* **4449**

BOARD DIPLOMA EXAMINATION, (C-14)
OCTOBER/NOVEMBER-2018
DME-FOURTH SEMESTER EXAMINATION

INDUSTRIAL ENGINEERING

Time: 3 Hours]   [Total Marks: 80
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PART-A

3X10=30

Instructions :   1. Answer **All** questions.

2. Each question carries **Three** marks.

3. Answer should be brief and straight to the point and shall not exceed

five simple sentences.

1.   What are the advantages of work study.

2.   Draw the flow process symbols.

3.   Define (a) Observed time (b) Standard time.

*   4.   What are the advantages of PMTS?

5.   Write down the techniques of job evaluation.

6.   Define the merit rating.

7.   Define the wages. Write down the types of wage payments.

8.   What are the different types of incentive plans used in industry?

9.   Explain the terms i) quality ii) Control.

10. Explain about two types of variations.

PART-B

Instructions : 1. Answer any **Five** questions.

2. Each question carries **ten** marks.

3. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. (a) What are the therbligs?

(b) Write the name, abbreviation & symbols of 18 therbligs?

12. Draw the operation process chart for repairing of punctured wheel a four wheeler.

13. (a) List out the various methods of time study.

(b) Explain the procedure for the time study by stop watch method?

14. (a) Explain the following (i) Speed rating method (ii) Skill & effect rating.

(b) Distinguish between financial and non financial incentives

15. Explain the step by step procedure for conducting job evaluation.

16. Explain briefly about the following financial incentive plans.

(a) Bedaux premium plan   (b) Rowan Premium plan.

17. Explain about (a) Floor inspection write its advantages and disadvantages.

(b) Centralised inspection write its advantages and disadvantages.

18. The values of sample means and ranges for 10 samples of size 5 each take A= 0.58, D=0, D= 2.11.

Sample no	1	2	3	4	5	6	7	8	9	10
$\overline{X}$	42	49	38	44	45	37	51	46	43	48
R	6	5	5	7	6	5	8	6	4	6

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