SEE 2080 (2024)
ESTIMATING COSTING AND SUPERVISION

समय : २ घण्टा

पूर्णाङ्क : ५०

विइएका निर्देशनका आधारमा आफ्नै शैलीमा सिर्जनात्मक उत्तर दिनुहोस् :

समूह 'क' (Group 'A')

तलका प्रश्नहरूको ठिक बिकल्प छानी उत्तरपुस्तिकामा लेख्नुहोस् :

Choose the best alternative of the following questions and write in the answer sheet:
(9×1=9)

१. कुन आधारमा preliminary estimate तयार पारिन्छ ?
   In which basis preliminary estimate is prepared?
   a. District rate
   b. Government rate
   c. plinth area of building
   d. Cost of similar works

२. १० सेन्टिमिटर मोटाइ भएको इट्टाको wall को मापनको एकाइ कुन हो ?
   What is the unit of measurement for 10 cm thick brick wall?
   a. m^3 b. m^2 c. m   d. lump-sump

३. आयताकार खाल्डो (Trench) जसको लम्बाइ, चौडाइ र गहिराइ क्रमश: ७५ मिटर, ५ मिटर र ३ मिटर छ भने त्यसको आयतन (volume) कति हुन्छ ?
   What is the volume of rectangular trench having length, width and depth 75m, 5m and 3m respectively?
   a. 1125 m^3 b. 1125 cm^3 c. 1225 m^3 d. 1300 m^3

४. तलकामध्ये स्टिल रडको तौल प्रति लम्बाइमा निकाल्न कुन सुत्र प्रयोग गरिन्छ ?
   Which of the following formula is used to calculate weight of steel bar per meter length?
   a. $\frac{D^2}{162}$ b. $\frac{D^2}{165}$ c. $\frac{D^3}{162}$ d. $\frac{D^3}{165}$

५. Brick Masonry मा opening को क्षेत्रफल कतिभन्दा बढी भएन भने घटाइदैन ।
   No deduction is made in the masonry for the opening area less than...
   a. 0.5m^2 b. 0.25m^2 c. 0.15m^2 d. 0.10m^2

६. तलकामध्ये कुन चाहिं कुरा Tender मा राखिएको हुँदैन ?
   Which of these is not mentioned in a tender?
   a. Date   b. Notice number   c. Signature   d. Designation

७. कुन पक्षले site layout plan तयार पादंछ ?
   Which of the following agent prepare the site plan?
   a. Client   b. Consultant   c. Contractor   d. Workers

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क्रमश:

5. तलकामध्ये कुन contract bill को भाग हो ?
   Which of the following is the part of contract bill?
   a. Contract document
   c. Measurement book
   b. Client reports
   d. Site order book

6. Civil Engineering काम गर्दा डोर हाजिरी (Muster Roll) कुन उद्देश्यका लागि प्रयोग गरिन्छ ?
   While carrying out civil engineering work, Muster Roll is used for the purpose of...
   a. payment of permanent staff in the work executing department
   b. Recording the attendance of daily labours, employed in a work and the quantity of work done by them
   c. payment of the materials
   d. recording of attendance of permanent staff in work executing department.

समूह 'ख' (Group 'B')

सबै प्रश्नहरूको छोटो उत्तर लेख्नुहोस् :
Attempt all short answer questions: (5×5=25)

10. Irregular Trench को क्षेत्रफल निकाल्न प्रयोग गरिने सूत्रहरू सूचीकृत गर्नुहोस् । Owner, Consultant र Contractor बिचको सम्बन्ध Three party system मा छोटकरीमा प्रस्तुत गर्नुहोस् ।

    Enlist the formula used to calculate area of irregular trench. State in brief about the relationship between the Owner, Consultant and Contractor in three party systems.

11. किन development length provide गरिन्छ ? Standard guidelines को प्रयोग गरी column र beam junction को reinforcement detailing को चित्र तयार पार्नुहोस् ।
    Why development length is provided? Draw reinforcement detailing of column and beam junction as per standard guidelines. (1.5+3.5)

12. Construction site मा कस्ता प्रकारका worker हरू संलग्न भएका हुन्छन् छलफल गर्नुहोस् । Contract को condition हरूको सूची तयार पार्नुहोस् ।
    Which type of workers involve in construction site? Explain the condition of contract. (2+3)

13. Construction site मा sufrace drainage र sanitation को आवश्यकता बारे वर्णन गर्नुहोस् । तपाईंले building layout गर्दा कस्ता किसिमका तयारीहरू गर्नुहुन्छ ?
    Explain the necessity of surface drainage and sanitation in construction site. What kinds of preparations do you do before conducting building layout? (2+3)

क्रमशः

१४ Measurement book र Rate analysis को महत्वबारे व्याख्या गर्नुहोस् ।
Explain the importance of Measurement book and Rate analysis.

(2.5+2.5)

समूह 'ग' (Group 'C')

सबै प्रश्नहरूको लामो उत्तर लेख्नुहोस् :

Attempt all long answer questions: (2×8=16)

१५. निम्न आधारमा 10m³ आयतन भएको आधा brick wall को लागि Rate Analysis तयार पार्नुहोस् ।

Prepare the rate analysis for half brick wall of the volume of 10 m³.

- Cement mortar proportion 1:4,
- Standard size of brick: 230 mm X 155 mm X 55 mm
- Mortar joint on horizontal and vertical side of each brick: 10 mm
- Number of skilled manpower: 3
- Number of semi skilled manpower: 4
- Number of unskilled manpower: 5

(*Assume the suitable rate for each item.*)

१६. तलका चित्रका आधारमा विभिन्न कामको परिणाम निकाल्नुहोस् :

Based on the following figure, calculate the various quantities of works

a. Earthwork in excavation and filling in foundation
b. Brick soling and PCC work in foundation
c. Plastering works in super structure.
d. Size of Opening: Window =1.5m × 1.5m and Door = 1m × 2.1m

Plan

Section At A-A

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