STAFF SELECTION COMMISSION – Solved Papers

WORK AND WAGES (Questions Asked in Previous SSC Exams)

1. Suman can do a work in 3 days. Sumati can do the same work in 2 days. Both of them finish the work together and get Rs. 150. What is the share of Suman?

(1) Rs. 30 (2) Rs. 60

(3) Rs. 70 (4) Rs. 75

Ans : 2

Ratio of Suman's and Sumati's 1 day's

$$\text{Work} = \frac{1}{3} : \frac{1}{2} = 2 : 3$$

Sum of the ratios = 2 + 3 = 5

$$\text{Suman's share} = \frac{2}{5} \times 150$$

= Rs. 60

2. The average wage of 500 workers was found to be Rs. 200. Later on it was discovered that the wages of two workers were misread as 180 and 20 instead of 80 and 220. The correct average wage is :

(1) Rs. 200.10

(2) Rs. 200.20

(3) Rs. 200.50

(4) Rs. 201.00

Ans : 2

Total wages of 500 workers

= 500 × 200 = 100000

Now, according to question,

$$? = \frac{(100000 - 180 - 20 + 80 + 220)}{500}$$

$$= \frac{100100}{500} = \text{Rs. } 200.20$$

3. A and B undertook to do a piece of work for Rs. 4500. A alone could do it in 8 days and B alone in 12 days. With the assistance of C they finished the work in 4 days. Then C's share of the money is

(1) Rs. 2250 (2) Rs. 1500

(3) Rs. 750 (4) Rs. 375

Ans : 3

C's 1 day's work

$$= \frac{1}{4} - \left(\frac{1}{8} + \frac{1}{12}\right) = \frac{1}{4} - \left(\frac{3+2}{24}\right)$$

$$= \frac{1}{4} - \frac{5}{24} = \frac{6-5}{24} = \frac{1}{24}$$

$$A : B : C = \frac{1}{8} : \frac{1}{12} : \frac{1}{24}$$

= 3 : 2 : 1

$$\text{C's share} = \text{Rs. } \left(\frac{1}{6} \times 4500\right)$$

= Rs. 750

4. If 6 persons working 8 hours a day earn Rs. 8400 per week, then 9 persons working 6 hours a day will earn per week

(1) Rs. 8400 (2) Rs. 16800

(3) Rs. 9450 (4) Rs. 16200

Ans : 3

More persons, more earning (Direct Proportion)

Less working hour less earning (Direct Proportion)

6 : 9 }

: : 8400 : x,

8 : 6

where x = required earning Therefore,

$$6 \times 8 \times x = 9 \times 6 \times 8400$$

$$\text{or, } x = \frac{9 \times 6 \times 8400}{6 \times 8}$$

= Rs. 9450

5. A alone can do a piece of work in 6 days and B alone in 8 days. A and B undertook to do it for Rs. 3200. With the help of C they completed the work in 3 days. How much is to be paid to C?

(1) Rs. 375 (2) Rs. 400

(3) Rs. 600 (4) Rs. 800

Ans : 2

$$\text{A's 1 day's work} = \frac{1}{6}$$

$$\text{B's 1 day's work} = \frac{1}{8}$$

$$\text{(A + B + C)'s 1 day's work} = \frac{1}{3}$$

$\therefore$ C's 1 day's work

$$= \frac{1}{3} - \frac{1}{6} - \frac{1}{8}$$

$$= \frac{8-4-3}{24} = \frac{1}{24}$$

$\therefore$ Ratio of their one day's work respectively

$$= \frac{1}{6} : \frac{1}{8} : \frac{1}{24} = 4 : 3 : 1$$

Sum of the ratios

$= 4 + 3 + 1 = 8$

$\therefore$ C's share

$= \text{Rs.}\ \frac{1}{8} \times 3200 = \text{Rs.}\ 400$

6. A and B can complete a piece of work in 15 days and 10 days respectively. They contracted to complete the work for Rs. 30,000. The share of A in the contracted money will be :

(1) Rs. 18,000

(2) Rs. 16,500

(3) Rs. 12,500

(4) Rs. 12,000

Ans : 4

A's 1 day's work $= \frac{1}{15}$

B's 1 day's work $= \frac{1}{10}$

Ratio $= \frac{1}{15} : \frac{1}{10} = 2 : 3$

Sum of the ratios

$\therefore$ A's share

$= \text{Rs.} \frac{2}{5} \times 30000$

= Rs. 12000

7. A man and a boy received Rs. 800 as wages for 5 days for the work they did together. The man's efficiency in the work was three times that of the boy. What are the daily wages of the boy?

