KUMARAGURU
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Register Number: ……..

B.TECH DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

Sixth Semester

TEXTILE TECHNOLOGY

TTX204**:** Work Study in Textile Industry

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Calculate the productivity of a garment factory which produces a piece in an average of 10 min. and produces 800 pieces in a shift of 8 hours.

   a) 10.17 b) 16.67

   c) 64 d) 100

2. Excess time more than standard rate of working to complete a job.

   a) Allowance b) Basic work content

   c) Added work content d) Normal time

3. Work study comprises of

   a) Method study + Time study b) Work measurement + Time study

   c) Method study + Work measurement d) Method study + Motion study

4. _____ makes a worker comfortable to make him work with high efficiency.

   a) Work measurement b) Motion study

   c) Method study d) Ergonomics

5. The chart which shows the economic movement of the limbs in improving productivity.

   a) Flow process chart b) Multiple activity chart

   c) Two handed chart d) Cycle graph

6. _____type of layout is preferred for the apparel industry.

   a) Process layout b) Product layout

   c) Fixed position layout d) Combination layout

7. _____ is the application of different techniques to measure and establish the time required to complete the job by a qualified worker at a defined level of performance.

a) Method study
b) Work Measurement
c) Productivity Analysis
d) Production Analysis

8. What PMTS stands for

a) Predetermined motion time standards
b) Predetermined time standards
c) Preliminary motion time standards
d) Preliminary time standards

9. _____is a system to control the logistical chain from a production point of view, and is not an inventory control system.

a) 5 S concept
b) Kaizen
c) Kanban
d) Value analysis

10. Give the expansion for GSD.

a) General sewing description
b) General sewing data
c) Global sewing description
d) Global sewing data

PART B (10 x 2 = 20 Marks)

11. Differentiate production and productivity.
12. Give the significance of inefficient method in excess work content.
13. Relate work study with productivity improvement.
14. State the importance of noise control in improving the working environment.
15. Mention the advantages of string diagram when compared with a flow diagram.
16. Illustrate the process chat symbols and name it.
17. State the importance of normal distribution curve and sigma level in work sampling method.
18. List the various types of ratings that are used in calculation of standard data.
19. List the advantages of bundle progressive system in apparel production.
20. What do you mean by SAM?

PART C (5 x 14 = 70 Marks)

21. a) Elucidate the factors that are affecting the productivity and suggest some of the productivity improvement techniques.

(OR)

b) Discuss about reduction of ineffective time with respect to worker management and supervision.

22. a) Describe the basic procedure of conducting a work study in an industry and list the factors to be considered in conducting it.

(OR)

b) Explain the factors to be considered in providing a good working condition and environment to the workers in view of increasing the productivity. Give suitable example from textile background.

23. a) Find the suitability of rules framed by Gillbirth in concern with the various factors of motion economy.

(OR)

b) (i) Discuss about therbligs and its importance in micro-motion study. (7)

(ii) Explain the importance of SIMO chart and its construction. (7)

24. a) Analyze the work measurement techniques, standard data system and direct time study system for their advantages and suggest a suitable system for apparel industry with justification.

(OR)

b) Identify the suitable operation breakdown to calculate the standard minute value of a specific garment style with production machinery details.

25. a) Assuming the relevant data explain the application procedure of work study in optimizing the workload for automatic and shuttleless loom weavers.

(OR)

b) Compare batch production and line production systems of garment industries and discuss their suitability with respect to quantity of production along with their merits and demerits.

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