



**Tertiary and Vocational Education Commission**  
**Knowledge Assessment – March/ April 2021**  
**Quantity Surveying Assistant**  
**National Vocational Qualification - Level 04**



**Time: 03 Hours**

**Instructions for the Candidates**

- This Question Paper Comprises of 2 sections as Part 1 & 2
  - The 1<sup>st</sup> Part of this question paper consists of 30 Multiple Choice Questions (MCQ). Answer all the questions. Choose the most suitable answer from the given four answers of each and mark as “X” in the appropriate places of the answer sheet
  - Use of Calculator and BSR Sheet are allowed.
  - This question paper consists of 07 pages.
  - Using SLS 573 in the exam hall is allowed.
  - Take off sheets, Bill Sheet, abstract sheet, query sheets to be issued to candidate for part 2.
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**Part 1**

1. What will help to prepare proper Bills of Quantities for contractor’s pricing
  - a. Measure all the Items
  - b. Get measurements without missing work items
  - c. Measure Items using standard measurement procedures
  - d. Use Building Schedule of Rates
  
2. In the BOQ, Where should we include the cost of site Investigations
  - a. Under Excavation and Earth work
  - b. Under Preliminaries
  - c. Under measured works
  - d. Under Services
  
3. Excavated trenches filled with water due to rain. How can we measure this de watering item
  - a. Get approval and-Measure the work as day work
  - b. Measure the Volume of filled water
  - c. Calculate Estimated Machine and labour hours and get approval
  - d. Measure under insurance
  
4. Which item given below will be the duty of Quantity Surveyor during Feasibility stage
  - a. Do the Measurements for Bills of Quantities
  - b. Prepare preliminary cost Estimate
  - c. Select Contractors
  - d. Tender Evaluation

5. CESMM volume 4 Measures
  - a. External works
  - b. Internal works
  - c. Building works
  - d. Civil works
  
6. What **is not** the duty of Contractor's Quantity Surveyor
  - a. Prepare payment applications
  - b. Check balance Materials at Site
  - c. Check cash in and out
  - d. Check Quality and progress at site
  
7. SMM7 is
  - a. An Australian Standard
  - b. The property of RICS & Building Employers' Confederation (UK)
  - c. Sri Lankan Standard under CIDA
  - d. Oman standard under Oman Government
  
8. What is the unit of Measurement of Screed Concrete
  - a. Linear Meter -(M)
  - b. Square Meter (M2)
  - c. Meter Cube (M3)
  - d. none of the above
  
9. What are the most suitable Insurance policies to be applied to the construction site
  - a. Workman compensation/full option/ third party
  - b. CAR Policy/ Workman compensation/ professional indemnity
  - c. Full option/ Plant/3<sup>rd</sup> party
  - d. Vehicle insurance/Material insurance/Labour insurance
  
10. 3<sup>rd</sup> party insurance covers
  - a. Only damaged property of innocent party
  - b. Damaged Contractors property
  - c. Damaged Contractor's and consultant's property, labour
  - d. Cost of labour, material and plant
  
11. What is the document **should not** be included in the set of tender documents
  - a. Set Drawings
  - b. Prices
  - c. Specifications
  - d. Bills of Quantities
  
12. What is the purpose of having conditions of contract
  - a. It determines parties obligations
  - b. Solving problems
  - c. It helps to prevent damages to the property
  - d. It helps to prevent legal actions

13. Who is Domestic Sub-Contractor
- Works under main contractor's pay roll
  - He is a specialized contractor
  - He is appointed by Client for specialized work and he should pay an attendance fee for main contractor
  - He is a sub-contractor works under the main contractor with the agreement of the both parties
14. The purpose of Pre bid meeting is
- To meet client and bidders
  - To clarify matters after visiting site and referring documents.
  - To check how the payments are going to make
  - To Identify Architect, Engineer and the client
15. During Preparation of feasibility report the Qs is response
- Check physical environment and collect information from environmental authority
  - Prepare preliminary cost Estimate as per the client requirement.
  - Check availability of services, access to site etc.
  - All of the above
16. What should we calculate to find hourly rate of the machine
- scrap value of the machine
  - Life Cycle cost of the machine
  - How much profit earned through machine
  - Re sale value of the machine
17. What is the "value engineering"
- Engineer's valuation of the project at the construction stage
  - Value During tender stage and previous cost date
  - Value as per Quantity surveyors assessment and as per previous cost data and new cost
  - The substitution of materials and methods with less expensive alternatives, without sacrificing functionality
18. Provisional Sum provides us
- Sum of total work Item
  - The works to be done at a later stage, but money to be allocated in the BOQ for future use
  - The work may not design at a tender stage and client requires doing the work within the period of construction
  - Item b and c correct

