



UNIVERSITY OF EMBU

2016/2017 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

THIRD YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
MANAGEMENT OF AGROECOSYSTEMS AND ENVIRONMENT AND BACHELOR
OF SCIENCE IN WATER RESOURCES MANAGEMENT

AEM 302: PRINCIPLES OF ENVIRONMENTAL PROJECT PLANNING AND
MANAGEMENT

DATE: APRIL 6, 2017

TIME:11:00AM-1:00PM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

QUESTION ONE

- a) Explain the following terms.
 - i) Project appraisal. (1 mark)
 - ii) Decision analysis. (1 mark)
 - iii) Gantt chart. (1 mark)
 - iv) Project charter. (1 mark)
 - v) Project scope. (1 mark)
- b) Outline the process of project appraisal. (5 Marks)
- c) Explain the importance of project planning. (5 Marks)
- d) With the aid of a diagram, explain the work breakdown structure for a road construction project. (5 marks)
- e) State five inputs that should be taken into consideration when assessing the technical feasibility of a project. (5 marks)
- f) Discuss the critical path analysis project planning technique. (5 Marks)



QUESTION TWO

- a) With the aid of a diagram, explain the project cycle. (10 Marks)
- b) Describe briefly the project management process groups. (10 Marks)

QUESTION THREE

- a) Discuss the main elements of a project scope. (10 marks)
- b) Explain five methods of project appraisal. (10 marks)

QUESTION FOUR

- a) Discuss the main stages of Project Risk Management Plan. (10 marks)
- b) Explain the scoping process in environmental impact assessment. (10 marks)

QUESTION FIVE

- a) Discuss the key quality factors for long-term sustainability of projects. (10 marks)
- b) Describe the use of indicators in assessing the performance of a project. (10 Marks)

END