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Hong Kong Institution of Textile and Apparel

ADVANCED DIPLOMA IN APPAREL STUDIES AND MERCHANDISING

Examination Paper

1ST Term 2015

Module Name: Apparel Production and Management

Module Code: 750

Date: 7 Mar 2015

Time Allowed: **3** hours

Reading Time: **15** minutes

Examination Time: 2:45pm – 5:45pm

This question paper has **3** pages (including this page).

INSTRUCTION TO CANDIDATES:

- This paper has **EDIGHT (8)** questions.
- Answer any **FIVE (5)** questions
- All questions carry equal marks.

The following tools with an asterisk (*) are NOT ALLOWED in the examination:

- Paperback Dictionary *
- Electronic Dictionary *
- Open Book Examination Material *
- Programmable Calculator *

DO NOT TURN OVER THE PAGE UNTIL YOU ARE TOLD TO DO SO

Question 1

(a) What is “Preventive Maintenance”? **(30 %)**

(b) List 7 (seven) factors being considered in choosing machinery and equipment in apparel manufacturing. Explain your answer. **(70 %)**

Question 2

Describe the systems and their main features.

(a) The progressive Bundle system, and **(50 %)**

(b) The Conventional Bundle System. **(50 %)**

Question 3

Discuss the advantages & disadvantages of using the following cutting equipment in the clothing factory.

(a) Band knife **(50 %)**

(b) Die cutter **(50 %)**

Question 4

(a) Describe briefly the main purposes of the “operation breakdown.” **(50 %)**

(b) Discuss 5 (five) factors that may govern the extent of operation breakdown. **(50 %)**

Question 5

(a) State the objectives of “Line-balancing” techniques in garment manufacture. **(60 %)**

(b) Refer to the following data provided, answer the questions below.
Product: Blouse
Production Target: 2,400 pieces.
Production Time: 8 hours (480 Standard minute)

	Operation	Standard time /garment (min)
1.	Sew Collar	1.5
2.	Join shoulder	0.48
3.	Sew collar	0.96
4.	Make sleeve	0.51
5.	Set in sleeve &close side seam	1.2
6.	Set in collar	1
7.	Hem bottom	0.46
8.	Button holing	0.53
9.	Button sewing	0.51

i) How many operators should be assigned to each operation for producing 2,400 blouses per working day ? **(20 %)**

ii) Calculate the "cycle time". **(20 %)**

Question 6

What are the objectives of Work Measurement techniques. **(100 %)**

Question 7

(a) Discuss 5 (five) factors that may contribute to the choice of a proper material handling system. **(50 %)**

(b) State the advantages of an effective material handling system. **(50 %)**

Question 8

Refer to the cutting order provided:

Size		36	38	40	42	44
Quantity		200	300	400	350	150
Marker	length (1 gmt.)	2.0 m	2.2m	2.4m	2.5m	2.6m

Information relevant to cost and possible savings is given below:

	1 gmt. lays	2 gmt. lays	3 gmt. lays	4 gmt. laus
Spreading time/lay	0.75 min	0.9 min	1 min	1.2 min
Marker preparation time	0.75 hr.	1 hour	1.5 hr.	2 hours

Fabric costs:	$ 60 per meter
Cutting time per garment marked:	30 mins.
Maximum cutting height:	100 plies
Maximum garments per marker:	4
Labour cost:	$ 60 per hour
End allowance:	4 cm. per ply

Fabric consumption saving on multi-garment or multi-size marker is 5%.

(a) With reference to size 40, compare the total cost on economic of cutting. **(30 %)**

i) A shallow lay using multi-garment market, &
ii) A deeper alay using a single garment marker.

(b) Calculate the total cutting room cost using an economic lay cut plan. **(70 %)**

- END -