# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

## FACULTY OF INDUSTRIAL TECHNOLOGY

## DEPARTMENT OF TECHNICAL TEACHER EDUCATION

Programme: BACHELOR OF EDUCATION HONOURS DEGREE

SUPPLEMENTARY EXAMINATION: THEORY

Course: Applying Educational Technology Part: I Time: 3 hours Lecturer : N Phuthi TTE1213 JULY 2011 100 marks

## DIRECTIONS AND INFORMATION FOR CANDIDATES

- 1. Answer **Question 1** and any **THREE** others.
- 2. All questions carry equal marks.
- 3. Questions may be written in any order but each question/sub-question must be clearly numbered.
- 4. Begin each question on a fresh page and parts of the same question must be together.
- 5. Show all working on the answer book, no part of the question paper should be handed in.
- 6. This paper consists of two printed pages.

### **QUESTION 1**

Fig. Q1 shows Dale's cone of experience.

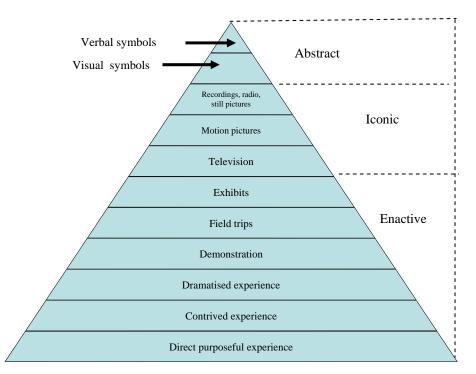


Fig. Q1 : Dale's cone of experience

- (a) Justify the position in the hierarchy of any **three** of the media shown in the diagram. [9]
- (b) Explain, giving examples, why it is often much easier for teachers to use media in the abstract and iconic levels of the cone in most classroom situations. [16]

#### **QUESTION 2**

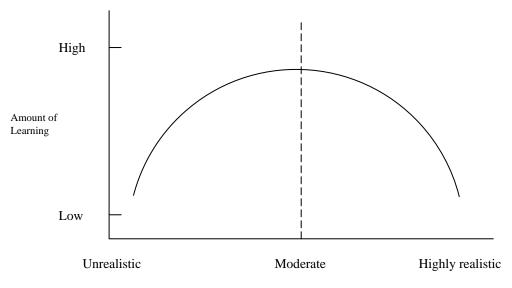
Give a comprehensive account of the four generations of instructional media. [25]

#### **QUESTION 3**

- (a) "Experience is the best teacher" Discuss. [12]
- (b) "The best way to learn something is to teach it to someone else". Comment on the validity of this statement. [13]

#### **QUESTION 4**

Fig Q4 shows the effect of realism on the amount of learning in a given situation.



#### **Degree of realism**



- (a) What is the message being portrayed here about the use of real life situations as learning resources? Explain the graph as accurately as possible. [10]
- (b) Discuss the difference between adults and children in their use of prior experience as an aid to learning. [15]

#### **QUESTION 5**

Create an eight-slide PowerPoint presentation on the topic: Planning for a difficult lesson. [25]

### **QUESTION 6**

Read the passage below and answer the questions after it:

Instruction is the arrangement of information to produce learning. The transfer of information from a source to a receiver is called communication. Because new learning usually depends on taking in new information, effective instruction cannot take place unless communication takes place. It is, therefore, helpful to know something about the communication process if we are to use instructional media effectively.

- (a) Define *instructional design* and link it to instructional media. [5]
- (b) Use one model of communication to explain how new information can be effectively transferred from a source to a receiver. [20]

## END OF EXAMINATION PAPER