#### ADVANCED DIPLOMA IN APPAREL STUDIES AND MERCHANDISING

# **Examination Paper**

1<sup>st</sup> Term, 2017

**Apparel Production and Management** 

| Module Code:  | 750         |
|---------------|-------------|
| Date:         | 17 Mar 2017 |
| Time Allowed: | 3 hours     |

Examination Time: 7:15pm – 10:15pm

15 minutes

Module Name:

Reading Time:

This question paper has <u>6</u> 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**

State and describe in detail the factors that will affect the material utilization in the cutting  $(\underline{100} \%)$  room.

#### **Question 2**

- (a) What are the factors that will be considered when choosing machineries and (70 %) equipment?
- (b) What is "Preventive Maintenance"? (30 %)

## **Question 3**

Describe the advantages and disadvantages of using the following cutting equipment in the clothing factory.

(a) Die cutter (25 %)

(b) Band knife (25 %)

(c) Circular cutter (25 %)

(d) Straight knife (25 %)

#### **Question 4**

Describe in detail the objectives of work measurement techniques. (100 %)

## **Question 5**

(a) A new blouse factory is set up and the production target is 1,000 blouses a day. The working day is 8 hours. (480 SMV)

Each operation SMV is as follow.

| operations                           | Standard minutes/garment(SMV) |  |  |
|--------------------------------------|-------------------------------|--|--|
| 1. Set pocket                        | 3.1                           |  |  |
| 2. join shoulder                     | 1                             |  |  |
| 3. set collar                        | 2                             |  |  |
| 4. make sleeve                       | 1.1                           |  |  |
| 5. set in sleeve and close side seam | 2.5                           |  |  |
| 6. setin collar                      | 2.1                           |  |  |
| 7. hem bottom                        | 0.95                          |  |  |
| 8. button holing                     | 1.1                           |  |  |
| 9. Button sewing                     | 1.05                          |  |  |

- i) How many operators are required to meet the production target?
  ii) Explain how you would balance the line?
  (20 %)
- (b) Explain briefly the reasons of the line-balancing techniques. (60 %)

## **Question 6**

You are required to cut the following order by using the following information.

| Size                | 30  | 32  | 34  | 36  | 38  |
|---------------------|-----|-----|-----|-----|-----|
| Quantity            | 100 | 150 | 200 | 175 | 75  |
| Marker length       | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 |
| (single garment)(M) |     |     |     |     |     |

|                          | 1 gmt.    | 2 gmt.   | 3 gmts.   | 4 gmts.  |
|--------------------------|-----------|----------|-----------|----------|
| Spreading time per ply:  | 0.75 min. | 0.8 min. | 0.85 min. | 0.9 min. |
| Marker preparation time: | 0.5 hr.   | 0.75 hr. | 0.9 hr.   | 1 hr.    |

| Fabric cost:   | \$ 80 per meter |  |
|--|-----------------|--|
| Cutting time per garment marked:                           | 15 minutes      |  |
| Maximum lay height   | 100plies        |  |
| Maximum garment per marker                                 | 4               |  |
| Labour cost:   | \$ 60 per hour  |  |
| End wastes:  | 5 cm. per ply   |  |
| Cloth saving on a multi-size or multi-garment marker is 5% |                 |  |

Calculate the total cutting room cost using an economical lay planning.

(<u>100</u> %)

## **Question 7**

What are the factors that you will consider when you select a proper Material Handling (100 %) System in sewing room.

# **Question 8**

(a) State the key operation of the F.O.F. handling system and its advantages. (60 %)

(b) What are the main purpose of operation break down. (40 %)