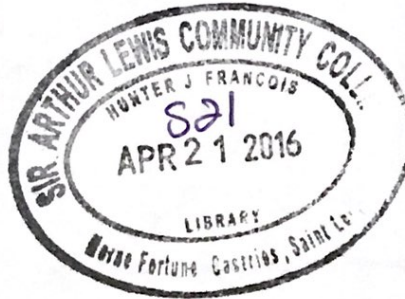


DTENS PAST PAPER

TECHNICAL

SIR ARTHUR LEWIS COMMUNITY COLLEGE DIVISION OF TECHNICAL EDUCATION AND MANAGEMENT STUDIES

EXAMINATION SESSION : May 2015 Final Examination (Alternate)
TUTOR (S) :
PROGRAMME TITLE : **Building Trading Craft**
PROGRAMME CODE : **BTC-CE**
COURSE TITLE : **Surveying for Craft Students**
COURSE CODE : BSC113
CLASS (ES) : **Building Trades - 2**
DATE :
COMMENCEMENT TIME :
DURATION :
INVIGILATOR (S) :
ROOM (S) :



INSTRUCTIONS:

This examination paper consists of five (5) questions. You are required to answer all.

- ◆ The use of scientific calculators is permitted.
- ◆ Students are advised to use a pen to write this examination.
- ◆ Write your ID Number on *each* answer sheet.
- ◆ All cell phones must be turned off during the examination.
- ◆ **Note:** Bags, books as well as writing paper not given by the invigilator should be deposited at the front of the examination room or as otherwise indicated.
- ▲ Students must sign **IN** and **OUT** on the examination class list

Question 1

It is required to layout a rectangular commercial building – 75 ft. wide and 100 ft. long. If the steel tape being used is 100.05 long, under standard conditions. What distances should be laid out ? **(20 MARKS)**

Question 2.

Compute the horizontal distance for each line from the given data.

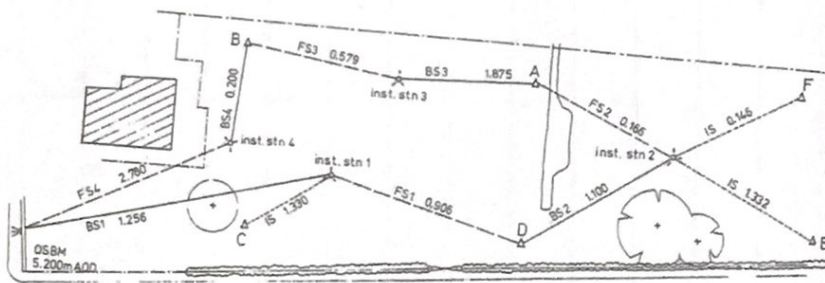
(15 MARKS)

LINE	TAPE MEASUREMENT	SLOPE DATA
AB	330.11 ft.	Slope angle 2°
BC	498.98 ft.	Difference in height. 4.62 ft.
CD	200.00 ft.	Slope gradient 1.5%

Question 3.

The following figure shows the station points of a linear survey and Table 1 shows the results of a leveling of those stations from multiple set-up points. Use blank field book page and :

- (i) Calculate the reduced levels of the stations **(20 MARKS)**
- (ii) Determine the Circuit Error **(5 MARKS)**



BS	IS	FS	HPC	RED LEV.	Remarks
1.256				5.200	OSBM
	1.330				C
1.100		0.906			D
	1.332				E
	0.146				F
1.875		0.166			A
0.200		0.579			B
		2.780			OSBM

Table 1.

Question 4.

The reduced levels of points A,B,C and D on the frame of a multi-storey building (Fig. 4.28.) require checking. Reduce the levels on the blank field book page provided, using the HPC method and apply all checks. **(20 MARKS)**

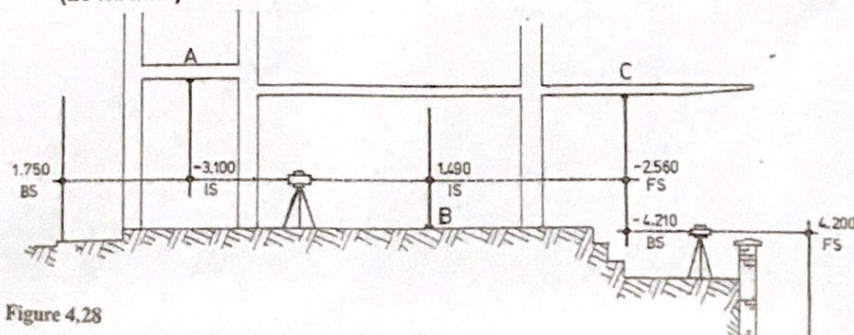


Figure 4,28

