Register Number:…………

M.TECH DEGREE EXAMINATIONS: DEC 2015

(Regulation 2014)

Third Semester

APPAREL TECHNOLOGY

P14FTE504: Apparel Production Management

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

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. In the context of the apparel manufacturing, sequence the functions of Production Control   CO1   [K_2]
   1. Line planning
   2. Material Resource Planning
   3. Process selection & planning
   4. Estimating quantity and costs of production

   a) 1-2-3-4   b) 2-3-1-4

   c) 3-4-1-2   d) 4-2-3-1

2. -------- is one of the corrective measures in production control   CO1   [K_1]

   a) Re scheduling   b) Loading

   c) Routing   d) Scheduling

3. Fit samples refers to ------------------ of the garment   CO2   [K_2]

   a) Correct style   b) Correct pattern

   c) Correct color   d) Correct tightness

4. Matching type item with multiple choice code   CO2   [K_3]

List I	List II
A. Rapid prototype	1. estimates operation breakdown, work content, identification of critical operation and sewing line planning
B. Virtual Prototype	2. a visual representation of design by the use of CAD before it is actually produced
C. Approved Sample	3. toile is a model of a garment

	made out of calico
D. Prototype	4. crosscheck if the apparel production is based on preproduction sample

a) A-3 B- 4, C-1, D-2   b) A-4, B-3, C-2, D-1

c) A-4, B-1, C-3, D-2   d) A-3, B-2, C-1, D-4

5. -------emphasizes the relationship between the time each activity takes, the costs associated with each phase of production.   CO3 [K_3]

a) UPS   b) PERT

c) CPM   d) GANTT

6. Which one of the following spreading technique is suitable for two way fabrics?   CO4 [K_3]

a) Face up   b) Zig zag

c) Face to face   d) Face to back

7. Assertion (A): Line Balancing is the art of providing the work to operators to prevent over burdening of operators .   CO5 [K_4]

Reason (R): Line Balancing helps production manager as well as line supervisor

without information.

a) both A and R are individually true but R is not the correct explanation of A   b) both A and R are individually true and R is the correct explanation of A

c) A is false but R is true.   d) A is true but R is false

8. Calculate the garment production per day (@ 100% efficiency) if the sewing operators per team is 12, working hours per day is 8 and the Standard Minutes for T-shirt pattern is 9 minutes.   CO5 [K_3]

a) 420 pieces per day   b) 450 pieces per day

c) 470 pieces per day   d) 530 pieces per day

9. Which of the following statements are true?   CO4 [K_4]

1. The inventory in process costs tend to increase when multi style orders run simultaneously

2. Flow process material chart informs the production of garment.

3. The master flow process grid gives the best production sequence when multi styles are produced

4. Man Machine Ratio (MMR) of a factory is 1:1, when the machine capacity is 500 and the workers utilized are 1000.

a) 1,4   b) 2,3

c) 1,3   d) 2,4

10. If the standard time for developing the full sleeve shirt is 30 mins, calculate the pcs/ machine/ labour?   CO5   [K$_4$]

a) 16 pcs   b) 30 pcs

c) 20 pcs   d) 14pcs

PART B (10 x 2 = 20 Marks)

11.	Distinguish between production control and production planning.	CO1	[K$_1$]
12.	Mention any four strategies for improving productivity in an apparel Industry	CO1	[K$_2$]
13.	State the functions of production planning and control in an apparel industry	CO2	[K$_2$]
14.	Give a short note on GANTT chart and its applications	CO3	[K$_2$]
15.	State the importance and need for creative designs in getting export orders.	CO4	[K$_3$]
16.	What are the considerations in selection of a process chart?	CO4	[K$_3$]
17.	Write about the importance of backlog graph in production system	CO3	[K$_3$]
18.	How the alignment of plies affects the fabric consumption in lay making?	CO4	[K$_4$]
19.	State the purpose of bundling and ticketing	CO4	[K$_3$]
20.	Enlist the factors to be considered in selecting machinery for a new factory?	CO5	[K$_4$]

PART C (6 x 5 = 30 Marks)

21.	Elaborate on the importance and distribution of documents and records for production control	CO1	[K$_2$]
22.	Explain the method of analyzing production with respect to quality and quantity.	CO2	[K$_3$]
23.	Describe the production preplanning processes carried out before execution of an order	CO2	[K$_2$]
24.	Discuss in detail about the scheduling charts with suitable examples	CO3	[K$_3$]
25.	Compose the strategies involved in the cut order planning for any two sizes of garments with equal and differing order quantity.	CO4	[K$_5$]

26. A single head embroidery machine takes 20 mins to process a job. Efficiency of the embroidery machine is 80% and waste is 20%. The desired output is 610 pieces per week. Consider 48 hours per week. Determine the number of machines required.   CO5 [K5]

PART D (4 x 10 = 40 Marks)

27. Explain in detail about the steps involved in creating real designs through rapid and virtual prototype models. Give an example for each level.   CO2 [K4]

28. Explain briefly about the working principle of whole garment production systems employed in a large scale knit wear industry   CO3 [K4]

29. Discuss in detail about the importance, types of network modules and its specific applications in apparel industry   CO3 [K4]

30. Elucidate about the different types of spreads and spreading machines used in the production of apparels.   CO4 [K2]

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