

Quiz Date: 8<sup>th</sup> May 2020

Q1. Raman took a loan of Rs. 15000 from Laxman. He was agreed that for the first three years rate of interest charged would be at 8% Simple Interest per annum and at 10% Compound Interest (compounded, annually) from the fourth year onwards. Ram did not pay anything until the end of the fifth year. How much would he repay if he clears the entire amount, only at the end of fifth year ? (in Rs.)

- (a) Rs. 22506
- (b) Rs. 22105
- (c) Rs. 22900
- (d) Rs. 22500
- (e) Rs. 22450

Q2. The interest earned when Rs P is invested for four years in a scheme offering 9% p.a. simple interest is more than the interest earned when the same sum (Rs P) is invested for two years in another scheme offering 12% p.a. simple interest, by Rs 360. What is the value of P? (in Rs.)

- (a) 2000
- (b) 3500
- (c) 2500
- (d) 4000
- (e) 3000

Q3. A person invested a certain amount at simple interest at the rate of 6 per cent per annum earning Rs. 900 as an interest at the end of three years. Had the interest been compounded every year, how much more interest would he have earned on the same amount with the same interest rate after three years ?

- (a) Rs. 38.13
- (b) Rs. 25.33
- (c) Rs. 55.08
- (d) Rs. 35.30
- (e) Rs. 40.39

Q4. On Rs 3500 invested at a simple interest rate 7 per cent per annum, Rs 500 is obtained as interest in certain years, In order to earn Rs 800 as interest on Rs 4900 in the same number of years, what should be the rate of simple interest?

- (a) 9%
- (b) 10%
- (c) 12%
- (d) 8%
- (e) 11%

Q5. Ashok borrowed some money at simple interest at the rate of 6 per cent per annum for the first two years, at the rate of 9 per cent per annum for the next three years and at the rate

of 14% per cent per annum for the period beyond five years. If he pays a total interest of Rs. 11400 at the end of 9 years how much money did he borrow ?

- (a) Rs. 16,000
- (b) Rs. 14,000
- (c) Rs. 18,000
- (d) Rs. 12,000
- (e) Rs. 20000

Q6. Dev went to a shop and purchased some shirts (each at Rs 3000) and some jeans (each at Rs 4000) and spent total Rs 36,000 on it. If he had bought as many jeans as he bought originally the shirts and vice-versa then he would have saved an amount equal to half the price of either a shirt or a jean. Find the total number of shirts and jeans bought by him?

- (a) 10
- (b) 9
- (c) 12
- (d) 8
- (e) 6



Q7. A garment company declared 17% discount for wholesale buyers. Mr Sameer , a wholesaler bought garments from the company for Rs. 1660 after getting discount. He fixed up the selling price of garments in such a way that he earned a profit of 7% on original company price. What is the selling price ?

- (a) Rs. 2130
- (b) Rs. 2140
- (c) Rs. 2410
- (d) Rs. 2310
- (e) Rs. 2240

Q8. A trader buys goods at 20% discount on marked price. If he wants to make a profit of 25% after allowing a discount of 20%, by what percent should his marked price be greater than the original marked price ?

- (a) 15%
- (b) 65%
- (c) 25%
- (d) 20%
- (e) 30%

Q9. A shopkeeper has a stock of rice. 20% of rice is spoiled, then shopkeeper sell remaining rice at 110% of the cost price and weight 200 gram less than 1 kg. Find his overall profit %.

- (a) 12%
- (b) 14%
- (c) 8%
- (d) 10%
- (e) 4.4%

Q10. Ratio of markup price and selling price when a discount is given, of an article is 5 : 4 and ratio of cost price and selling price is 5 : 6. If discount% is double up then a loss of 60 Rs. occur. Find the mark up price.

- (a) 600
- (b) 750
- (c) 840
- (d) 900
- (e) 720

**Directions (11-15): Find the wrong term in the given number series**

Q11. 419, 420, 425, 450, 575, 1200, 4320

- (a) 419
- (b) 4320
- (c) 420
- (d) 1200
- (e) 425

Q12. 7, 8, 16, 52, 209, 1046, 6277

- (a) 6277
- (b) 7
- (c) 1046
- (d) 16
- (e) 8

Q13. 7, 22, 46, 88, 166, 316, 600

- (a) 600
- (b) 7
- (c) 316
- (d) 22
- (e) 46

Q14. 240, 180, 120, 360, 90, 450, 75

- (a) 75
- (b) 180
- (c) 450
- (d) 240
- (e) 120

- Q15. 3000, 3008, 3072, 3288, 3800, 4800, 5528  
 (a) 4800  
 (b) 3008  
 (c) 3288  
 (d) 3000  
 (e) 5528

### Solutions

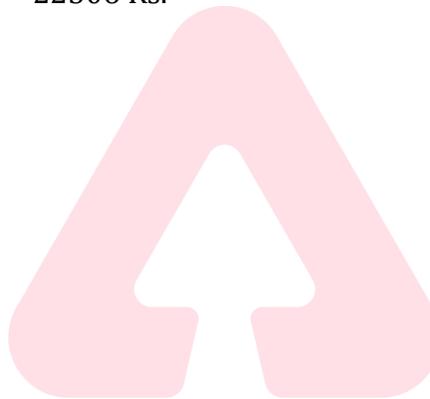
S1. Ans.(a)

Sol.

At the end of three years amount will be =  $15000 + \frac{15000 \times 3 \times 8}{100}$   
 = 18600 Rs.

Now, amount put at CI for 2 years

So amount =  $18600(1 + \frac{10}{100})^2$   
 = 22506 Rs.