19. Which document is most useful to refer the functions of the building after the handing over process of the project
- Set of final drawings
  - As built Drawings
  - Set of Contract documents
  - None of the above
20. How the Main contractor covers cost of normal services provided to nominated sub-contractor
- Through values of resources used by nominated sub-contractor
  - Through main contractors overhead and profit
  - Through nominated contractors overhead and profit
  - Through the percentage of main contractors attendance
21. How do we access price Escalation claims
- Using Price Escalation formula
  - Using new price and old price
  - Using tender price and new price
  - a and c Correct
22. Raft foundation is using for
- Loose soil Conditions
  - Normal soil Conditions
  - Hard soil conditions
  - None of the above
23. What are the methods of construction used to avoid/ stop dampness going up through foundation and soil
- Damp proof Membrane
  - Damp proof course
  - Both (a) and (b)
  - Two coats of hot tar on the top of the rubble work foundation
24. One of the Standard Sheet Which Quantity Surveyors are using
- SMM
  - Abstract Sheet
  - Invoices
  - Rainfall chart
25. What is not included in the of BOQ
- Preamble notes
  - Principle Quantities
  - Construction program
  - Provisional Sums

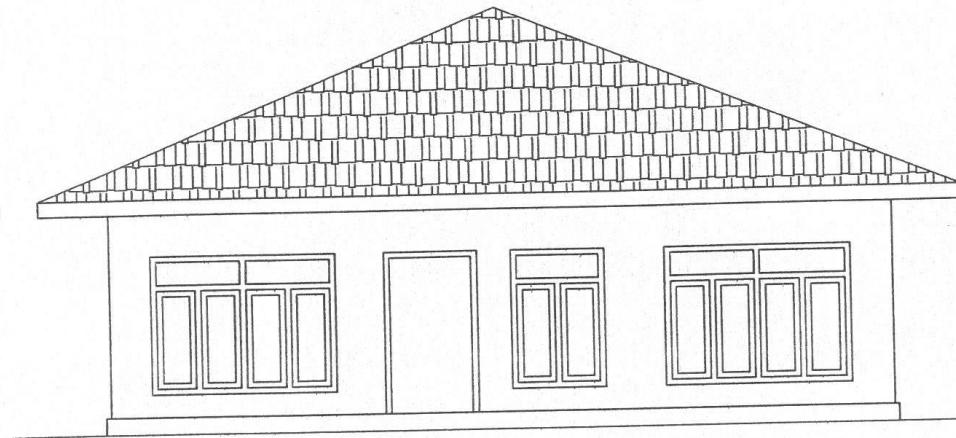
26. What is the purpose of Using Standard abbreviations
- To save time and writing lengthy descriptions
  - Requires always to use abbreviations
  - Because of it's in the SMMs
  - Easy to understand others in the industry
27. Which of the following is not a key objective of SMM ?
- Preparation of the main part of the BOQ Sheet after measuring and quantifying the work of the project.
  - Preparation of the basis to uniformly arrange for the submission of the contractor
  - Finding out the condition of the Quality of the work
  - Submission of the basis to Control the variation and measuring
28. To maintain the best construction communication pattern in the construction Industry we must improve
- Our knowledge & skill in the industry
  - Personnel relationship with top to bottom
  - Interrelationship with external & Internal Parties
  - Number (b) & (c)
29. The suitable type of foundation that is selected in the construction that is to take place closer to the beach in the coastal area is,
- Strip Foundation
  - Rubble bond
  - Pile Foundation
  - None of the above
30. When constructing a bridge across large rivers in Sri Lanka, the foundation method used in the laying of the base is,
- Strip foundation
  - Piling of deep foundation
  - Piling of Cylinder until meeting the granite layer located under the floor area
- The correct answer is,
- I and II
  - II and III
  - I and III
  - I, II and III are correct

