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Submitted to

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subject

Civil Engineering
Drawing and
graphics.

Date

22/08/2020

Summer Semesters

6th

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Q1:- What is the importance of various types of drawings in building constructions.

Ans:-

Drawings:- Easiest way to describe an object simply lines are drawn on paper according to certain fixed rules.

Types of drawings in building construction:

- ① Architectural Drawings.
- ② Structure Drawings.
- ③ plumbing Drawings.
- ④ Electrical Drawing
- ⑤ Air-conditioning Drawings.

① Architectural Drawings :- These drawings provide basic idea of the building in design form with multi-dimensional virtual presentation.

- ⊙ Major components of house architecture drawing are rooms, stores, dining room, bathrooms, kitchen, TV lounge, stairs etc.
- ⊙ These drawing are developed by Architects.

② Structural Drawings :- These drawings are based on the final architecture drawings that mainly show interior details of buildings.

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- ① These internal details may include reinforcement for RCC buildings, Floor details, Roofs details etc.
- ② Main purpose of design building structurally means that the behaviour of the building under the worst possible loads is studied, thickness and materials of construction are specified for various components of the structure such as foundation / footing, plinth beam, columns, roof beams, slab stairs etc.
- ③ plumbing Drawings & ④ These drawings are for public health showing water supply system and building sewerage system such as marking lines GI, RCC etc.
- ⑤ In water supply drawings hot water and cold water lines are shown with location of geysers, taps, showers etc.
- ⑥ In sewerage drawings, lines of waste water and sewage disposal are indicated with waste outlets heading towards manholes.

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④ Electrical Drawings :- These drawings show how the wiring is laid identify the construction and position of elements fittings and fixtures, switches, sockets, lights and fans etc.

⊙ Moreover call bell system, fire-alarm system, CCTV system etc are included.

⑤ Air-Conditioning Drawings :- ⊙ These drawings are developed for the building with centrally air conditioning system

⊙ placement of fresh air ducts and chilled air pipes is mentioned which help to leave provision in structural element and walls etc.

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Q39- What is various components of plumbing drawings? Briefly describe each component.

Ans:-

Plumbing Drawings & plumbing drawing is a type of technical drawing that provides visual representation and information relating to plumbing system. A complete plumbing system provides an adequate supply of water and removes wastes.

There are three principle part of plumbing system.

- ① water supply system.
- ② waste water and waste removal system.
- ③ plumbing fixtures.

Traps:- The traps most commonly used with plumbing fixtures is the p-trap.

Trap are required because they prevent sewer gases from entering a building causing bad smell and serious illness or death.

House Trap:- Building (House) traps are provided in the main building sewer.

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it shall provided with a cleanout and a relief vent or fresh air intake on the inlet side of the trap.

Relief vents or fresh air intake shall be carried above grade and shall be terminated in a screened outlet located outside the building.

The relief vents are not less than half of diameter of the drain.

plumbing cleanouts :-
① A plumbing cleanout is a clean out fitting with a removable plug.

② it is designed to help keep clear any types of debris that could cause any type of stoppage in the water drain lines.

③ cleanout are usually placed at the connection point b/w the ~~so~~ sewer lines and drain lines.

④ it is also provided where the pipe direction change) at 90 degree.

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plumbing air vents :- Drain pipe remove water and waste from a building the plumbing vent pipe also called a plumbing air vent, removes gas and odors. it also allows fresh air into the plumbing system to help wastewater flow smoothly through the drain pipes. However, no wastewater runs through the plumbing vent pipe.

~~Plumbing plan~~

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Q2:-
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Ans:- Structural types :

The basic types of multi-story structure and include:

- ① Framed structure :- Network of column and connecting beam form the ~~stax~~ structural skeleton of the building and carry loads of the foundations.
- ② Propped structure :- Uses a cantilever ~~beam~~ slab or platform as the seating of columns. It utilizes an internal core and external propped columns.
- ③ Suspended structure :- Has an internal core and horizontal floors which are supported by high strength steel cables hung from cross beams at the top.
- ④ Cantilever structure :- Has an internal core from which beams and floors cantilever. This removes the necessity for columns.

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(5) Brace structures - Bracing is used to give stability so that columns can be design as pure compression members. The beams and column that form the frame carry vertical loads, and the bracing system carries the lateral load. Brace frame reduced lateral displacement as well as the bending moment in columns. They are economical and easy.