**Course: IBPS PO Pre**

**Subject: : Practice Set**

Time:10 Minutes

Published Date: 6th September 2020

**Directions (1 – 5):** What will come in place of (?) in the following no. series.

Q1. 120, 128, 152, 192, 248,320, ?

(a) 408

(b) 342

(c) 370

(d) 442

(e) 336

L1Difficulty 2

QTags MISSING SERIES Quant

QCreator Deepak Rohilla

Q2. 1, 3, 11, 47, 239,1439, ?

(a) 9837

(b) 7650

(c) 10079

(d) 11650

(e) 12630

L1Difficulty 2

QTags MISSING SERIES Quant

QCreator Deepak Rohilla

Q3. 64, 68, 77, 102, 151, 272, ?

(a) 421

(b) 441

(c) 524

(d) 484

(e) 553

L1Difficulty 2

QTags MISSING SERIES Quant

QCreator Deepak Rohilla

Q4. 255, 325, 399, 485, 575,677, ?

(a) 923

(b) 899

(c) 793

(d) 783

(e) 974

L1Difficulty 2

QTags MISSING SERIES Quant

QCreator Deepak Rohilla

Q5. 12, 6, 6, 9, 18, 45, 135, 472.5, ?

(a) 1375

(b) 1525

(c) 1690

(d) 1890

(e) 1450

L1Difficulty 2

QTags MISSING SERIES Quant

QCreator Deepak Rohilla

Q6. A boat running upstream takes 14 hours to cover a certain distance, while it takes 8 hours to cover the same distance running downstream. What is the ratio between speed of boat in still water to speed of water current?

(a)11:9

(b)11:3

(c)17:11

(d)13:7

(e)15:7

L1Difficulty 2

QTags Boat And Stream

QCreator Deepak Rohilla

Q7. A boat covers a distance of 950 km downstream in 19 hour while it takes 25 hour to cover the same distance upstream. What is the speed of boat in still water (in kmph)?

(a)44

(b)35

(c)37

(d)48

(e)40

L1Difficulty 2

QTags Boat And Stream

QCreator Deepak Rohilla

Q8. At simple interest, a sum becomes 3 times in 16 years. Find the time in which the sum will be 6 times at the same rate of interest.

(a)36 years

(b) 44 years

(c) 38 years

(d) 40 years

(e) 35 years

L1Difficulty 2

QTags Simple Interest

QCreator Deepak Rohilla

Q9. find the difference between simple interest and compound interest on Rs 12000 for 1$\frac{1}{2}$ years at 10% per year but interest is calculated on half yearly basis.

(a)Rs 91

(b)Rs 91.5

(c)Rs 93.5

(d)Rs 95.5

(e)Rs 96

L1Difficulty 2

QTags Simple Interest

QCreator Deepak Rohilla

Q10. Mr. Ravi invested an amount of Rs 2500 divided into two different schemes A and B at the simple interest 14% per annum and 13% per annum respectively. If the total amount of simple interest earned in three years be Rs 1011, what was the amount invested in scheme B?

(a)Rs 1550

(b) Rs 1200

(c) Rs 1700

(d) Rs 1500

(e) Rs 1300

L1Difficulty 2

QTags Simple Interest

QCreator Deepak Rohilla

**Directions (11-15): -** What will come in place of (?) question mark in the following questions?

Q11. $12.5\%of 74.4×12+7×\sqrt{39.69}=?$

(a) 112.4

(b) 243.6

(c) 145.3

(d) 155.7

(e) 132.2

L1Difficulty 2

QTags Simplification

QCreator Deepak Rohilla

Q12. $(27)^{\frac{4}{3}}×(729)^{\frac{1}{3}}÷(9)^{\frac{5}{2}}=?$

(a) 4

(b) 8

(c) 27

(d) 9

(e) 3

L1Difficulty 2

QTags Simplification

QCreator Deepak Rohilla

Q13. $(343)^{\frac{1}{3}}÷(49)^{\frac{3}{2}}×63÷\frac{1}{\sqrt[3]{729}}×\sqrt[3]{\frac{343}{729}}=? $

(a) 49

(b) 81

(c) 343

(d) 63

(e) 9

L1Difficulty 2

QTags Simplification

QCreator Deepak Rohilla

Q14. $60\% of 950+35\% of 880-47\% of 500=?$

(a) 643

(b) 523

(c) 713

(d) 673

(e) 663

L1Difficulty 2

QTags Simplification

QCreator Deepak Rohilla

Q15. $14\frac{2}{7}\% of 651+6\frac{1}{4}\% of 1008-5\frac{15}{17}\% of 1156=?$

(a) 86

(b) 88

(c) 49

(d) 72

(e) 98

L1Difficulty 2

QTags Simplification

QCreator Deepak Rohilla

**Solutions**

S1. Ans.(a)

Sol.

