KUMARAGURU
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Register Number: ……..

B.TECH DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

Sixth semester

FASHION TECHNOLOGY

FTY115 : Apparel Production Planning and Control

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

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Lead time means

   a) Best season for mass production
   b) Time taken to Process the Garment
   c) Time from confirmation to shipping the order
   d) Time taken for sewing

2. Which is wrong statement?

   i) Specifications are drafted by ISO and AATCC

   ii) Proto sample is the first sample.

   iii)For each new style, specification sheet is to be created

   iv)Labdip approval is required before bulk production

   a) i
   b) iii
   c) ii
   d) iv

3. U Shaped layout is suitable if

   a) cutting and finishing is on either end of sewing line
   b) Frequent style changes are in line
   c) Supply and finishing of materials are done in same place
   d) Parts are produced in line

4. ----------layout is preferred for mass production.

   a) Product
   b) Process
   c) Vertical
   d) Group

5. Match list I with list II

List I	List II
A. Spreading	1. process of printing pattern pieces on paper
B. Plotting	2. the process of determiningthe most efficient layout of pattern pieces for aspecified style, fabric, and distribution of sizes
C. Marker planning	3. processes of superimposing lengths of fabric

	A	B	C
(a)	2	3	1
(b)	1	2	3
(c)	2	1	3
(d)	3	1	2

6. Longer throughput time,large inventory, extra handling , poor quality concealed are problems of ----------production system
   a) PBS b) JIT
   c) UPS d) MODULAR
7. Assertion: Inventory of materials should not be more
   Reason: Holding cost is more than purchasing cost
   a) both A and R are individually true and R is the correct explanation of A b) both A and R are individually true but R is not the correct explanation of A
   c) A is true but R is false d) A is false but R is true
8. The software based production planning and inventory control system is----------
   a) MRP b) OPT
   c) JIT d) CPM
9. _____ is maintaining the same level of inventory in every work station at any point of time
   a) Capacity planning b) Economic order quantity
   c) Line balancing d) Plant loading
10. If SAM is 25 and 25 operators are working, target per hour will be
    a) 480 b) 50
    c) 60 d) 625

PART B (10 x 2 = 20 Marks)

11. Differentiate proto sample and photo sample
12. Differentiate allowance and tolerance
13. Which type of layout is suitable for garment manufacturing? Why?
14. What do you mean by back tracking?
15. Enlist different types of spreads
16. Where do Modular manufacturing system is suitable?
17. Differentiate JIT and OPT
18. State the application of CPM &PERT in apparel manufacturing
19. What is skill matrix?
20. If SAM is 0.45 min, Calculate number of pieces to be stitched in 8hrs of shift

PART C (5 x 14 = 70 Marks)

21. a) Enlist the different samples submitted to buyer by apparel manufacturer. Explain the importance of each sample and suggest methods to get quick approval.

(OR)

b) With suitable example, explain the contents of specification sheet used in Apparel industry

22. a) Suggest a suitable layout for a new Garment manufacturing company with neat sketches. Justify the features of your layout.

(OR)

b) (i) Write about the method of determination of minimum space requirement.

(ii) Compare product layout and process layout.

23. a) Compare Progressive bundle system and unit production system .interms of manpower, production, productivity and quality

(OR)

b) Calculate the minimum number of lays required to cut the fabric using the following data

Size ratio	S	:	M	:	L	:	XL
Black	1000	:	2000	:	2000	:	1000
White	1750	:	1500	:	1500	:	1250

Maximum lay height – 60 plies

Maximum number of garments marked in the lay length – 15 garments.

If number of plies is reduced to 50, calculate number of garments to planned in single lay.

24. a) Explain the backlog graph with and without bottleneck problems

(OR)

b) Why material management is important in Garment manufacturing Indutry. Highlight different material management techniques.

25. a) For an operator working in sewing floor, if SAM is 0.50 min, calculate

i)Target at 100% efficiency for a shift of 8 hrs

ii)Capacity per day if actual efficiency is 75%

iii)Capacity per hour

(OR)

b) Operation and time required for each machine in a sewing line is given as follows .Calculate the total number of units produced per hour and per 8hr shift. Calculate the number of machines required to balance the line to produce the target of 192pcs/shift.

OPERATION	TIME REQUIRED FOR ONE UNIT
1	15min
2	20min
3	30 min

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