

**Quiz Date: 13<sup>th</sup> May 2020**

Q1. Seema's present age is four times her son's present age and four sevenths of her father's present age. The average of the present age of all three of them is 32 years. What is the difference between the present age of Seema's father and present age of Seema's son?

- (a) 44 years
- (b) 48 years
- (c) 46 years
- (d) 42 years
- (e) 56 years

Q2. In a factory, producing of an automobile, the parts manufactured on the shop floor are required to go through quality checks, each conducted after a specific part of the processing on the raw material is completed. Only parts that are not rejected at one stage are put through subsequent stages of production and testing. If average rejection rates at these three testing stages during a month are 10%, 5% and 2% respectively, then what is the effective rejection rate for the whole plant?

- (a) 17%
- (b) 15.20%
- (c) 84.80%
- (d) 16.21%
- (e) 1.621 %

Q3. Two partners invest Rs 12500 and Rs 8500 respectively in a business and agree that 60% of the profit should be divided equally between them and the remaining profit is to be divided in the ratio of their capital. If after one year, one partner gets Rs 240 more than the other, find the total profit made in the business.

- (a) Rs. 3250
- (b) Rs. 3150
- (c) Rs. 4050
- (d) Rs. 3550
- (e) Rs. 3450

Q4. A bag contains 4 red balls, 6 green balls and 5 blue balls. If three balls are picked at random, what is the probability that two of them are green and one of them is blue in colour?

- (a)  $\frac{20}{91}$
- (b)  $\frac{10}{91}$
- (c)  $\frac{15}{91}$
- (d)  $\frac{5}{91}$
- (e)  $\frac{25}{91}$

Q5. Two pipes A and B can separately fill a cistern in 60 minutes and 75 minutes respectively. There is a third pipe in the bottom of the cistern to empty it. If all the three pipes are simultaneously opened, then the cistern is full in 50 minutes. In how much time the third pipe alone can empty the cistern?

- (a) 110 minutes

- (b) 100 minutes
- (c) 120 minutes
- (d) 90 minutes
- (e) 95 minutes

Q6. From the 50 litres of milk, 5 litres of milk is taken out and after it 5 litres of water is added to the rest amount of milk. Again 5 litres of mixture of milk and water is drawn out and it was replaced by 5 litres of water. If this process is continued similarly for the third time, the amount of milk left after the third replacement is:

- (a) 45 L
- (b) 36.45 L
- (c) 40.5 L
- (d) 42.5 L
- (e) 44 L



Q7. A started a work and left after working for 2 days. Then B was called and he finished the work in 9 days. Had A left the work after working for 3 days, B would have finished the remaining work in 6 days. In how many days they will finish the whole work if they working together?

- (a) 5 days
- (b)  $15/4$  days
- (c)  $20/3$  days
- (d)  $14/3$  days
- (e) 7 days

Q8. A man undertakes to do a certain work in 150 days. He employs 200 men. He finds that only a quarter of the work is done in 50 days. The number of additional men that should be appointed so that the whole work will be finished in time is:

- (a) 75
- (b) 100
- (c) 125
- (d) 50
- (e) 110

Q9. Two trains A and B of same length start from two opposite points towards each other. The speed of train A is 54 kmph and speed of train B is 72 kmph. After meeting to train A,

train B completes the remaining distance in certain time  $t$ . After meeting B, the distance covered by train A in the given time  $t$  is approximately what percent of total distance between these two trains?

- (a) 26%
- (b) 32%
- (c) 30%
- (d) 36%
- (e) 24%

Q10. How many numbers of four digits can be formed using the digits 2, 3, 5, 4 and 6 which are divisible by 4 without repeating the digits?

- (a) 64
- (b) 32
- (c) 24
- (d) 36
- (e) 60

Q11. A man has three sons. The man can do twice the work of his three sons. The first and the second son can do the work in 24 days and 36 days respectively. If the man completes

the work in  $3\frac{1}{11}$  days. Then find out the time taken by the third person to finish the work? (approximate)

- (a) 13 days
- (b) 14 days
- (c) 18 days
- (d) 11 days
- (e) 17 days

Q12. Ronit when goes to city at a speed of 10 km/hr then he reaches 5 minutes late. But when he goes 15 km/h he reaches 2.5 min earlier. Find the distance between home and the city and at what speed should he travel to reach on time?