Pattern is

120 + 8 × 1 = 120 + 8 = 128

128 + 8 × 3 = 128 + 24 = 152

152 + 8 × 5 = 152 + 40 = 192

192 + 8 × 7 = 192 +56 = 248

248 + 8 × 9 = 248 + 72 = 320

320 + 8 × 11 = 320 + 88 = 408

S2. Ans.(c)

Sol.

Series is

1 × 2 +1 = 3

3 × 3 + 2 = 11

11 × 4 + 3 = 47

47 × 5 + 4 = 239

239 × 6 + 5 = 1439

1439 × 7 + 6 = 10079

S3. Ans.(b)

Sol.

64+$2^{2}$=68

68+$3^{2}$=77

77+$5^{2}$=102

102+$7^{2}$=151

151+$11^{2}$=272

272+$13^{2}$=441

S4. Ans.(d)

Sol.

Pattern is

16² – 1 = 255

18² + 1 = 325

20² – 1 = 399

22² + 1 = 485

24² – 1 = 575

26² + 1 = 677

28² - 1 = 783

S5. Ans.(d)

Sol.

Series is

12 × 0.5 = 6

6 × 1 = 6

6 × 1.5 = 9

9 × 2 = 18

18 × 2.5 = 45

45 × 3 = 135

135 × 3.5 = 472.5

472.5 × 4 = 1890

S6. Ans(b)

Sol.

Let speed of boat in still water and speed of water current be x kmph and y kmph respectively.

ATQ

 $14 \left(x-y\right)=8 \left(x+y\right)$

 $14x-14y=8x+8y$

 $6x=22y$

 $\frac{x}{y}=\frac{11}{3}$

So, required ratio $=11 :3$

S7. Ans(a)

Sol.

Let speed of boat in still water = u km/h

And speed of current = v km/h

Downstream speed (u+v) = $\frac{950}{19}$

 =50km/h

Upstream speed (u-v) = $\frac{950}{25}$

 =38km/h

On solving

Speed of boat in still water (u) = 44km/h

S8. Ans(d)

Sol.

3 times in 16 years

So, interest will be 2 times of principal

Let principal=Rs. P

And rate = r%

 $2p=\frac{p×r×16}{100}$

R=$12\frac{1}{2}$%

Let required time be t years.

So, $5p=\frac{p×12\frac{1}{2}×t}{100}$

t = 40 years

S9. Ans.(b)

Sol. Since rate calculated half yearly

 $\left.\begin{matrix}R= \frac{10}{2}=5 \%\\ and time= \frac{3}{2}×2=3 half years\end{matrix}\right\}for C.I$

C.I-S.I = $12000\left[\left(1+\frac{5}{100}\right)^{3}-1\right]- \frac{12000×10×3}{100×2}$

= 1891.5 – 1800

=Rs 91.5

S10. Ans.(e)

Sol. Let investment in scheme A = *x* Rs.

 investment in scheme B = (2500- $x$*)* Rs.

 $\frac{x×14×3}{100} +\frac{\left(2500- x)×13×3\right)}{100}=1011$

 $\frac{3x}{100}=36$

$x$ = Rs.1200

Required sum = 2500-1200=Rs.1300

S11. Ans. (d)

Sol.

 $12.5\%of 74.4×12+7×\sqrt{39.69}=?$

=$\frac{1}{8} × 74.4×12+7×6.3=?$

=111.6+44.1 = ?

=155.7 = ?

S12. Ans. (e)

Sol.

=$(27)^{\frac{4}{3}}×(729)^{\frac{1}{3}}÷(9)^{\frac{5}{2}}=?$

=$81×9÷243=?$

=3 = ?

S13. Ans. (e)

Sol.

 $\left(343\right)^{\frac{1}{3}}÷\left(49\right)^{\frac{3}{2}}×63÷\frac{1}{\sqrt[3]{729}}×\sqrt[3]{\frac{343}{729}}=?$

=$7÷343×63÷\frac{1}{9}×\frac{7}{9}=?$

=9 = ?

S14. Ans. (a)

Sol.

 $60\% of 950+35\% of 880-47\% of 500=?$

 =$\frac{60}{100} × 950+\frac{35}{100} × 880-\frac{47}{100} × 500=?$

=570+308-235 = ?

=643 =?

S15. Ans. (b)

Sol.

 $14\frac{2}{7}\% of 651+6\frac{1}{4}\% of 1008-5\frac{15}{17}\% of 1156$

 =$\frac{1}{7}×651+\frac{25}{400}×1008-\frac{100}{1700}×1156$

=88