

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF POSTGRADUTE DIPLOMA IN
EDUCATION**

PGDE 753: METHODS OF TEACHING CHEMISTRY

STREAMS: PGDE (SB)

TIME: 2 HOURS

DAY/DATE: FRIDAY 06/12/2019

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS:

- Answer question **ONE** and any other **TWO** questions.
- Do not write on the question paper.

QUESTION ONE (COMPULSORY)

- (a) Describe six main aims of teaching chemistry at secondary school level. (6 marks)
- (b) Discuss five instances when teacher demonstration would be the most appropriate method of teaching experimental work in chemistry. (5 marks)
- (c) By use of relevant examples in chemistry subject, differentiate between deductive and inductive approaches of teaching. (4 marks)
- (d) Discuss five limitations of using practical work to teach chemistry subject. (5 marks)
- (e) Discuss the limitations of using resources in chemistry teaching and ways in which these limitations can be overcome. (10 marks)

QUESTION TWO

- (a) Explain why a teacher should write or modify a scheme of work instead of using commercially available scheme of work for teaching chemistry. (5 marks)
- (b) Explain the value of the following in teaching chemistry (10 marks)
- The chemistry syllabus
 - Lesson plan

QUESTION THREE

- (a) Explain the importance of instructional objectives in the teaching of chemistry. (5 marks)
- (b) Describe 5 types of test formats used in assessing learner achievement in chemistry. (10 marks)

QUESTION FOUR

- (a) Discuss the qualities of a good atomic model for use in chemistry teaching. (5 marks)
- (b) Describe 5 basic fittings in a chemistry laboratory and explain the use of each. (10 marks)

QUESTION FIVE

You are required to teach a lesson on the topic preparation of salts to a group of form TWO learners. Describe the process you would follow to achieve your objectives through use of class experiment. (15 marks)