- (a)  $3\frac{3}{4}$  km,  $12\frac{6}{7}$  km/h
- (b)  $3\frac{3}{4}$  km,  $11\frac{6}{7}$  km/h
- (c)  $2\frac{3}{4}$  km,  $12\frac{6}{7}$  km/h
- (d) 6 km, 14 km/h
- (e) None of these

Q13. In hotel Landmark, the rooms are numbered from 101 to 130 on the first floor, 221 to 260 on the second floor and 306 to 345 on the third floor. In the month of July 2017, the room occupancy was 60% on the first floor, 40% on the second floor and 75% on the third floor. If it is also known that the room chargers are Rs. 200, Rs. 100 and Rs. 150 on each of the floors respectively, then find the average income per room for the month of July 2017.

- (a) Rs. 151.5

- (b) Rs. 88.18
- (c) Rs. 78.3
- (d) Rs. 65.7
- (e) Rs. 108.18

Q14. The simple interest accrued on an amount Rs. 27,500 at the end of three years is Rs. 10,230. What would be the compound interest accrued on the same amount at the same rate in two years?

- (a) Rs. 7422.84
- (b) Rs. 7242.84
- (c) Rs. 6242.84
- (d) Rs. 9452.84
- (e) Rs. 8452.84

Q15. A man can row a boat in still water at 8 km/h. The time taken by man to row upstream is two hours more than the time taken by him rowing downstream between two points A and B having distance between them 30 km. Find rate of stream is what percent of upstream speed of boat?

- (a) 100/33%
- (b) 100/11%
- (c) 100/3%
- (d) 200/3%
- (e) None of these

**BANKERS**



## Solutions

S1. Ans.(b)

Sol.

Let Seema's present age is  $x$  years.

$$\text{ATQ, } \frac{x + \frac{x}{4} + \frac{7x}{4}}{3} = 32$$

$$\Rightarrow x = 32$$

$$\therefore \text{Required difference} = \frac{7 \times 32}{4} - \frac{32}{4} = 48 \text{ years.}$$

S2. Ans.(d)

Sol. Effective rate of passing through all the three stages =  $100 \times (0.9) \times (0.95) \times (0.98)$   
 = 83.79%

$\therefore$  Effective rate of rejection =  $100 - 83.79$   
 = 16.21%

S3. Ans.(b)

Sol.

(Profit of A) : (Profit of B) = 12,500 : 8,500

= 125 : 85

= 25 : 17

40% of total profit =  $240 \times \frac{(25 + 17)}{(25 - 17)}$

= 1260

$\therefore$  100% profit =  $\frac{1260}{40} \times 100$

= 3150

S4. Ans.(c)

Sol.

Required probability =  $\frac{{}^6C_2 \times {}^5C_1}{{}^{15}C_3}$

=  $\frac{15}{91}$

**BANKERS**

S5. Ans.(b)

Sol.

Let total capacity of tank be 300 units. (LCM)

So, efficiency of pipe A =  $\frac{300}{60} = 5 \text{ units/min}$

Efficiency of pipe B =  $\frac{300}{75} = 4 \text{ units/min}$

Efficiency of pipe A + B + C =  $\frac{300}{50} = 6 \text{ units/min}$

So, efficiency of pipe C =  $6 - 9 = -3 \text{ units/min}$

So, required time =  $\frac{300}{3} = 100 \text{ min.}$

S6. Ans.(b)

Sol.

Milk left =  $50 \times \left(1 - \frac{5}{50}\right) \times \left(1 - \frac{5}{50}\right) \times \left(1 - \frac{5}{50}\right)$

=  $50 \times \frac{45}{50} \times \frac{45}{50} \times \frac{45}{50}$

=  $50 \times \left(\frac{45}{50}\right)^3 = 50 \times \left(\frac{9}{10}\right)^3 = 36.45 \text{ L}$

adda247

S7. Ans.(b)

Sol.

According to the question,

$$2A + 9B = 3A + 6B \Rightarrow A = 3B$$

$\Rightarrow$  Total unit done by A and B

together = 4 unit's

$$\therefore \text{Total work} = 2 \times 3 + 9 \times 1 = 15 \text{ unit}$$

So, work will be finished by A and B

$$\text{together} = \frac{15}{4} = 3\frac{3}{4} \text{ days}$$

S8. Ans.(b)

Sol. let additional required men are x.

