MAKERERE UNIVERSITY BUSINESS SCHOOL
BACHELOR OF BUSINESS ADMINISTRATION
COURSE NAME: ADVANCED ICT
MS PROJECT CLASS CASE STUDY III, IV & VI 2025/2026

CASE STUDY THREE

GOGO Bus Company is the leading provider of Passenger, Cargo and Courier Transport services in the country. The company is in the process of developing a new information system for a variety of its operations. Study the WBS below and use MS project to produce a project for the schedule clearly showing the project start date, end date and task durations and dependencies

Required;

a) Enter the above tasks in the Ghant chart with their duration and link types
b) Set the default task duration to weeks
c) Set all Saturdays to working days and set working time on all Saturdays to start at 8 am and end At 8pm

d) Using the project start date as 1st May 2026, determine how long the project will take and therefore its end date. Use Ms word for this answer
e) Enter the above project resources in the resource sheet
f) All tasks should be 50% complete. What is the project cost at this point?,
g) Using the above project resource costs, what is the total cost or budget for the entire project ? After 100% completion?. Use

Microsoft word for this answer and save it in your folder

h) Open Microsoft word and list all the critical activities for the project, save it as project critical activities in the created folder on the desktop

i) State the over allocated resources if any, what is the total cost of each resource? Use Ms Word for this answer

Task No	Task Name	Duration	Link Type	Resources
	GOGO Transport System Project			
1	**Project Planning**			
1.1	Feasibility study	4 weeks	-	GPE
1.2	Identify key stakeholders	3 weeks	1.1	GPE
1.3	Budgeting	2 weeks	1.2	GPE
1.4	Implementation Plan Complete	0 weeks	1.3	GPE
2	**Garage Mechanical Activities**			
2.1	Prototype model design	3 weeks	1.4	SD,SA
2.2	Purchase of Spare Materials	2 weeks	2.1	SA
2.3	Machinery Prototype Development	3 weeks	2.2	SD,SA
2.4	Revise developed prototype Design	4 weeks	2.3	SD,SA
2.5	Try out Developed Prototype	2 weeks	2.4	SA,RCO
2.6	Garage Mechanical Activities Complete	0 weeks	2.5	GPE
3	**System Training Awareness**			
3.1	Staff Training Communication	1 weeks	2.6	RCO
3.2	General Staff Training	3 weeks	3.1	GPE
3.3	Garage Training	2 weeks	3.2	SA
3.4	One on one system training	2 weeks	3.3	SD
3.5	Branch training	3 weeks	3.4	RCO
3.6	Customer Training and Partner Training	2 weeks	3.5	RCO
3.7	Staff trained	0 weeks	3.6	
4	**Run Testing Activities**			
4.1	Pre-production testing Campaign	3 weeks	3.7	GPE
4.2	Post-redesign Testing Campaign	2 weeks	4.1	SA,GPE,SD
4.3	Unit Testing	3 weeks	4.2	SA

4.4	System and Integrated Testing	2 weeks	4.3	SD
4.5	User Acceptance Test	3 weeks	4.4	SA,SD
4.6	Product Tested	0 weeks	4.5FF	
5	**System Maintenance**			
5.1	Manual Data Transfer	3 weeks	4.6	SA,SD
5.2	Implementation Status Report	2 weeks	FS	GPE
5.3	Final System working Report	2 weeks	SS	GPE,SA,SD
5.4	Transport System Implemented	0 weeks	SS	

Resource Table

Resource Name	Resource Type	Resource Cost
Garage Project Engineer (GPE)	Work	UGX 30,000 Per hour
System Developer (SD)	Work	UGX 20,000 Per hour
System Analyst (SA)	Work	UGX 15,000 Per hour
Route chart Officer (RCO)	Work	UGX 15,000 Per hour
Systems Trainer(ST)	work	UGX 13,000 Per hour

CASE STUDY FOUR

Arua City Transport Association is in the process of developing new information systems for a variety of its association member operations. Study the WBS below and use MS project to produce a project for the schedule clearly showing the project start date, end date and task durations and dependencies.

