Sarvoday Polytechnic Institute – Limbdi
G.T.U. Mid-Term Exam, April 2009

Semester: 02 (1st & 2nd Shift) | Course: DME/DEE/DCE
Subject: S – 204 Elements of Civil Engineering (E.C.E.) | Date : 09/04/2009
Max. Marks: 20 | Time : 11:00 – 12:00

Instruction:

(1) This question paper contains three questions.
(2) All questions are compulsory.
(3) Use of Scientific calculator is permissible.
(4) Figure to the right indicates full marks.
(5) English script of question paper shall be considered as authentic.

Q-1 (A) (4)

1. What are the instruments required for chain and tape survey.
2. Sketch conventional sign for the following term:
   (a) Chain Line (b) Tie Station (c) Station (d) Road (e) Electric pole (f) Tree.

(B) Describe the uses of instrument used in chain and tape survey (4)
(a) Ranging rod (b) Line ranger (c) Optical square (d) Cross staff (e) Plumb bob (f) Arrow

Q-2 (A) What do you mean by ranging. Explain direct and indirect ranging with figure. (3)
(B) How to select station for chain and tape survey. (3)

OR

(A) Uses of prismatic compass. (3)
(B) Types of bearing. Explain Fore and Back bearing. (3)

Q-3 (A) (3)

1. Explain Local Attraction.
2. Explain Closing Error with example.

(B) Describe the procedure to conduct chain and compass survey. (3)

OR

(B) A compass survey is conducted taking four stations A, B, C & D. The fore and back bearing reading is shown below. Find the include angle between alternative station. (3)

જી. □. યુનિવર્સિટી ટર્મ ટેસ્ટ, □□ □ - 2009

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પ્રશ્ન 1. (□) (4)

1. ચેઇન અને ટેપ સર્વેક્ષણ માટે જરૂરી સાધનો કયા કયા છે.
2. □□□□ □□□ □□□□□ □□ □□□ □ .
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પ્રશ્ન 2. (□) □□□ □ □□ □? ગવરજ્ઝ અને ઉણગવરજ્ઝ રજ્ઝાગ આકૃતિ સહિત સમજાવો. (3)

(□) □□□ □□□□□ □□□ □□ □□□ □□ □□□□ □□□ □ . (3)

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2. (□) પ્રાઝમટાઝ ઝપોસણા ઉપયોગો જણાવો. (3)

(□) ખરાગના પ્રકાર જણાવો. □□□ □□□□□ □□□□ □ □□□ □□□□ □□ . (3)

3. (□) (3)

1. □ □□□ □ □□□ણ પિરાસિમ ગણાવો.

2. ગ્રાઝગ ખરર ઉદાહરણ સાથે સમજાવો.

(□) ચઠણ અને ઝપોસ સપણુ ગ્રેઝમા ઝઠ રાતા સધોરણ કરવામા આપ છે. (3)

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(□) □□□□ □□□□ □A,B,C □□□D બમ ચાર સ્ટરણ આપલા છે. તેના ફર અને ખઠ ખરાગ □ □ □□□ □□શાપલ છે□તા તે સ્ટરણ વચ્ચેના ખરાગત ખુણાઓ શોધો. (3)

FIGURE 1