



UNIVERSITY OF KELANIYA – SRI LANKA
Centre for Distance and Continuing Education
Faculty of Commerce & Management Studies

Bachelor of Commerce (Special) Degree Fourth Year Examination (External) – 2022

July – 2025

BCOM E 4073 - Project Management

No. of questions: Six (06)

Answer only Four (04) questions.

Time: 03 hours

Question No. 01

GreenBuild Construction Pvt Ltd is a medium-sized construction company in Sri Lanka that recently secured a government contract to build a sustainable community housing project. The project involves constructing 50 eco-friendly houses in a rural area within **18 months**, with a total budget of **LKR 800 million**.

The project is part of the government's initiative to promote renewable energy and sustainable living. Each house must include solar panels, rainwater harvesting systems, and eco-friendly materials. GreenBuild has appointed **Mr. Nuwan** as the project manager.

Three months into the project, Nuwan faces several challenges:

- **Resource constraints:** Shortage of skilled labor and eco-friendly construction materials due to import delays.
- **Stakeholder issues:** Local community protests about potential environmental damage, while the government expects monthly progress reports.
- **Time overruns:** Unexpected monsoon rains have delayed the initial groundwork.
- **Cost escalation:** The price of imported solar panels has increased by 15% due to currency fluctuations.

Nuwan called for an urgent project team meeting. He must now revise the project plan, manage stakeholder expectations, and ensure project objectives are still achievable within the constraints.

As the new project consultant, you are asked to guide Nuwan in managing the GreenBuild project successfully.

Identify and explain **Five key project management knowledge areas** that Nuwan should prioritize in this situation.

(Total 25 marks)

Question No. 02

TechNova Pvt Ltd, a leading manufacturing company in Sri Lanka, has decided to implement an **Enterprise Resource Planning (ERP)** system to improve its operations and decision-making. The project has a duration of **12 months** and a budget of **LKR 500 million**.

As the appointed **project advisor**, you are asked to evaluate how well TechNova managed the ERP project across the **project life cycle phases**.

- a) Define the four phases of the Project Life Cycle and explain the key activities involved in each phase.
(15 marks)
 - b) Discuss how effective use of the Project Life Cycle approach can contribute to achieving the objectives of complex projects like ERP implementation.
(10 marks)
- (Total 25 marks)**

Question No. 03

Select 5 topics from the list and briefly explain them.

- a) Project Crashing
- b) Project Charter
- c) Project procurement
- d) Project Quality Management
- e) Project closure
- f) Project Management Structures
- g) Gant charts
- h) Project Risks

(Total 5 x 5 = 25 marks)

Question No. 04

ADB Construction Company has undertaken several high-profile projects in the recent past and has completed several leading projects that set the benchmark in the Country's construction Industry. You have been appointed as the new project manager for the firm. The following table highlights the main activities of the proposed new project of the firm with immediate predecessors and their specific time duration;

Activity	Immediate Predecessors	Completion Time (Indays)
A	-	2
B	-	7
C	-	4
D	A	5
E	D	9
F	E	3
G	B	5

- Select the activities which are critical to the project using critical path diagram. (10 marks)
- Calculate the total completion time of the above project (in days) ? (05 marks)
- Calculate the early finish time for activity G (in days)? (05 marks)
- Calculate late start time for activity G (in days)? (05 marks).

(Total 25 marks)

Question No. 05

SolarCity Pvt Ltd, a renewable energy company in Sri Lanka, plans to launch a **Rooftop Solar Panel Installation Project** aimed at installing 1,000 residential solar systems across the Western Province in 18 months. The company received funding from an international donor agency and allocated a budget of **LKR 800 million** for the project.

To kick off the project, SolarCity's senior management appoints **Mr. Kamal**, a certified project manager, and instructs him to prepare a **project charter** as the first step.

Kamal organizes a meeting with key stakeholders, including government representatives, donors, suppliers, and community leaders, to gather initial inputs.

As a project management consultant,

- Explain the purpose of a project charter and its importance in project management. (10 marks)
- Identify and describe six key components that should be included in the project charter for the Rooftop Solar Project.

(15 marks)
(Total 25 marks)

Question No. 06

Metro Bridge Ltd has undertaken a project to construct a new bridge over the Kelani River in Sri Lanka. The project has a budget of **LKR 1.2 billion** and a timeline of **24 months**. Six months into the project, unexpected heavy rains damaged the foundation work, causing delays. Rising steel prices and a shortage of skilled labor further increased costs. Additionally, local residents protested over environmental concerns. The project manager must now identify, assess, and mitigate these risks to avoid further setbacks.

- a) Define risk management in project management and explain its importance. (05 marks)
- b) Identify four risks from the case and categorize them as internal or external. (06 marks)
- c) Propose three risk mitigation strategies the project manager could use. (14 marks)

(Total 25 marks)