1. Standard production @ 20 units per hour, general wage rate ₹ 2.00 per hour, wage rate if work executed below standard : 80% of general rate, wage rate on execution of work equal to standard 120% of general rate; production in 8 hours of one day by Mr. A : 150 units and by Mr. B : 200 units.
   Compute total remuneration payable to Mr. A and B under the Taylor plan.

2. Calculate the earnings of workers A and B under Straight Piece Rate system and Taylor's Differential Piece Rate system from the following particulars :
   Normal rate per hour = ₹ 1.80
   Standard time per unit = 20 seconds
   Differentials to be applied are :
   80% of the piece rate below the standard.
   120% of the piece rate above standard.
   'A' produced 1,300 units per day of 8 hours; and 'B' 1,500 units per day of 8 hours.

3. From the following particulars, calculate the earning of workers X and Y for a day under :
   (a) Straight Piece Rate System; and (b) Taylor's Differential Piece Rate System :
   Standard production = 10 units per hour
   Normal time rate = ₹ 5.00 per hour
   Differentials to be applied :
   80% of piece rate below standard
   120% of piece rate at or above standard
   Hours of the day = 8
   Output X = 75 units
   Output Y = 100 units

4. The following particulars apply to a particular job :
   Standard production per hour = 6 units
   Standard working hours = 8
   Normal rate per hour = ₹ 1.20
   Mohan produced 32 units
   Ram produced 42 units
   Prasad produced 50 units
   Calculate the wage of these workers under Merrick Differential Piece Rate system.

5. The following are the particulars applicable to a process :
   Time Rate = ₹ 8 per hour
   High Task = 200 units per week

In a 40 hour week, the production of the workers was :

A = 180 units; B = 200 units; C = 205 units

Production above standard-high piece rate of ₹ 2.00 per unit.

Calculate the total earnings of each worker under Gantt's Task Bonus system.

6. An employee working under a bonus scheme saves 10 hours in a job for which standard time is 60 hours. Calculate the rate per hour worked and wages payable to him if incentive bonus of 10% on the hourly rate is payable when standard (namely 100% efficiency) is achieved, and a further incentive of 1% on hourly rate for each 1% in excess of that 100% efficiency is payable. Assume that normal rate of payment is ₹ 5 per hour.

7. In a manufacturing concern the daily wage rate is ₹ 2.50. The standard output in a 6 day week is 200 units representing 100% efficiency. The daily wage rate is paid without bonus to those workers who show upto 66⅔% of the efficiency standard. Beyond this there is a bonus payable on a graded scale as below :

80% efficiency – 5% bonus; 90% efficiency – 9% bonus; 100% efficiency – 20% bonus

Further increase of 1% for every 1% further rise in efficiency. In a 6 day week 'A' produced 180 units, 'B' 150 units, 'C' 200 units, 'D' 208 units and 'E' 130 units.

Calculate the earnings of each worker.

8. The standard production in a factory is 10 units per day of 8 hours. The wages is ₹ 6 per day. Bonus rated on efficiency is paid according to a scale as follows :

Level of efficiency	Bonus %
Upto 60% of standard	Nil
Above 60% and upto 75%	5%
Above 75% and upto 90%	10%
Above 90% and upto 10%	15%

For an increase of every 1% efficiency beyond 100% the bonus also rises by 1%. Output of 3 workers on a day was as follows :

'A' – 40 units; 'B' – 75 units; 'C' – 100 units

Calculate the earnings of the workers.

9. Rate per hour = ₹ 1.50

Time allowed for the job = 16 hours

Time taken = 12 hours

Calculate the total earnings of the worker under Halsey Premium Plan. Find out effective rate of earning also.

10. Calculate bonus payable under Rowan plan where time allowed is 24 hours, time taken is 18 hours and time rate is ₹ 20 per hour.

11. A worker produced 200 units in a week's time. The guaranteed weekly wage payment for 45 hours is ₹ 81. The expected time to produce one unit is 15 minutes which is raised further by 20% under the incentive scheme. What will be the earnings per hour of that worker under Halsey (50% sharing) and Rowan bonus schemes ?

12. Calculate the earnings of a worker under : (i) Halsey Plan; and (ii) Rowan Plan from the following particulars :
(1)   Hourly rate of wages guaranteed ₹ 0.50 per hour.
(2)   Standard time for producing one dozen articles = 3 hours.
(3)   Actual time taken by the worker to produce 20 dozen articles = 48 hours.

13. A worker produced 200 units in a week's time. The guaranteed weekly wage payment for 45 hours is ₹ 405. The expected time to produce one unit is 15 minutes which is raised further by 20% under the incentive scheme. What will be the earnings per hour of that worker under Halsey (50% sharing) and Rowan bonus schemes ?

14. The following are the details as regards a worker who worked for Job No. 444 and 555 :

Job No.	**Time allowed**	**Time taken**
444	26 hours	20 hours
555	30 hours	20 hours

His normal basic rate of wages was ₹ 80 per day of 8 hours and his dearness allowance was ₹ 240 per week of 48 hours.
Calculate the amount payable to him :
(1)   On Time Basis
(2)   On Halsey Plan Basis (Bonus at 50% of time saved); and
(3)   On Rowan Plan Basis

15. From the following particulars work out the earnings for the week of a worker under :
(a)   Straight Piece Rate
(b)   Differential Piece Rate
(c)   Halsey Premium System
(d)   Rowan System
Number of working hours per week – 48
Wages per hour – ₹ 3.75
Normal time per piece – 20 minutes
Normal output per week – 120 pieces
Actual output per week – 150 pieces
Differential piece rate – 80% of the piece rate when output is below standard and 120% above standard.

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