

Subject - Foundation Engg. COURSE CODE: CVUA31174

50:17 and marking scheme

Ques. 1 (a) i) Principle - 2 marks

ii) Procedure & sketch - 2 marks

iii) Limitations - 2 marks

(b) Inside clearance = 2.94% - 2 marks

Outside clearance = 2.77% - 2 marks

Area ratio = 18.42% - 2 marks

(c) For depth of exploration - 2 marks

no. of bearings - 2 marks

Ques. 2 (a) i) Principle - 2 marks

ii) Procedure with sketch - 2 marks

iii) Limitation - 2 marks

(b) Factors affecting - 2 marks

Problem - 4 marks

(c) Minimum 2 correction - 4 marks

Que. 3 (a)

minimum 3 modes of shear failure
- 2 marks each

(b) for general shear failure

$$q_u = 1.2 C N_c + \gamma N_q + 0.4 \gamma B N_\gamma$$

$$B' = B - 2e_x$$

$$= 2.1 - 2(0.35)$$

$$= 1.4$$

$$q_u = 965.74 \text{ kN/m}^2$$

Que. 4 (a)

For 1 - 3 marks

For 2 - 3 marks

(b) $q_u = 197.6 \text{ kN/m}^2$ - 4 marks

(c) factors min - 4 points - 4 marks