



NAME: Abdulazeez zubeidat

MATRIC NUMBER: 17/ENG03/001

QUESTION A

Procedures;

1. Desk study.
2. Site investigation.
3. Offer project and building designs, structural detailing using principal engineering directions etc.
4. Negotiate with every contractor for the project.
5. Organize field work, assign technicians and staff specialists to task.
6. Coordinate bills of materials issuance for construction and equipment.
7. Minimize risks and costs, understand and implement project specifications efficiently.
8. Commence project work from civil stage to plant commissioning.
9. Review design consultants drawings and integrate in project.
10. Execute whole project in a cost and time effective manner.

QUESTION B

- Differences between an **architectural** drawing and **engineering** drawing

An architectural drawing: is a technical drawing of a house, building or any kind of structure. It is a schematic representation of a building in which case the main purpose of the drawing is for aesthetics reasons i.e to depict or represent an overview of the building(elevation). Architects use their drawings to convey their ideas into a coherent proposal. Also use it to communicate ideas and concepts.

Civil engineering drawing: is a type of technical drawing that shows information about grading, landscaping, or other site details. These drawings are intended to give a clear picture of all things in a construction site to a civil engineers.

- Differences between **soak away** and **septic tank**

Soak away: a soak away is simply a hole dug into the ground, filled with rubble and coarse stone into which waste water is piped which allows it to percolate back into the earth to where it falls. Unlike septic tank it doesn't involve any type of tank. As part off drainage system it is an efficient and low environmental-impact way of dealing with surface water(also called runoff, rain water or storm water).

Septic tank: is an underground chamber made of concrete, fiberglass, or plastic through which domestic wastewater flows for basic treatment. Settling and anaerobic processes reduce solids and organics, but the treatment efficiency is only moderate. Saptic tank systems are a type of simple onsite sewage facility.

- Differences between **sections** and **elevations**

Section: is a cut through that shows the interior details of how an element or structure is made in the inside which reveals more details.

Elevation: refers to an orthographic projection of the exterior(or sometimes the interior) faces of a building, that is a two dimensional drawing of the buildings facades.

- Differences between BEME and BOQ

BEME(bill of engineering measurements and evaluation): it is a form of review(description and evaluation of evidence) pertaining to a clearly formulated concept that uses explicit scientific methodologies and methods to systematically identify, assemble, critically analyze and synthesize information relevant to the review topic.

BOQ(bill of quantities): is a document used in tendering in the construction industry in which materials, parts and labor are itemized. It also details the terms and construction or repair contract and itemizes all work to enable contractor to price the work for which he or she is bidding for.

(2)

Types of paper size;

A size papers are the most commonly used type of papers size available. But paper sizes are easy to understand and are easily distinguished since they increase and decrease in successive order. With A1 being the biggest size and A10 being the smallest.

| Paper size | width x height(mm) | width x height(inches) |
|------------|--------------------|------------------------|
| A1 | 594 x 841 mm | 23.4 x 33.1 in |
| A2 | 420 x 594 mm | 16.5 x 23.4 in |
| A3 | 297 x 420 mm | 11.7 x 16.5 in |
| A4 | 210 x 297 mm | 8.3 x 11.7 in |
| A5 | 148 x 210 mm | 5.8 x 8.3 in |

Site planning ;

Is the art and science of arranging the various portions of a particular piece of land according to their uses. The site planner decides on the use of the site in details by selecting and analyzing it for the various characteristics of soils, slope, vegetation, e.t.c. .It is the design and process of planning for new development project.

Types of staircase;

The various types of stair case include;

Spiral stairs: spiral stairs follows a helical arc. They usually have a very compact design and the threads radiates around a central pole.

Winder stairs: winder stairs are a variation of an I shaped stairs but instead of a flat landing, they have pie-shaped or triangular steps at the corner transition

Straight stair case: a straight stairs without any changes in the direction.

L shaped stair case: the I shaped stair case is a variation of the straight stair case with a bend in some portion of the stair. This bend is usually achieved by adding a landing at the transition point.

Curved stairs: like spiral stairs, it follows a helical arc. However, they tend to have a much larger radius and typically do not make a full circle

U shaped stair case: are essentially two parallel flight of straight stairs joined by a landing that creates a 180-degree turn in the walk line.