

# Main Exam

## FIRST YEAR, SECOND SEMESTER EXAMINATION FOR THE POST GRADUATE DIPLOMA IN EDUCATION

### ECG 4170: METHODS OF TEACHING TECHNICAL SUBJECTS

**DATE: December 2022**

**TIME: 2 HOURS**

**INSTRUCTIONS:** Answer **Question ONE** and any other **THREE Questions**

#### **QUESTION ONE (24 MARKS)**

- a. Explain the meaning of the following terms
  - i. Education Technology (1 mark)
  - ii. Competency-Based Education (1 mark)
- b. Outline three reasons for ICT integration in technical training and learning (3 marks)
- c. Highlight any four characteristics of a good STEM lesson (4 marks)
- d. Explain four factors that a technical trainer should consider when selecting suitable instructional materials for a technical lesson. (4 marks)
- e. Outline any four contributions of the industry towards the formulation of Competency Based Curriculum in Kenya (4 marks)
- f. Outline any three core functions of KNEC in testing and evaluation of trainees (3 marks)
- g. State two benefits of each of the following documents to a trainer
  - i. Syllabus (2marks)
  - ii. Record of work covered (2 marks)

#### **QUESTION TWO (12MARKS)**

- a. Outline three objectives of Educational Technology (3 marks)
- b. Using a sub-topic in your subjects of specialization, make a 1 hour lesson plan (9 marks)

#### **QUESTION THREE (12 MARKS)**

- a. Outline four differences between traditional Education System Approach & Competency Based Approach. (4 marks)
- b. Explain four factors a technical trainer should consider when choosing appropriate method of teaching (4 marks)
- c. Explain two benefits of micro-teaching to a teacher trainee. (4 marks)

#### **QUESTION FOUR (12 MARKS)**

- a. Outline six factors that a technical trainer should put into consideration when developing a schemes of work. (6 marks)
- b. Explain the following principles of generating scientific knowledge (6 marks)
  - i. Theory
  - ii. Hypothesis
  - iii. Verifiability

**QUESTION FIVE (12 MARKS)**

- a. Giving examples, Explain the following types of assessment in education (6 marks)
- i. Formative assessment
  - ii. Summative assessment
  - iii. Diagnostic assessment
- b. Problem based learning method of giving instructions is useful in technical teaching and learning. Analyze the steps for carrying out problem based learning during a technical lesson (6 marks)