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TEVETA
Technical Education, Vocational and Entrepreneurship Training Authority

DIPLOMA IN PRODUCTION AND OPERATIONS MANAGEMENT

LEVEL 6 YEAR III EXAMINATIONS

FINAL INTEGRATED SUMMATIVE EXAMINATIONS

SITTING: JULY/AYGUST 2026

SUBJECT: QUALITY MANAGEMENT

TIME ALLOWED: 3 HOURS **TOTAL MARKS: 100**

PASS MARK: 50

INSTRUCTIONS TO CANDIDATE:

1. Write your examination number and National Registration Card number on the answer booklet provided. Ensure to append your signature in the answer space provided on the answer booklet.
2. Write your answer SCRIPT SERIAL NUMBER on the examination register and on the entry slip provided.
3. There are Seven (7) questions in this paper.
4. Question One (1) is compulsory.
5. Attempt any other Four (4) questions of your choice from the remaining Six (6).
6. All questions carry equal marks.
7. Programmable calculators and cellular phones are not allowed in the examination room.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

QUESTION 1 (COMPULSORY)

a) Suppose that an average of 10% of the components of the factory is defective in a sample size of 8, what is the probability of 3 defectives? (4 marks)

b) Distinguish between Normal Inspection and Reduced Inspection. (4 marks)

c) With the aid of diagrams, explain the following techniques:

i) Ishikawa diagram. (4 marks)

ii) Histogram. (4 marks)

iii) EFQM Excellence Model. (4 marks)

Total (20 marks)

QUESTION 2

a) Describe **four (4)** techniques of Benchmarking. (8 marks)

b) Outline three (3) main objectives of the Toyota Production System. (4 marks)

c) Explain **four (4)** types of inspection. (8 marks)

Total (20 marks)

QUESTION 3

a) State **two (2)** determinants of a quality service. (4 marks)

b) Outline **nine (9)** steps taken in implementing ISO 9001:2008. (9 marks)

c) Describe the procedure of attaining quality assurance. (7 marks)

Total (20 marks)

QUESTION 4

a) Outline **four (4)** kinds of waste addressed by lean production. (4 marks)

b) Describe **four (4)** costs of quality which influence profitability and growth of businesses. (8 marks)

c) Explain **four (4)** principles of quality circles. (8 marks)

Total (20 marks)

QUESTION 5

a) Define 'Quality Auditing'. (2 marks)

b) State **six (6)** principles formulated by Deming as cures for the "seven deadly diseases" of management in ensuring that organizations remain competitive in the long term. (6 marks)

c) Explain **four (4)** important stages in a Quality Auditing Programme. (12 marks)

Total (20 marks)

15

QUESTION 6

a) Differentiate quality policy from quality objectives. (4 marks)

b) State **three (3)** features of a quality product. (6 marks)

c) Explain **five (5)** reasons quality has become more pronounced today than it was a century ago. (10 marks)

Total (20 marks)

QUESTION 7

a) State **four (4)** precautions and preparations that should be put in place before introducing Operator Control in the Production Department. (4 marks)

b) With the aid of an example in each case, explain **four (4)** types of quality (8 marks)

c) Distinguish between the following:

i) Quality Design and Quality Conformance (4 marks)

ii) 1st Tier quality manual and a 3rd Tier quality manual (4 marks)

Total (20 marks)