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(SECTION - II)

QUESTION # 6B:

$$\text{Original price} = 80 \$$$

$$\text{Discount rate} = 15 \%$$

$$\text{Sales tax} = 10 \%$$

$$\text{Final price} = ?$$

$$\text{Discount amount} = \left(\begin{array}{c} \text{Original} \\ \text{price} \end{array} \right) \times \left(\begin{array}{c} \text{Discount} \\ \text{Rate} \end{array} \right)$$

$$= 80 \times 0.15$$

$$\text{D.A} = 12$$

$$\left(\begin{array}{c} \text{Price after} \\ \text{Discount} \end{array} \right) = \left(\begin{array}{c} \text{Original} \\ \text{Price} \end{array} \right) - \left(\begin{array}{c} \text{Discount} \\ \text{Amount} \end{array} \right)$$

$$= 80 - 12$$

$$\left(\begin{array}{c} \text{Price after} \\ \text{Discount} \end{array} \right) = 68$$

$$\text{Sales tax} = \left(\begin{array}{c} \text{Price After} \\ \text{Discount} \end{array} \right) \times \left(\begin{array}{c} \text{Sale} \\ \text{tax rate} \end{array} \right)$$

$$= 68 \times 0.10$$

Date: ___/___/20

$$\text{Sales tax} = 6.8$$

$$\text{Final price} = \left[\begin{array}{l} \text{price after} \\ \text{Discount} \end{array} \right] + \left(\begin{array}{l} \text{sales} \\ \text{tax} \end{array} \right)$$

$$= 68 + 6.8$$

$$\left(\begin{array}{l} \text{Final} \\ \text{price} \end{array} \right) = 74.8$$

QUESTION NO. 6C:

$$\text{Distance} = 42 \text{ km}$$

$$\text{avg. time} = 36 \text{ km/hr.}$$

$$\text{Travel time} = ?$$

$$\text{Travel time} = \frac{\text{Distance}}{\text{avg. time}}$$

$$= \frac{42}{36}$$

$$\text{Travel time} = 1.1667 \text{ hrs}$$

which is approximately 1 hr and 10 min.

Determine the arrive time.

$$\begin{aligned}\text{Departure time} &= 4 \text{ pm} \\ \text{Arrive time} &= 1 \text{ hr } 10 \text{ min.}\end{aligned}$$

which means

$$\text{Arrive time} = 5:10 \text{ pm}$$

QUESTION # 6A:

$$A : B : C : D = 4 : 7 : 3 : 1$$

which means

$$4x, 7x, 3x, x$$

From the statement, we know:

$$4x = 3x + 50$$

$$4x - 3x = 50$$

$$x = 50$$

Now we can calculate the types of block.

$$4x = 50$$

$$x =$$

QUESTION # 4B:

Role of kidney in Excretion.

The kidney play a crucial role in the excretion process, which involves the removal of waste products and excess substances from the bloodstream.

Functions:

1- Filtration:

Blood enters the kidneys through the renal arteries and is filtered in the nephrons, the functional units of the kidneys.

Each nephron contains a glomerulus, a network of capillaries where blood filtration begins.

2- Reabsorption:

As the filtered fluid, known as filtrate, moves through the tubules of the nephron, essential substances such as glucose, certain ions and

and water are reabsorbed back into bloodstream. This process ensures that the body retains necessary nutrients and maintains electrolyte balance.

3- Secretion:

The tubules also actively secrete additional waste products and excess ions from the blood and excess ions from the blood into the filtrate. This process helps in regulating blood pH and removing substances that are not initially filtered out by the glomerulus.

4- Excretion:

The remaining filtrate, now called urine, consists of waste products like urea, creatinine and excess ions. Urine collects in the ureters and is stored in the bladder until it is excreted from the body through the urethra.