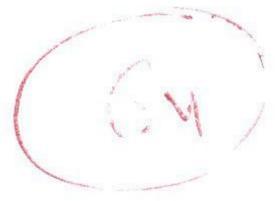
B.E Civil



Const Hagt. Eng 7 QP Code: 732102

(3 Hours)

Total Marks: 80

N.B.: Question No.1 is compulsory

- Answer any three (3) questions from the remaining.
- All questions carry equal marks.
- Write short notes on the following with neat sketches wherever necessary. DIAPHRAGM WALL
- 20

20

- Mechanical Moles
- DRAGLINE
- BULLDOZER
- Find the OWNING COST & OPERATING COSTS for a construction equipments used in the large site with following given data:

PURCHASE COST=Rs.15 Lakhs

USEFUL LIFE = 10 Years (2000 Hrs. per Year)

OPERATING FACTOR = 0.65

ENGINE = 40 H.P (Diesel Type)

SALVAGE VALUE = 10% of PURCHASE COST

MAINTENANCE & REPAIRS = 85% OF DEPRECIATION

INVESTMENT COST = 12% OF Average Annual Investment

Lubricating Oil = 20% of Fuel Cost

Labour Cost = Rs. 15, 000/- per month

Assume any other data, if missing, as per the rules and state the same while doing all the detailed calculations.

- Draw neat sketch for "TUNNEL BORING MACHINE" and explain in detail 3. how it works for tunneling purpose. (b)
 - Draw neat sketch for "WELL-POINT SYSTEM" and how it works on the large site. 10
- Draw neat sketches for "Jaw Crusher" and "Gyratory Crusher" and explain them how work. 10
 - Explain in detail about "Mass Concreting" and "Vacuum Concreting" along with sketches. 10

TRUNOVER

20

- 5. (a) Explain about the following:
 - (i) PILE DRIVING HAMMERS
 - (ii) CENTRIGUGAL PUMP
 - (b) Explain the following with neat sketches:
 - (i) Lining of Tunnels & Ventilation in Tunnels
 - (ii) Air Compressor
- 6. Explain any four(4) from the following with neat sketches
 - (a) TYPES OF CLADDING
 - (b) SAND DRAINS
 - (c) ROCKANCHORS
 - (d) FOUNDATION GROUTING
 - (e) JACK HAMMERS
 - (f) ROLLERS & COMPACTORS
 - (g) Methods of "Depreciation" and formula for each method.