Task No	Task Name	Duration	Predecessor	Resources
	Arua City Transport System Project			
1	**System Planning**			
1.1	Feasibility Study	5 weeks	-	PE
1.2	Stakeholder Mapping	3 weeks	1.1	PE
1.3	Planning workshop	1 weeks	1.2	PE
1.4	System Planning Complete	0 weeks	1.3	PE
2	**System Analysis & Design**			
2.1	Prototype model design	4 weeks	1.4	SD,SA
2.2	Purchase of primitive hardware tools	1 weeks	2.1	SA,PD
2.3	Process Model Prototype	3 weeks	2.2	SD,SA,PD
2.4	Data Model Prototype	4 weeks	2.3	SD,SA, PD
2.5	Process and Data Prototype Integration	2 weeks	2.4	SAPD
2.6	System Analysis & Design Complete	0 weeks	2.5	PE
3	**System Testing**			
3.1	Testing Awareness Campaign	3 weeks	2.6	PE,SA
3.2	Setting Testing Condition	2 weeks	3.1	SA,PE,PD
3.3	Unit Testing	2 weeks	3.2	SA,PE,PD
3.4	System and Integrated Testing	1 week	3.3	SD,SA
3.5	User Acceptance Test	1 week	3.4	PE
3.6	Alpha Testing	2 weeks	3.5	SD,PD,PE
3.7	System Tested	0 weeks	3.6SS	
4	**System Training**			
4.1	Staff Training Awareness	1 weeks	3.7SS-1Week	ST,PE
4.2	General Staff Training	3 weeks	4.1	ST,PD

4.3	Departmental Training	2 weeks	4.2	ST,PD
4.4	User training	3 weeks	4.3	ST
4.5	Branch training	3 weeks	4.4	ST
4.6	Customer Training and Partner Training	2 weeks	4.5	ST
4.7	Staff trained	0 weeks	4.6	
5	**System Maintenance**			
5.1	Data Aggregation		4.7FS+1 Week	
5.2	Manual Data Transfer	3 weeks	5.1	SA,SD
5.3	Implementation Status Report	2 weeks	FS	PE
5.4	Final System working Report	2 weeks	SS	PE,SA,SD
5.5	Transport System Implemented	0 weeks	SS	

Project Resource Table

Resource Name	Resource Type	Resource Cost
Project Engineer (PE)	Work	UGX 30,000 Per hour
System Developer (SD)	Work	UGX 40,000 Per hour
System Analyst (SA)	Work	UGX 20,000 Per hour
Process Designer (PD)	Work	UGX 20,000 Per hour
Systems Trainer(ST)	work	UGX 15,000 Per hour

Required;

a) Using Ms Project 2016 software, Create a Project File called Arua City Transport System Project and save it in your Folder on the desktop

b) Set the project start date as 1St July 2026

c) Set all Saturdays and Sundays as working days with work stopping at 1 PM on these two days

d) Set the default duration to weeks

e) Indent the main project , main activities and related tasks to ensure logical duration
f) Enter the above tasks in the Ghant Chart with their respective duration
g) Link the various task with their predecessor provided in the WBS table above
h) Enter the project resources in the resource sheet
i) Assign the various resources as to the various tasks as indicated in the WBS
j) Determine the project end date. Write the answer in this space
k) Determine how long the project will take. Write your answer in this space
l) All tasks should be 100% complete.
m) Determine the total cost for each activity in the project. Write your answer here
n) Using the project resources assigned and their resource costs, what is the total cost or budget for the entire project after 100% completion of tasks? Write the answer here

CASE STUDY FIVE

In a bid to improve on the registration process in MUBS, the university has embarked on an online student registration system. The system will however be housed in a special building with servers and other ICT infrastructures. Endeavored with skills in project management you have been asked to help in determining the project schedule using Ms Project software.