(1 X 30 = 30 Total Marks)

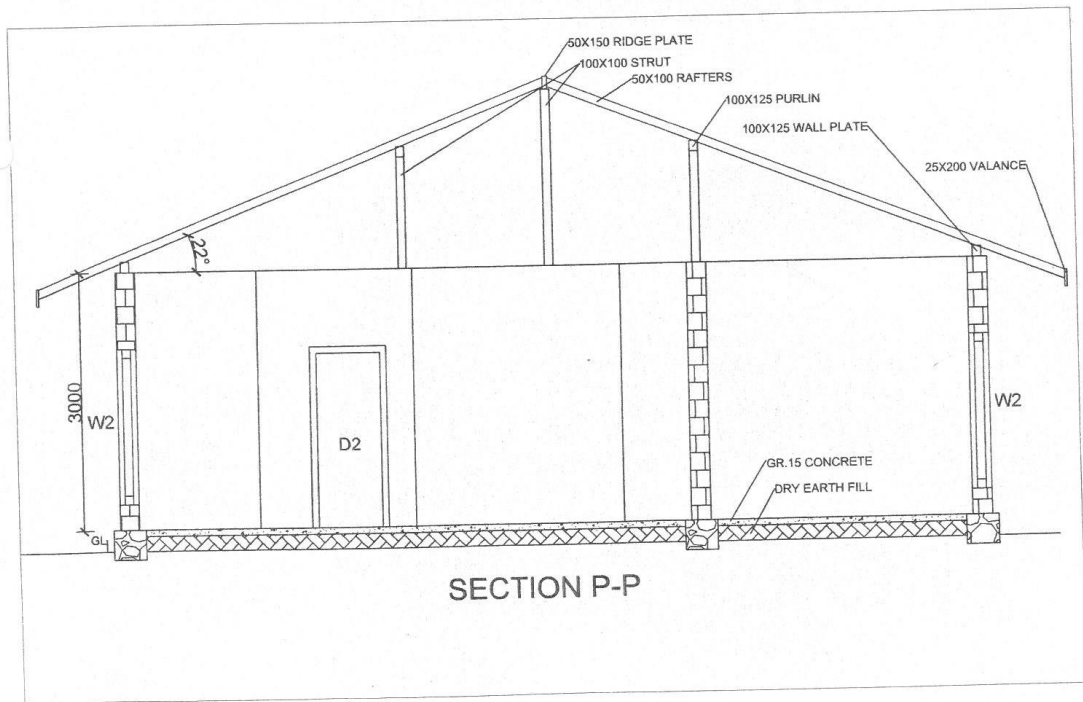
## Part 2

- Refer Drawing No QS/SUB/02 and Specifications to answer the Questions 1 to 3
- Note: I – Question no. 01 and 02 are compulsory
- Note: II - Answer only 01 question from question 03 and 04
- Note: III - Refer given specifications in foundation details (use takeoff sheet, Abstract sheets, bill sheets , Query sheets (if required)
- Do not scale Drawing

1.
  - i. Calculate Centerline length with adjustment of “T” Junctions (10 Marks)
  - ii. Prepare Take off List up to Level of D.P.C (10 Marks)
  - iii. Do the Take off up to DPC (refer drawing and sections) (15 Marks)
2. Do the Quantity abstract of Q1 and prepare bill sheet for substructure. (15 Marks)
3. Prepare Unit Rate for 1M3 of brick work (1:6 Cement and sand Mortar)  
(Note:-Marks will be added for the steps and standards used)  
(Use prevailing rates) (20 Marks)
4. Write the short notes of the following
  - i. Briefly describe the Quantity Surveyor’s duties in post contract level
  - ii. When the 1st half of retention will be released to the contractor. Briefly describe action
  - iii. Define what is Claim and give 2 examples of claims.
  - iv. Define Cost and Value
  - v. Briefly describe Types of Variations (Total 4x5=20 Marks)



FRONT ELEVATION



SECTION P-P

2