THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF ENGINEERING TECHNOLOGY
DIPLOMA IN TECHNOLOGY - LEVEL 02
FINAL EXAMINATION - 2006
MEX 2230 – COMMUNICATING ENGINEERING INFORMATION

DATE : 2nd March, 2007 (Friday)

TIME : 1400 hrs. - 1800 hrs.

DURATION : FOUR HOURS

WRITE YOUR INDEX NUMBER CLEARLY	⇨	
WRITE YOUR REGISTRATION NUMBER	⇨	

READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE ANSWERING THE QUESTION PAPER

INSTRUCTIONS:

1. *This question paper consists of two sections* **PART A** *(5* ***questions****)* *and* **PART B** *(4* ***questions****).*
2. *Answer* ***all*** *questions.* **PART A** *carries* **60** *marks and* **PART B** *carries* **40** *marks.*
3. *Spend at least two and a half (2½) hours for* **PART A** *and the rest for* **PART B**
4. *Answers should be written or drawn within the space provided under each question in both* **PART A** *and* **PART B.**
5. ***Any answers given in separate sheets other than this question paper will not be taken for evaluation.***
6. *You may use drawing instruments (other than drawing board and T- ruler) at your discretion.*
7. *All sketches must be neatly drawn and proportional in sizes.*
8. *It is* ***extremely important*** *that you do not remove the question paper, or any part of the question paper, from the examination hall.*
9. *Please remember to write your* ***index number*** *and* ***registration number*** *in the space provided above.* ***Do not*** *write your name.*
10. *If you are in a doubt, consult the supervisor or an invigilator conducting the examination.*

Q1. Under each (a), (b), (c), (d) and (e), a pair of word/expressions is given. Distinguish the meaning of each pair clearly.

a) (i) Data.

.....

.....

.....

(ii) Information.

.....

.....

.....

b) (i) Introduction of a report.

.....

.....

.....

(ii) Summary of a report.

.....

.....

.....

c) (i) Memory method of delivery.

.....

.....

.....

(ii) Extemporaneous method of delivery.

.....

.....

.....

d) (i) Over head projector.

.....

.....

.....

given.

(ii) Multi-media projector.

.....

.....

.....

e) (i) Isometric view.

.....

.....

.....

(ii) Perspective view.

.....

.....

.....

Q2. You are required to make a short oral presentation on a technical subject to a limited audience. Answer the following:

a) List five most important particulars related to the audience, which you would verify before you begin to prepare your presentation.

.....

.....

.....

.....

.....

b) What characteristics of the venue would you check prior to prepare your presentation?

.....

.....

.....

.....

.....

.....

.....

c) List five sources you would seek to gather information for your presentatio

.....

.....

.....

.....

.....

d) List five most common elements you would include in your presentation.

.....

.....

.....

.....

.....

Q3. (a) List five types of technical reports you are familiar with, explaining briefl the purpose of each type.

(i) .....

.....

.....

(ii) .....

.....

.....

(iii) .....

.....

.....

(iv) .....

.....

.....

(v) .....

.....

.....

(b) Select any of the above five types and list five main elements of the selected type, explaining each element briefly.

Type of the report:.....

Elements of the report

(i) .....

.....

.....

(ii) .....

.....

.....

(iii) .....

.....

.....

(iv) .....

.....

.....

(v) .....

.....

.....

Q4. A business software company provides many support services for its customers. Advising over the phone is one of such services. The company used its past experience to investigate the cost incurred in providing this service. It was found that the average advisory cost per telephone call is around Rs. 250.00.

The number of such telephone calls taken place each day during the last 64-day quarter, which is representative, is shown below:

Telephone calls

Number of calls	0-9	10-15	20-29	30-39	40-49	50-59	60-69	70+	Total
Frequency	Nil	5	10	20	15	10	4	Nil	64

You are required to find:

(a) the mean of the number of telephone calls during the last 64-day quarter.

(b) the Standard deviation of the telephone calls during the last quarter.

Q5. The data below shows consumers' expenditure on selected items in 1991 and 1999.

Consumers' expenditure (based on the figures as at 1995)

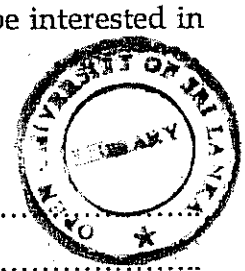
	1991	1999
Food	47,114	52,277
Alcohol and tobacco	40,258	37,788
Clothing and footwear	22,502	34,662
Cars and vehicles	18,598	25,541
Other durable goods	15,894	29,775
Total of all categories	144,366	180,043
Total consumers' expenditure	407,332	504,289

Expenditures are in Rs. million

You are required to construct an appropriate bar chart and answer the following questions:

(i) Why do you think a private sector retail organization might be interested in such information?

(ii) What comments can you make about the data?



PART B (*Answer all questions*)

Q6. Fig.Q6 shows two orthographic views of an object. **Sketch** the isometric view of the object within the space given below taking the near points as shown by the two arrows.

