

92

Programme: MScTE 2-Yr, 3rd Sem.

Date: 03 October 2023, Tuesday (Afternoon)

Time: 02:30 PM – 04:00 PM

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION (TVE)

Mid Semester Examination

Course No: TVE 6371

Course Title: Systems approach in Technical Education

Winter Semester (2022-2023)

Time : 90 Minutes.

Full Marks : 75

There are 4 (four) questions. Answer any 3 (three).
Figures in the right margin indicate marks of the questions.

- (a) What is systems approach? Describe in detail the major steps involved in systems approach. 10

(b) Define the concepts of systems analysis. How does it work in an educational organization? 10

(c) Briefly outline the main steps involved in systems analysis. 5
- (a) 'Systems approach is an inter-disciplinary approach'. Explain the statement. 05

(b) Write the common characteristics of an organization. Explain briefly the key elements of an organization. 10

(c) With a diagram explain how organization acts as a system with interrelated subsystem. 10
- (a) Explain briefly the concept of Ergonomics. How does Ergonomics work as a systems approach? 10

(b) What are the essential principles of systems engineering? 5

(c) Discuss briefly the advantages and disadvantages of Ergonomics within a systems approach. 10
- (a) Explain with a diagram the organization as a composite of 'strategic, coordinating, and operating subsystems. 15

(b) Discuss briefly the functions of boundary-spanners or BRP with a suitable example in terms of Technical Education. 10