C14-M-403

4479

BOARD DIPLOMA EXAMINATION, (C-14)

OCT / NOV-2017

DME-FOURTH SEMESTER EXAMINATION

INDUSTRIAL ENGINEERING

Time : 3 Hours] [Total Marks : 80

PART - A 3 X 10 = 30

Instructions : (1) Answer all questions.
(2) Each question carries three marks.
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
(4) SQC tables are permitted.

1. Define method study and productivity.
2. List out any six therbligs used for constructing SIMO chart.
3. Define time study and rating factor.
4. The observed time for an element is 0.7 mins. The rating factor is 90%.All the allowances put together are 20% of normal time. Calculate the standard time.
5. Define living wages and fair wages.
6. Define the term incentive.
7. Define the term job evaluation.
8. List out the methods of job evaluation.
9. Define the terms quality of design and quality of conformance.
10. List out any three objective of quality control.

PART - B

10 X 5 = 50

Instructions : (1) Answer any five questions

(2) Each question carries ten marks.

(3) Answers should be comprehensive and the criteria for valuation is the content but not the length of the answer.

11. Explain the procedure of method study.

12. Explain flow diagram and string diagram with neat sketches.

13. Explain the procedure of stop watch method for time study.

14. a) Explain any five allowances considered in calculating standard time for an element.

b) List out any five non-financial incentives paid to worker.

15. A management sets the target of completing 72 jobs for each worker. The hourly wage rate is Rs. 2/- and standard time set for each job is 8 hours, but worker would complete the job in 6 hours only. Compute the daily earning on

a) 50-50 Halsey plan

b) Rowan's plan

16. Explain the ranking method of job evaluation. List out two advantages and disadvantages.

17. Using each day production as days sample, draw control chart for fraction defective on the basis of proportion of defective casting produced in 10 days.

Days	1	2	3	4	5	6	7	8	9	10
No of casting Produced	154	152	148	150	154	145	151	154	150	153
No of casting defective	4	2	2	4	3	4	2	2	1	4

18. Explain single sampling plan and double sampling plan.

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