The Management University of Africa

Sponsored by the Kenya Institute of Management

POST GRADUATE UNIVERSITY EXAMINATIONS

SCHOOL OF MANAGEMENT AND LEADERSHIP

DEGREE OF MASTER OF ARTS IN DEVELOPMENT STUDIES

MDP 514: PROJECT PLANNING AND MANAGEMENT

DATE: 2ND APRIL 2026

DURATION: 3 HOURS

MAXIMUM MARKS: 70

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX (6)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **THREE** questions.
6. Question **ONE** carries 30 **MARKS** and the rest carry **15 MARKS** each.

7. **Write all your answers in the Examination answer booklet provided.**

QUESTION ONE

Read the Case Study below carefully and, answer the questions that follow:

THE KAJIADO COMMUNITY WATER SUPPLY PROJECT

Kajiado County is a semi-arid region of Kenya where communities depend largely on livestock and small-scale farming for their livelihoods. However, recurring droughts and climate change have severely affected water availability, leading to food insecurity, loss of livestock, and poor hygiene conditions. Residents often walk long distances in search of water, and women and children are disproportionately burdened with water-fetching responsibilities. In response, the County Government of Kajiado, in collaboration with local NGOs and a donor-funded program, initiated the Kajiado Community Water Supply Project in 2019. The project aimed to establish a piped water distribution system sourced from a protected dam, supported by solar-powered pumps and storage tanks. The total budget was estimated at KES 60 million, with funding shared between the county government, an international development partner, and community contributions in the form of labor and land.

The project began with a feasibility study, which identified the technical, social, and financial requirements of the intervention. A detailed needs assessment was conducted in consultation with local leaders, households, and water user associations. This participatory approach ensured community ownership, a critical factor for sustainability. The planning team developed a Work Breakdown Structure (WBS) to divide the project into manageable components, including land acquisition, design and engineering, procurement of materials, construction, installation of solar pumps, and community training on water management. A Gantt chart was

prepared to establish timelines, with the project scheduled for completion within 18 months. Milestones included the completion of the dam intake structure, installation of the main distribution pipeline, construction of storage tanks, and establishment of household water kiosks. A budget breakdown was prepared, allocating funds to labor, materials, equipment, and capacity-building activities. Risk management was also integrated into the plan, identifying possible challenges such as delays in procurement, political interference, inflation in material costs, and technical breakdowns of equipment. Contingency measures included maintaining a reserve fund, setting up a procurement oversight committee, and establishing partnerships with local technicians for equipment maintenance.

The project management team adopted the Project Management Body of Knowledge (PMBOK) framework, focusing on key areas such as scope management, cost management, quality management, and stakeholder engagement. Weekly project meetings were held to review progress, while monthly reports were shared with donors and the community. A project steering committee composed of county officials, donor representatives, and local leaders provided oversight and resolved emerging disputes. Construction began with the dam intake works, followed by the laying of a 12-kilometer main pipeline. Local youth were engaged in trenching and pipe-laying activities, providing employment opportunities while also building community ownership. The project team ensured that quality standards were met by contracting experienced engineers and conducting site inspections at every stage. Solar-powered pumps were installed to reduce reliance on grid electricity, making the system more sustainable in the long term. In addition, 15 water kiosks were constructed in different villages, ensuring equitable access for all households.

Training sessions were organized for members of the water user association on financial management, record keeping, and preventive maintenance of the water infrastructure. This capacity-building component was crucial in

ensuring that the community could operate and sustain the system after project completion.

Required:

a) Propose any five SMART objectives that the completed Kajiado Community Water Supply project was to achieve and explain how each was expected to be achieved

(10 marks)

b) Propose any five stakeholders who had to be engaged during project planning and explain the purpose of each

(10 marks)

c) Articulate any five possible challenges that such a Kenyan county-based project could have faced

(10 marks)

QUESTION TWO

a) Explain the purpose of conducting feasibility study before starting a project

(10 marks)

b) Explain the term Scope creep in project management and propose possible causes of scope creep

(5 marks)

QUESTION THREE

a) Prepare a sample work breakdown structure for a named project in any county in Kenya

(10 marks)

b) Explain the role of the media in national projects planning and management in Kenya

(5 marks)

QUESTION FOUR

a) In the last decade, Kenya has witnessed a large number of projects failing. Evaluate typical reasons for these project failures in Kenya

(10 marks)

b) Assess any five essential characteristics of a successful project **(5 marks)**