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MATRIC NO : 18/IMG05/013

DEPARTMENT : MECHATRONICS ENGINEERING

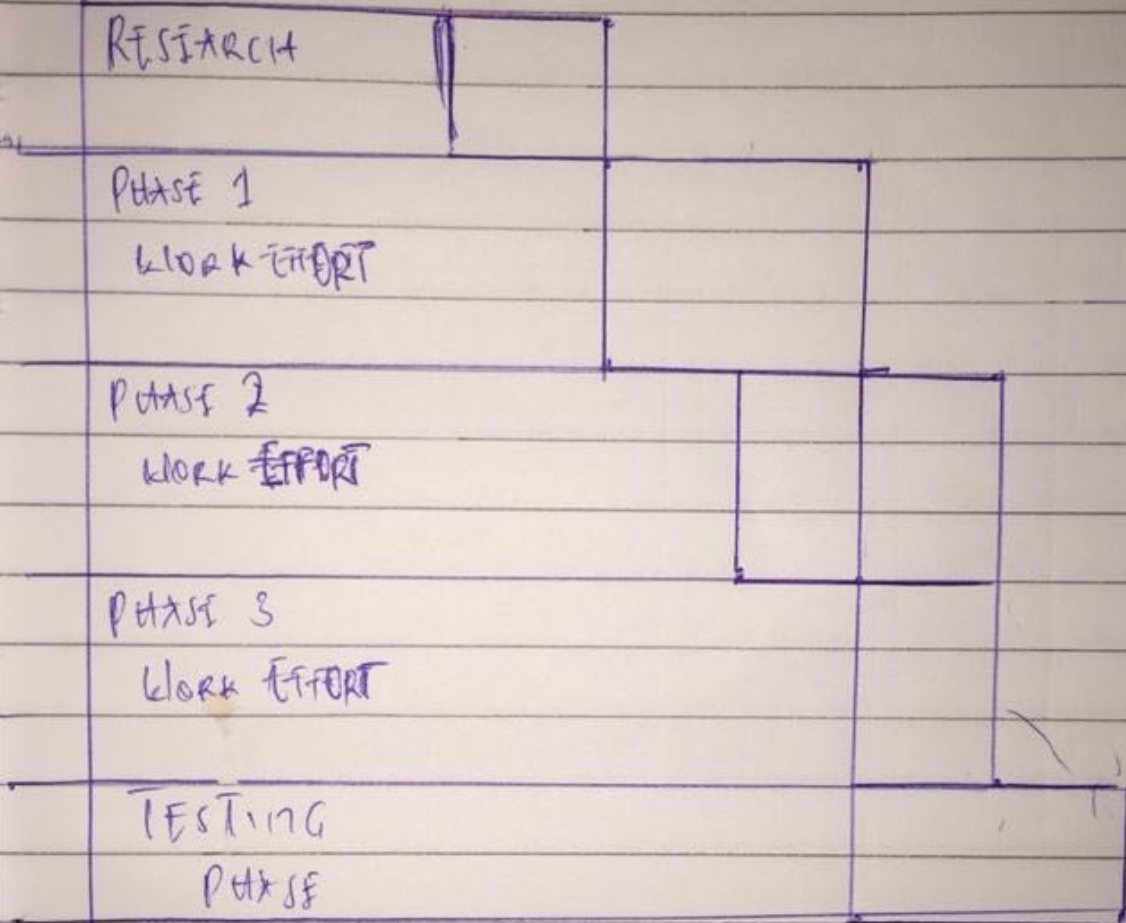
COURSE : ENGINEER IN SOCIETY (ENG 284)

ASSIGNMENT : ENGINEERING CONSULTANCY

1) Outline the scope of work in detail in order of occurrence

- \* Relocating of Personnel's i.e ICT
- \* Clearing out of equipment and moveable materials i.e chairs, air conditioner etc
- \* Site securing
- \* Removal of wiring and plumbing
- \* Removing of roofing
- \* Building of temporary storage house
- \* Building of water reservoir
- \* Scaffolding
- \* Main work begins
- \* Roofing
- \* Installation of wiring and plumbing
- \* Plastering
- \* Screeding
- \* Repainting

2 Prepare a project Gantt Chart





3) List all the human resources needed and constitute the project team stating who the lead consultant

### Human Resources

- \* Construction laborers
- \* Painters
- \* Blacksmiths
- \* Plumbers
- \* Carpenters
- \* Electrician

### Project Team

- \* Designer
- \* Civil engineer
- \* Structural engineer
- \* Consulting engineer (lead consultant)
- \* Electricians
- \* Project Manager (responsible for delivering the project)
- \* Main constructor
- \* Site Manager (Clerk of works)

4) Explain why the site was secured

The reasons why the site was secured are:

i) For Safety:

To prevent staffs, workers and students from objects - that may possible cause unnecessary injuries

ii) For Security:

To avoid unnecessary theft of items eg cement etc

iii) To prevent accidents



5)

## BIME

ITEM	DESCRIPTION	Quantity	Unit	RATE	Amount
1	Sand	4	Per 20 tonne	45,000	180,000
2	Paint	6	Per bucket	34,000	204,000
3	Cement	50	bag	2,800	140,000
4	Cirante	4	Per 20 tonne	85,000	340,000
5	Windows	8	-	10,500	84,000
6	Doors	5	-	10,000	50,000
7	Pipes	47	-	5,000	235,000
8	Water	30	barrels	5,000	150,000
9	Consultancy fee			150,000	150,000
10	Transportation			120,000	120,000
11	Site preparation and clearing			50,000	50,000
12	Profit			200,000	200,000

b.)

S/N	DESCRIPTION	SCHEDULE DATE	PERCENTAGE OF TFC (%)	Amount	PAYMENT DATE
1	MOBILIZATION	30/01/2020	30	6,000,000	19/01/2020
2	50% completion	16/02/2020	30	6,000,000	27/02/2020
3	Completion and handover	29/05/2020	30	6,000,000	29/05/2020
4	Defect liability period	12/09/2025	10	2,000,000	12/10/2020



7) What is BIMF, Defect Liability Period, lead consultant, Project life cycle, Environmental Impact Assessment (EIA)

\* BIMF:

BIMF stands for Bill Of Engineering Measurement and Evaluation. It is a tool used before, during and post construction to assess and value the cost of construction works

\* DEFECT LIABILITY PERIOD:

This is a period following practical completion during which a constructor remains liable under the building contract for dealing with any defects which become apparent. Usually a period of around 6 to 12 months but can vary depending on the contract used. Any defects or faults which arise during this period (for example; due to defective materials or workmanship) must be put right by the contractor at its own expense

### \* Lead Consultant:

The consultant who directs the work of the consultant team and is the main point of contact for communication between the client and the consultant team.

### \* Project Life Cycle:

The sequence of phases that a project goes through from its initiation to its closure. The number and sequence of the cycle are determined by the management and various other factors like needs of the organization involved in the project; the nature of the project, and its area of application.

### \* Environmental Impact Assessment (EIA):

This is the assessment of environmental consequences of a plan, policy, program or actual projects prior to the decision to move forward with the proposed action.