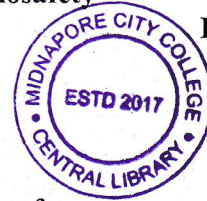


The West Bengal University of Health Sciences
B.Sc. in Medical Microbiology 3rd Semester May - June, 2023
Examination

Subject : Laboratory, TQM, Ethics and Biosafety

Time : 2 hrs.

Attempt all questions



Full Marks : 50

1. Tick the correct answer :

10 x 1

- a) Which of the following is a principle of TQM?
 i) Product-centered system. ii) Customer-focus.
 iii) Intermittent improvement. iv) Decisions made by top executives only.
- b) Quality management requires :
 i) ISO 9000 certification. ii) Workers not working overtime.
 iii) Printing promotional brochures. iv) Keeping internal customers satisfied.
- c) Two major components of fitness of use are, first is Quality of Design and second is _____.
 i) Quality of Conformance. ii) Quality of Service.
 iii) Quality of Specification. iv) Quality of Manufacturing.
- d) How are principles of management formed?
 i) In a laboratory. ii) By experiences of management.
 iii) By experiences of customers. iv) By propagation of social scientists.
- e) Calibration cost carried in company is :
 i) Overhead cost. ii) Prevention cost. iii) Appraisal cost. iv) Marginal cost.
- f) The Deming's P-D-C-A cycle, is a process of :
 i) Problem-solving process. ii) Innovation-process.
 iii) Involvement-process. iv) Distribution.
- g) The full name of ISO is _____.
 i) Indian Standard of Organization. ii) International Standard of Organization.
 iii) Institute of Standardization –Organization. iv) International Standardization –Organization.
- h) Problem solving begins with :
 i) Team discussions. ii) SPC. iii) Design of experiments. iv) Problem identification.
- i) Individuals who have no role in quality management :
 i) Teachers in universities. ii) Government regulators.
 iii) Workers. iv) ISO 9000 trainers.
- j) Precision in production means :
 i) Workers are well-trained. ii) Hi-tech equipment is used.
 iii) Instruments are kept clean. iv) Parts produced have little or no variation.

2. Answer **any four** of the following questions :

4 x 2

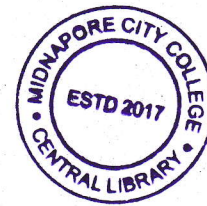
- a) Write down the basic features of Total Quality Management.
 b) What are the major dimension of product quality?
 c) What is cusun chart? Write down it's significance.
 d) What is laboratory ethics of bio-safety?
 e) Write how to make a good reliable & authentic laboratory report.

P. T. O.

3. Write short notes on (*any four*) :

4 x 4

- a) PDCA cycle.
- b) Safety equipments used in laboratory.
- c) IEC.
- d) Decontamination & disposal of laboratory hazardous material.
- e) Chemical & radiation safety in laboratory.
- f) Write down Laboratory Bio-safety level. Criteria (BSL) 1- IV.



4. Answer *any two* of the following questions :

2 x 8

- a) Write the rules of ISO standards for Bio-safety.
- b) Write about 5Q model of Laboratory management.
- c) Briefly write about the Handling, transfer and shipment of laboratory specimen.