

CLASS XII (COSTING)

TYPES OF REMUNERATION

Piece rate methods

1. Straight piece rate method
2. Taylor differential piece rate method
3. Merrick multiple piece rate method

Straight piece rate method

Total earnings/wages = no of units produced X rate per piece

IN a factory M produced 1600 units, N produces 1000 units and O produces 800 units

Rate per piece is given as ₹1.50

For worker M earnings = no of units produced X rate per piece

$$= 1600 \text{ units} \times ₹1.50 = ₹2400$$

For worker N earnings = no of units produced X rate per piece

$$= 1000 \text{ units} \times ₹1.50 = ₹1500$$

For worker O earnings = no of units produced X rate per piece

$$= 800 \text{ units} \times ₹1.50 = ₹1200$$

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Q.5

Units produced in 8 hours = 480 units

Standard production per hour = 50 units

Wage rate per hour = ₹20.00

Normal piece rate = rate per hour /no of units produced in 1 hour

$$= ₹20/50\text{units} = ₹0.4$$

Wages of kishore kumar = No of units produced X rate per piece

$$= 480 \text{ units} \times ₹0.4$$

$$= ₹192$$

Q6.

Units produced in a day of 8 hours = 2500 units

Standard production per hour = 250 units

Wage rate per hour = ₹150.00

Piece rate = ₹0.60

Wages of hari Prasad = no of units produced X rate per piece

$$= 2500 \times 0.60 = ₹1500$$

Q4.

Rate per piece = ₹15.00

Material cost = ₹45.00

IN 8 hours	rakhal produces 4 units	upendra produces 3 units
In 1 unit	total working hours/units produced	
	$8/4 = 2 \text{ hours}$	$8/3 = 2.7 \text{ hours}$
Over head expenses	$4.50 \times 2 = ₹9.00$	$4.50 \times 2.7 = 12.15$
Material cost	45	45
Wages	15	15
	—————	—————
	69	72.15

Rakhal is efficient than upendra.

Two workers

Sunny & Binny

Standard time to produce 1 unit = 36 seconds

Rate per hour is ₹3.00

Sunny produces 900 units

Binny produces 800 units

Working hours – 8 hours

Standard time to produce 1 unit 36 seconds

In 1 hour no of seconds = 60 x 60 = 3600 seconds

So standard production in 1 hours = 3600/36 = 100 units

Rate per hour = ₹3.00

So normal piece rate = rate per hour/no of units produced in 1 hour

$$= 3.00/100 = 0.03$$

Sunny earnings = no of units produced X rate per piece

$$= 900 \text{ units} \times 0.03 = ₹27.00$$

Binny earnings = no of units produced X rate per piece

$$= 800 \text{ units} \times 0.03 = ₹24.00.$$

Standard time to produce 1 unit = 4 min

Rate per hour = ₹75.00

X produces 600 units

Y produces 720 units

Z produces 900 units

Calculate their earnings.

In 4 min 1 unit produced

So 1 hours no of unit produced = $60/4 = 15$ units

Rate per hour = ₹75

Normal piece rate = rate per hour/no of units produced in 1 hour = $75/15 = ₹5.00$

X earnings = no of unit produces X rate per pice

$$= 600 \times 5 = 3000$$

Y earnings = no of unit produces X rate per pice

$$= 720 \times 5 = 3600$$

Z earnings = no of unit produces X rate per pice

$$= 900 \times 5 = 4500$$

Taylor differential piece rate system

Find out efficiency level of each labour = $\text{Actual Production}/\text{Standard Production} \times 100 (\%)$

<100% then the wages applicable will be 80% of normal piece rate

>=100% then the wages applicable will be 120% of normal piece rate.

Normal ₹10 per piece

80% of ₹10.00

>=100 120% of ₹10.00

Standard production in 8 hours = 48 units

Wage rate per hour = ₹72

X produces 40 units

Y produces 60 units

Calculate the earnings of X and Y under TDPRS.

Standard production in 8 hours = 48 units

So in 1 hour standard production will be = $48/8 = 6$ units

Rate per hour = ₹72.00

Normal piece rate = $72/6 = ₹12$

X

EFFICIENCY = $AP/SP \times 100 = 40/48 \times 100 = 83\%$.

WORKER X EFFICIENCY LEVEL $<100\%$ SO APPLICABLE PIECE RATE WILL 80% OF ₹12 = ₹9.6

EARNINGS = NO OF UNITS PRODUCED x RATE PER PIECE

$$40 \times 9.6 = ₹384$$

Y

EFFICIENCY = $AP/SP \times 100 = 60/48 \times 100 = 125\%$.

WORKER Y EFFICIENCY LEVEL $\geq 100\%$ SO APPLICABLE PIECE RATE WILL 120% OF ₹12 = ₹14.4

EARNINGS = NO OF UNITS PRODUCED x RATE PER PIECE

$$60 \times 14.4 = ₹864$$