Instructions:

1. Answer all the questions in Section A and ANY other 2 questions in Section B.
2. Candidates are advised not to write on the question paper.
3. Candidates must hand in their answer booklets to the invigilator while in the examination room.
SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. List the advantages of rain water harvesting (3 marks)
2. Briefly explain the criteria for selection of excreta disposal method
3. Describe any three advantages of rain water harvesting
4. Briefly explain the following concepts in community water supply (3 marks)
   a) Water ethics (1 mark)
   b) Ecological sanitation (1 mark)
   c) Water hierarchy (1 mark)
5. State any three roles of the state in water supply (3 marks)
6. Enumerate the effects of water pollutants on health (3 marks)
7. Briefly explain any three key intervention of water based diseases (3 marks)
8. State any three limitations of using pipes in water supply (3 marks)
9. State any three benefits of community participation in community water supply
10. State any three basic requirements of drinking water (3 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

11. a) Discuss the Community factors you will consider in selecting water technology (10 marks)
    b) Kenya is ranked as a water scarce country. Discuss the causes of water scarcity in Kenya (10 marks)
12. a) As an officer posted to county X currently experiencing high prevalence of water borne diseases, discuss the strategies you will put in place to control the problem (10 marks)
    b) With the aid of a diagram explain the hierarchy of water requirements (10 marks)
13. a) Discuss the hydrological cycle (10 marks)
    b) Discuss the government’s strategy for promoting integrated water resource management (10 marks)
14. a) Discuss the challenges facing the water and sanitation sector in Kenya (10 marks)
    b) Discuss any 2 conventional methods of water treatment (10 marks)