S2. Ans.(e)

Sol.

$$P \times 4 \times 9 / 100 - P \times 2 \times 12 / 100 = 360$$

$$12P / 100 = 360$$

$$P = 3000 \text{ Rs.}$$

S3. Ans.(c)

Sol.

$$P = 900 \times 100 / (6 \times 3)$$

$$P = \text{Rs. } 5000$$

CI 1<sup>st</sup> year 300

2<sup>nd</sup> year 300 + 18

3<sup>rd</sup> year 300 + 18 + 18 + 1.08

Total CI = Rs. 955.08

Required value = 955.08 - 900 = 55.08 Rs.

S4. Ans.(d)

Sol.

$$\text{Time } t = 500 \times 100 / (3500 \times 7)$$

$$t = 100 / (49 \text{ year})$$

Let the rate of interest is R %

$$800 = 4900 \times R \times 100 / (49)(100)$$

$$R = 8\%$$

S5. Ans.(d)

Sol.

Let the amount is P Rs.

$$6 \times P \times 2/100 + 9 \times P \times 3/100 + 14 \times P \times 4/100 = 11400$$

$$(56 + 39)P/100 = 11400$$

$$95P/100 = 11400$$

$$P = 1140000 / (95)$$

$$P = 12000 \text{ Rs.}$$

S6. Ans.(a)

Sol:

Let the number of shirts and jeans bought by him be x and y respectively.

ATQ

$$3000x + 4000y = 36000$$

$$3x + 4y = 36 \dots \dots \dots (i)$$

Now

$$(3000x + 4000y) - (4000x + 3000y) = \text{either } 1500 \text{ or } 2000$$

$$\Rightarrow \text{if we take, } y - x = 1.5$$

We will not have integral value for x and y

So, will take  $y - x = 2 \dots \dots \dots$  (ii)

From (i) and (ii), we get

$$x = 4 \text{ and } y = 6$$

Required total number of shirts and jeans = 10

S7. Ans.(b)

$$\text{Sol. Original company price} = 1660 \times \frac{100}{83} = 2000 \text{ Rs.}$$

$$\text{SP} = 2000 \times \frac{107}{100} = 2140 \text{ Rs.}$$

S8. Ans.(c)

Sol.

Let original marked price is  $100x$

$$\text{Cost price for trader} = 80\% \text{ of } 100x = 80x$$

$$\text{To gain } 25\% \text{ selling price} = \frac{125}{100} \times 80x = 100x$$

Allowed discount = 20%

$$\therefore \text{trader's marked price} = \frac{100x}{80} \times 100 = 125x$$

$$\text{Required percentage} = \frac{125x - 100x}{100x} \times 100 = 25\%$$

S9. Ans.(d)

Sol.

Let stock =  $100x$  Kg

Spoiled  $\rightarrow 20x$  kg

Remaining  $\rightarrow 80x$  kg

Let price be 10 Rs. per kg.

Total cost price =  $100x \times 10 = 1000x$  Rs.

Now,

Selling Quantity =  $\frac{80 \times 1000}{800} = 100x$  times rice

Total selling Price  $\rightarrow 100x \times 11 = 1100x$

Profit percent  $\rightarrow \frac{1100x - 1000x}{1000x} \times 100 = \frac{100x}{1000x} \times 100 = 10\%$



S10. Ans.(d)

Sol.

ATQ,

Mark price	Selling price	Cost price
$5 \times 6$	$4 \times 6$	
1	$4 \times 6$	$4 \times 5$
30	24	20

$$\text{Discount given} = \frac{30 - 24}{30} \times 100 = 20\%$$

When discount double = 40%

$$\frac{30 \times 40}{100} = 12$$

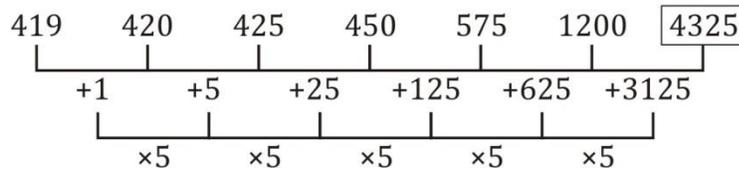
$30 - 12 = 18$  New selling price

Loss  $20 - 18 = 2 \rightarrow 60$  Rs.

$$\text{Mark price} = \frac{60}{2} \times 30 = 900$$

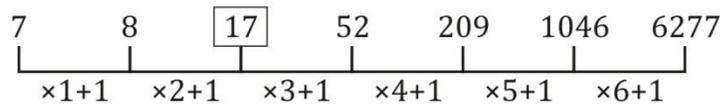
S11. Ans.(b)

Sol.



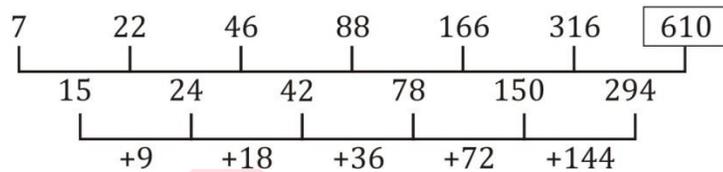
S12. Ans.(d)

Sol.



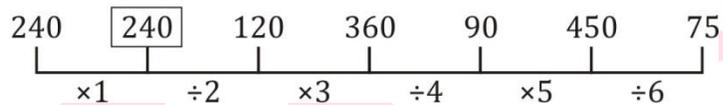
S13. Ans.(a)

Sol.



S14. Ans.(b)

Sol.



S15. Ans.(e)

Sol.

