



All Rights Reserved

| | | |
|---|-------------------|--------------------|
| Tertiary and Vocational Education Commission | | |
| Diploma in Quantity Surveying | | |
| NVO Level 05 –Semester I | | |
| Construction Technology 1 | K75C002M03 | Three Hours |
| Answer to any 05 questions | | |

Question No 01

1. Name the main parties involved in building construction project (03 Marks)
2. State the functional requirement of a building (02 Marks)
3. Classify the building according to the height (03 Marks)
4. Draw a labeled & dimensional sketch for the timbering of trenches in,
a. Dry loose soil
b. Wet loose soil
(Note: Isometric view & sectional elevation is required) (12 Marks)

Question No 02

1. Name 04 load bearing elements (structural) in a building (02 Marks)
2. Describe with a sketch a suitable type of foundation for a made up ground (08 Marks)
3. Define the term pile & explain how it bears loads (06 Marks)
4. State 02 advantages & 02 disadvantages of cast in – situ concrete piles (04 Marks)

Question No 03

1. State 03 differences between load bearing walls & non load bearing walls (03 marks)
2. Briefly explain the types of brick bonds (08 marks)
3. Explain“floor”& state its functional requirements (04 marks)
4. Explain with necessary sketches the construction of a solid ground floor(05 marks)

Question No 04

1. Name the openings in a building (04 marks)
2. Draw a labeled sketch of sectional plan, front elevation & sectional elevation of a window having three sashes (08 Marks)
3. What is the suitable maximum number of steps in a flight & state the functional requirements of landing (04Marks)
4. Draw a labeled sketch of a plan & sectional elevation of reinforced cement concrete dog-legged staircase (08 Marks)

Question No 05

1. What is form work & state its functional requirements (04 Marks)
2. Draw a labeled sketch of a column form work for 225 mm X 225 mm concrete column (06 Marks)
3. Draw a typical longitudinal sectional elevation & cross sectional elevation for 225 mm X 300 mm fixed end beam. Span of the beam 3.5 m. Reinforcement details must be clearly shown. (06 Marks)
4. What is the purpose of a kicker? Draw an isometric view of a kicker for 225 mm X 225 mm column. (04 marks)

Question No 06

Write short notes on the followings

(4 x 5 = 20 marks)

1. Compaction of concrete
2. Types of roof
3. Building construction for disabled
4. Environmental problems related with construction
5. Advantages of pre fabrication