ATQ

$$\frac{200 \times 50}{1/4} = \frac{x \times 100}{3/4}$$

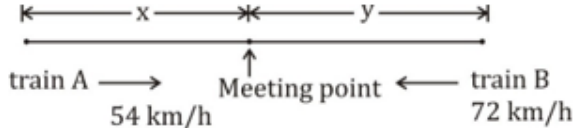
$$x = 300$$

$\therefore$  Additional 100 men are required.

S9. Ans.(b)

Sol.

Let total distance between two trains = d



$$\therefore x + y = d \dots\dots\dots(i)$$

$$\text{And } \frac{x}{54} = \frac{y}{72}$$

$$\Rightarrow y = \frac{4x}{3} \dots\dots\dots(ii)$$

Again, ATQ,

$$t = \frac{x}{72}$$

and distance covered by train A in this time t

$$= 54 \times \frac{x}{72}$$

$$= \frac{3x}{4}$$

From (i) and (ii)

$$d = \frac{7x}{3}$$

$$\therefore \text{Required answer} = \frac{\frac{3x}{4}}{\frac{7x}{3}} \times 100$$

$$\simeq 32\%$$

S10. Ans.(d)

Sol. A number will be divisible by 4 if its last two digits are divisible by 4.

∴ Required possibilities may be  
 -- 24, -- 32, -- 36, -- 52, -- 56, -- 64  
 ∴ Total numbers =  $3 \times 2 \times 6$   
 = 36

S11. Ans.(d)

Sol.

Let third can complete the work in x days.

ATQ

Man's one day's work = 2 × three son's one day's work

$$\Rightarrow \frac{11}{34} = 2 \times \left( \frac{1}{24} + \frac{1}{36} + \frac{1}{x} \right)$$

$$\Rightarrow x \approx 11 \text{ days}$$

## RBI ASSISTANT MAHA PACK

Live Class, Video Course  
Test Series, e-Books

Bilingual

S12. Ans.(a)

Sol.

Let speed of Rohit = x km/h

And actual time to complete required distance = t hours

$$\therefore \left( t + \frac{5}{60} \right) \times 10 = \left( t - \frac{2.5}{60} \right) \times 15$$

$$\Rightarrow 2t + \frac{1}{6} = 3t - \frac{1}{8}$$

$$\Rightarrow t = \frac{7}{24} h$$

∴ Distance between home and city

$$= \left( \frac{7}{24} + \frac{5}{60} \right) \times 10$$

$$= \frac{15}{4} \text{ km}$$

$$\therefore \text{Actual speed} = \frac{\frac{15}{4}}{\frac{7}{24}}$$

$$= \frac{90}{7} \text{ km/h}$$

S13. Ans.(b)

Sol.

Total charge

$$= \frac{60}{100} \times 30 \times 200 + \frac{40}{100} \times 40 \times 100$$

$$+ \frac{75}{100} \times 40 \times 150$$

$$= 3600 + 1600 + 4500$$

$$= 9700$$

$$\therefore \text{Average income per room} = \frac{9700}{110}$$

$$= \text{Rs. } 88.18$$

S14. Ans.(b)

Sol.

$$\text{Rate} = \frac{10230 \times 100}{27500 \times 3}$$

$$= 12.4 \% \text{ per annum}$$

$$\therefore \text{C.I.} = 27,500 \left(1 + \frac{12.4}{100}\right)^2 - 27,500$$

$$= 27,500 \times \frac{164.61}{625}$$

$$= \text{Rs. } 7,242.84$$

S15. Ans.(c)

Sol.

Let rate of stream =  $r$  km/h

ATQ,

$$\frac{30}{8-r} - \frac{30}{8+r} = 2$$

$$\Rightarrow 15(8+r-8+r) = (64-r^2)$$

$$\Rightarrow 30r = 64 - r^2$$

$$\Rightarrow r^2 + 30r - 64 = 0$$

$$\Rightarrow r^2 + 32r - 2r - 64 = 0$$

$$\Rightarrow (r+32)(r-2) = 0$$

$$\therefore r = 2 \text{ km/h}$$

$$\therefore \text{upstream speed} = 8 - 2 = 6 \text{ km/h}$$

$$\therefore \text{Required percentage} = \frac{2}{6} \times 100$$

$$= 33\frac{1}{3} \%$$

**BANKERS**

adda247