(1) Rs. 76 (2) Rs. 56

(3) Rs. 44 (4) Rs. 40

Ans : 4

Man : boy = 3 : 1

$\therefore$ Boy's share $= \frac{1}{4} \times 800$

= Rs. 200

$\therefore$ The daily wages of boy

$= \text{Rs.} \left(\frac{200}{5}\right) = \text{Rs.}\ 40$

8. A daily-wage labourer was engaged for a certain number of days for Rs. 5,750; but being absent on some of those days he was paid only RS. 5,000. What was his maximum possible daily wage?

(1) Rs. 125 (2) Rs. 250

(3) Rs. 375 (4) Rs. 500

Ans : 2

It is required to find the highest common factor of 5750 and 5000, because his daily wage is their common factor.

5000) 5750 (1
5000
750) 5000 (6
4500
500) 750 (1
500
250) 500 (2
500
x

Hence, the daily wage is Rs. 250.

9. A, B and C completed a work costing Rs. 1,800. A worked for 6 days, B for 4 days and C for 9 days. If their daily wages are in the ratio of 5 : 6 : 4, how much amount will be received by A?

(1) Rs. 800 (2) Rs. 600

(3) Rs. 900 (4) Rs. 750

Ans : 2

Ratio of wages of A, B and C respectively

$= 5 \times 6 \ : \ 6 \times 4 \ : \ 4 \times 9$

$= 30 : 24 : 36 = 5 : 4 : 6$

$\therefore$ Amount received by A

$= \frac{5}{5+4+6} \times 1800$

$= \frac{5}{15} \times 1800 = \text{Rs.}\ 600$

10. A labourer was appointed by a contractor on the condition that he would be paid Rs. 75 for each day of his work but would be fined at the rate of Rs. 15 per day for his absence, apart from losing his wages, After 20 days, the contractor paid the labourer Rs. 1140. The number of days the labourer abstained from work was

(1) 3 (2) 5

(3) 4 (4) 2

(Ans : 3

Total salary for 20 days

= Rs. (75 × 20)

= Rs. 1500

Actual salary received

= Rs. 1140

Difference = Rs. (1500 – 1140)

= Rs. 360

Money deducted for 1 day's absence from work

= Rs. (15 + 75) = Rs. 90

$\therefore$ Number of days he was

$= \frac{360}{90} = 4 \text{ days}$

11. Two men undertook to do a job for Rs. 1400. One of them alone can do it alone in 7 days, and the other in 8 days. With

the assistance of a boy they together completed the work in 3 days. How much money will the boy get?

(1) Rs. 300 (2) Rs. 325

(3) Rs. 275 (4) Rs. 250

Ans : 3

First man's 1 day's work $= \frac{1}{7}$

Second man's 1 day's work $= \frac{1}{8}$

Boy's 1 day's work $= \frac{1}{x}$

$$\therefore \frac{1}{7}+\frac{1}{8}+\frac{1}{x}=\frac{1}{3}$$

$$\Rightarrow \frac{1}{x}=\frac{1}{3}-\frac{1}{7}-\frac{1}{8}$$

$$=\frac{56-24-21}{168}=\frac{11}{168}$$

$\therefore$ Ratio of their one day's work

$$=\frac{1}{7}:\frac{1}{8}:\frac{11}{168}$$

= 24 : 21 : 11

Sum of the ratios

= 24 + 21 + 11 = 56

$\therefore$ Boy's share in wages

$$=\frac{11}{56}\times 1400 = \text{Rs. } 275$$

12. If 5 men or 7 women can earn Rs. 5,250 per day, how much would 7 men and 13 women earn per day?

(1) Rs. 11,600

(2) Rs. 11,700

(3) Rs. 16,100

(4) Rs. 17,100

Ans : 4

5 men $\equiv$ 7 women

$$\therefore 7 \text{ men} \equiv \frac{7}{5}\times 7 = \frac{49}{5} \text{ women}$$

$\therefore$ 7 men + 13 women

$$=\frac{49}{5}+13=\frac{114}{5} \text{ women}$$

Now,

$\because$ 7 women $\equiv$ Rs. 5250

$$\therefore \frac{114}{5} \text{ women}$$

$$\equiv \frac{5250}{7}\times\frac{114}{5} = \text{Rs. } 17100$$

13. 2 men and 1 woman together can complete a piece of work in 14 days, while 4 women and 2 men together can do it in 8 days. If a man gets Rs. 600 per day, how much should a woman get per day?

(1) Rs. 400 (2) Rs. 450

(3) Rs. 480 (4) Rs. 360

Ans : 1

According to the question,

(2 × 14) men + 14 women

= 16 men + 32 women

$\Rightarrow$ (289 – 16) men

= (32 – 14) women

$\Rightarrow$ 12 men = 18 women

$\Rightarrow$ 2 men = 3 women

$$\therefore 1 \text{ women} = \frac{2}{3} \text{men}$$

$\therefore$ Amount received by 1 woman per day

$$=\frac{2}{3}\times 600 = \text{Rs. } 400$$