150+\left(2^{2}-1\right)=153$
$153+\left(3^{2}-1\right)=161$
$161+\left(4^{2}-1\right)=176$
$176+\left(5^{2}-1\right)=200$
$200+\left(6^{2}-1\right)=235$
13. 17, 53, 78, 94, ?, 107
$1.99 \quad 2.101$
$3.100 \quad 4.97$
5.103
13.(5)The series follows the following pattern:
$17+6^{2}=53$
$53+5^{2}=78$
$78+4^{2}=94$
$94+3^{2}=103$
$103+2^{2}=107$

DIRECTION (14.-18):- What will come in place of question mark '?' in the following question?(M)
14. $1987+23 \%$ of $1500=?+21 \%$ of $(300+400)$
(1) 2275
(2) 2180
(3) 2185
(4) 2075
(5) 2285
14.(3) $1987+345=x+147$
$x=2185$
15. $\left(2^{4} \times 5^{12} \times 10^{6.8} \times 5^{0.2} \times 2^{0.2} \times 4^{6}\right) \times \frac{1}{16}=10^{?}$
(1) 10
(2) 17
(3) 15
(4) 19
(5) None of these
15.(4)
$\left(2^{4} \times 5^{12} \times 10^{6.8} \times 5^{0.2} \times 2^{0.2} \times 4^{6}\right) \times \frac{1}{16}=10^{?}$
$5^{12} \times 10^{6.8} \times 5^{0.2} \times 2^{0.2} \times 4^{6}=10^{\mathrm{x}}$

Important arithmetic questions for IBPS PO Pre 2020
$5^{12+0.2} \times 10^{6.8} \times 2^{0.2} \times\left(2^{2}\right)^{6}=10^{x}$
$5^{12.2} \times 10^{6.8} \times 2^{12.2}=10^{\mathrm{x}}$
$10^{19}=10^{\mathrm{x}}$
$x=19$
16. $(1568+244) \div ?=770-566$
(1) 5
(2) 6
(3) 4
(4) 3
(5) None of these
16.(5) $(1568+244) \div ?=770-566$
$\frac{1812}{x}=204$
$x=8.8$
17. $\left\{(35)^{2}+(45)^{2}-(40)^{2}\right\} \times \frac{1}{5}=$ ?
(1) 199
(2) 159
(3) 330
(4) 190
(5) None of these
17.(3)
$1 / 5 *(1225+2025-1600)=x$
$x=330$
18. $20 \%$ of $5550+20 \%$ of $2500=$ ?
(1) 1244
(2) 1610
(3) 1880
(4) 1910
(5) None of these
18.(2) $1110+500=1610$

Directions (19-23): Study the below mentioned line chart carefully and answer the following questions.

Line chart shows the units produced (in units) and units sold (in \%) by 5 different companies in agiven year.(m)

Important arithmetic questions for IBPS PO Pre 2020


Note:- 1.Total units produced =units sold +units unsold
2. Percentage of unit sold $=\frac{\text { Units sold }}{\text { Total Units produced }} \times 100$
19. Total unsold units of $P$ and $T$ is what percent of sold units of $S$ ?(Approx.)
$1.120 \quad 2.150$
$3.140 \quad 4.145$
5.150
19.(3) $\frac{3500+1000}{3200} \times 100$
$=140 \%$ (Approx.)

| COMPANY | TOTAL | SOLD | UNSOLD |
| :---: | :---: | :---: | :---: |
| $\mathbf{P}$ | 7000 | 3500 | 3500 |
| $\mathbf{Q}$ | 9000 | 7200 | 1800 |
| $\mathbf{R}$ | 6000 | 4200 | 1800 |
| $\mathbf{S}$ | 8000 | 3200 | 4800 |
| $\mathbf{T}$ | 10000 | 9000 | 1000 |

20. What will be the average of unsold unit by all companies together?
$1.3000 \quad 2.2800$
3.2500
21. 2580
22. None of these
20.(4) Required average $=\frac{3500+1800+1800+4800+1000}{5}=\frac{12900}{5}$
$=2580$

Important arithmetic questions for IBPS PO Pre 2020
21. Selling price of an unit sold by company-R \& company-Q is Rs. 20 and Rs. 30 respectively. 12\% and $30 \%$ of units sold by company-R \& company-Q respectively are returned by the customers. Then, find the difference between total revenue of company-R\& company-Q.

| 1.72840 | 2.77280 |
| :--- | :--- |
| 3.75413 | 4.78480 |

### 5.77616

21.(2) Total revenue of company-R=20*4200*88/100=73920

Total revenue of company-Q=30*7200*70/100=151200

Difference $=151200-73920=77280$
22.If units sold by company-U is $200 \%$ of the unsold units of company-Q \& $S$ together and ratio of sold units to unsold units of company-U is $12: 11$. Then, find total units produced by company-U.

| 1.26100 | 2.25160 |
| :--- | :--- |
| 3.24140 | 4.25250 |

5. None of these
22.(5)Total unsold units of $Q$ and $S=1800+4800=6600$

Total sold units of $U=6600+6600=13200$

12 units========13200

23 units========25300
23. Minimum number of units sold by which company?

1. P 2. Q
2. R
3. S
4. T
23.(4) it is clear from line graph $S$ sold minimum number of units.
