

HARARE INSTITUTE OF TECHNOLOGY
TECHNOLOGY EDUCATION CENTRE
TLC230: RESEARCH AND DEVELOPMENT
METHODOLOGIES
END OF SEMESTER II PART IV EXAMINATIONS

Time: 3 Hours

Date: May 2012

INSTRUCTIONS TO CANDIDATES

Answer **THREE (3)** questions, one from each of the sections A, B and C

All questions carry 25 marks

Start a new question on a separate sheet of paper

Credit will be given for examples drawn from candidate's area of specialization

Section A

Question 1

In industry, research and development (R & D) are two intimately related processes. Discuss.

Question 2

Innovations of new products and new processes start from laboratory ideas to market introduction. Assess the relevance of this assertion

Section B

Question 3

Innovation is the application of an invention to a significant market need. Justify or refute this assertion with reasons.

Question 4

In modern industrial R & D basic or "pure research" is usually not entirely pure. Discuss.

Section C

Question 5

A research design reflects a researchers' world outlook, strategies of inquiry and specific methods. Discuss.

Question 6

Explain why high technology companies such as computer manufacturers or pharmaceuticals invest more in R & D.

END OF EXAMINATION