Task No	Task	Duration	Predecessor	Resources
	E-Registration House Project			
1	**Site Work**			
1.1	Clear site	5 Days	-	Engineer, Porter
1.2	Strip Topsoil	4 Days	-	Porter
1.3	Prepare site for Excavation	3 Days	1.2	Engineer
1.4	Rough grading	2 Days	1.3	Engineer, Porter
1.5	Site preparation complete	0 Day		
2	**Foundation**			
2.1	Layout foundation footings	3 Days	1.3	Engineer, Porter
2.2	Dig Footings	2 days	2.1	Porter
2.3	Footing Inspection	1 day	2.1	Engineer
2.4	Dig foundation	2 days	2.3	Porter
2.5	Build Block Foundation	3 days	2.4	Sand, Bricks
2.6	Lay foundation concrete	2 days	2.5	Porter, Cement
2.7	Foundation Complete	0 day	2.6	
3	**Building Wall**			
3.1	Build to window level	6 days	2.3	Porter, Mason
3.2	Build to ring beam	4 days	3.1	Mason, Porter
3.3	Build beam	2 days	3.2	Mason, Porter
3.4	Build to wall plate	2 days	3.3	Sand, Cement, Brick
3.5	Walls complete	0 days	3.4FS+1 eday	
4	**System Testing**			
4.1	Stock Roof Shingles	1 day	3.4	Engineer
4.2	Stock roofing timber	1 day	4.1	Engineer

4.3	Frame Roof	2 days	4.2	Engineer, Porter
4.4	Install Roof Plywood	3 days	4.3SS	Engineer, Timber
4.5	Roofing Complete	0 days	4.4	
5	**Plumbing**			
5.1	Stock plumbing pipes	1 day	4.4	Plumber
5.2	Drill plumbing turnels	3 days	4.4	Plumber, Porter
5.3	Fix pipes	4 days	5.2 FS-1 day	Plumber, Porter
5.4	Do plumbing inspection	1 day	5.3FF	Engineer
5.5	Plumbing complete	0 days	5.4	
6	**Finishing**			
6.1	Plastering	6 days	5.5	Painter, cement, Sand
6.2	Lay Ceramic Tiles	2 days	6.1	Mason
6.3	Prepare for undercoat painting	3 days	6.2	Painter
6.4	Finishing complete	0 dyas	6.3	

Sample Project Resources Table

Resoure Name	**Type**	**Initials**	**Standard. Rate**
Engineer	work	E	Ugx50,000/hr
Porter	work	PR	Ugx 10,000/hr
Manson	work	M	Ugx20,000/hr
Bricks	Material	B	Ugx 180,000
Sand	Material	S	Ugx 300,000
Cement	Material	C	Ugx30,000
Iron Sheets	Material	IS	Ugx40,000
Timber	Material	TM	Ugx 15000
Painter	work	P	Ugx15000/hr
Paint	Material	PNT	Ugx 60000

Required;

a) Using Ms Project 2016 software, Create a Project File called E-Registration Implementation Project and save it in your folder on the desktop
b) Set the project start date to 1st May 2026
c) Set all Saturdays as working days.
d) Set the default task duration to Days
e) Enter the above tasks and their durations in the Gantt chart and ensure the main activities and tasks are logically linked
f) Link the various tasks with their predecessors as shown in the WBS.
g) Using resource sheet, Add the project resources as indicated on the WBS.
h) Assign the various resources as to the various tasks as indicated in the WBS
i) Determine the end date of the project. Write your answer in this space.
j) Determine how long the project will take. Write your answer in this space
k) Using report tab, extract the resource cost overview report for the project. Save this report in your folder
o) All tasks should be 100% complete.
p) Using the project resources assigned and their resource costs, what is the total cost or budget for the entire project after 100% completion of tasks? Write the answer here

End of Question Paper