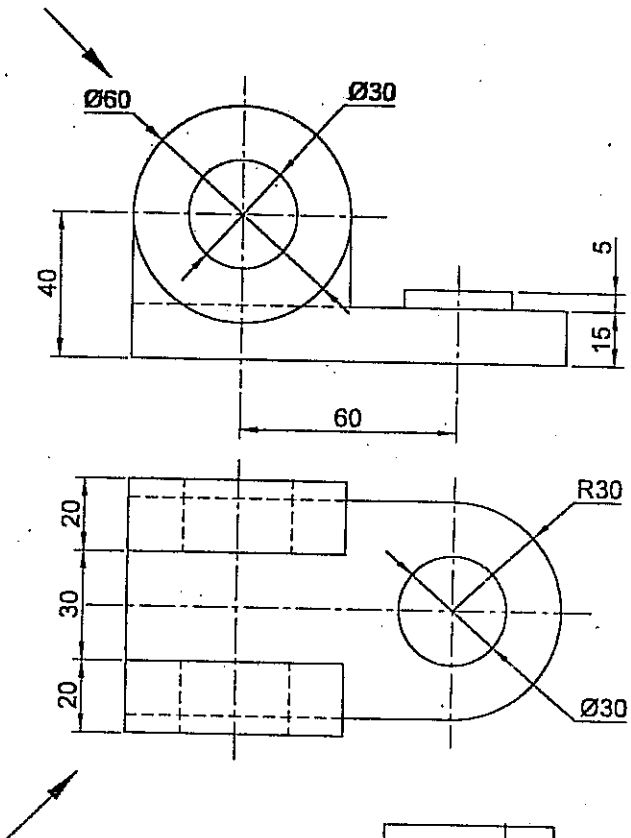


Fig. Q6

Q7. Three incomplete elevations of an object made by connecting a right circular cone a pipe, projected in first angle are shown in the Fig.Q7. Complete the three elevatio drawing the interpenetration curves. (It is not necessary to show the construction line

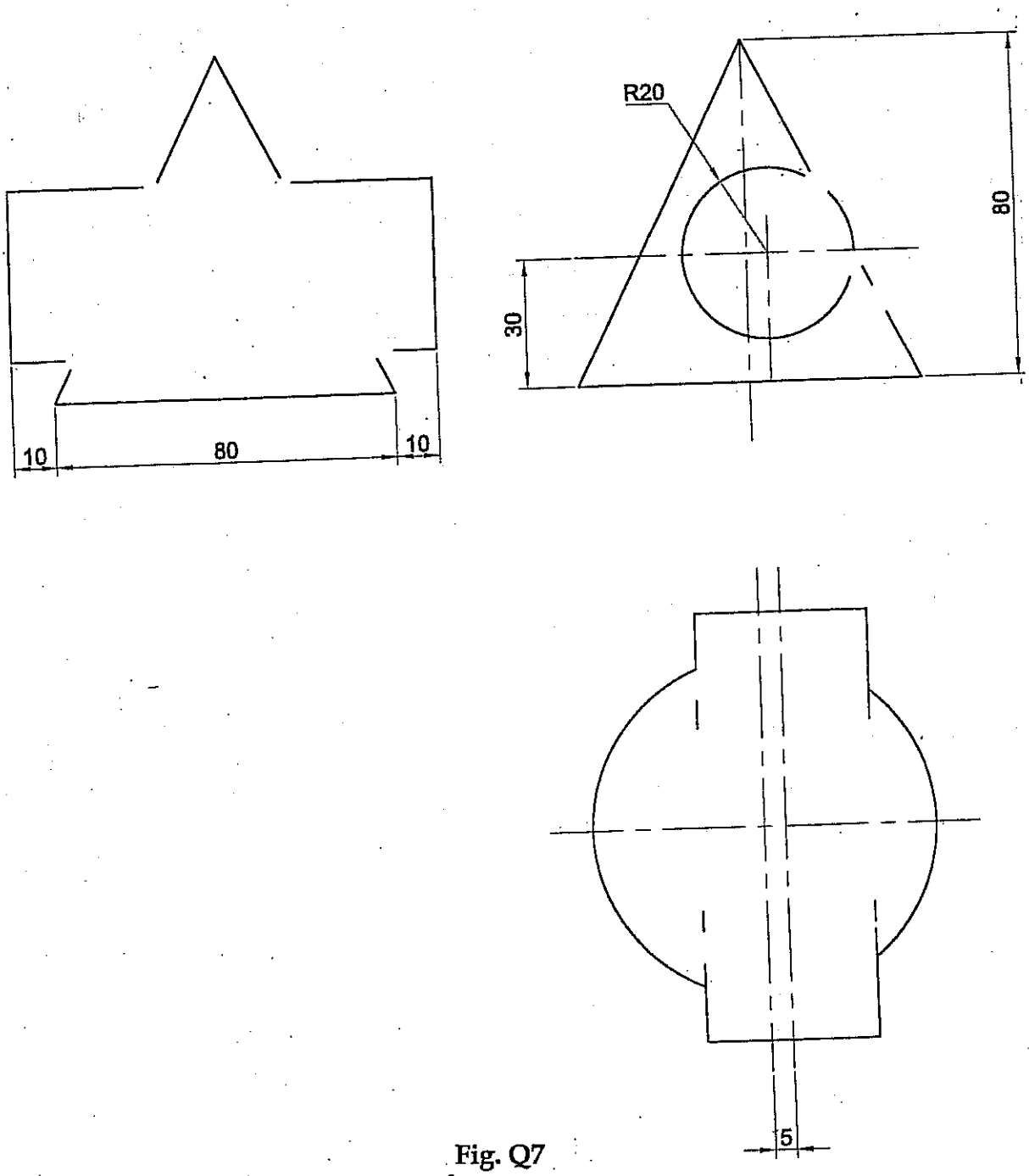


Fig. Q7

Q8. Fig.Q8 shows a pictorial view of a sleeve bracket. Sketch the following orthographic views within the space given below in the first angle projection.

(a) Front Elevation looking in the direction of arrow "X".
(b) Sectional End Elevation projected on Y - Y.
(c) Plan projected from view (a).

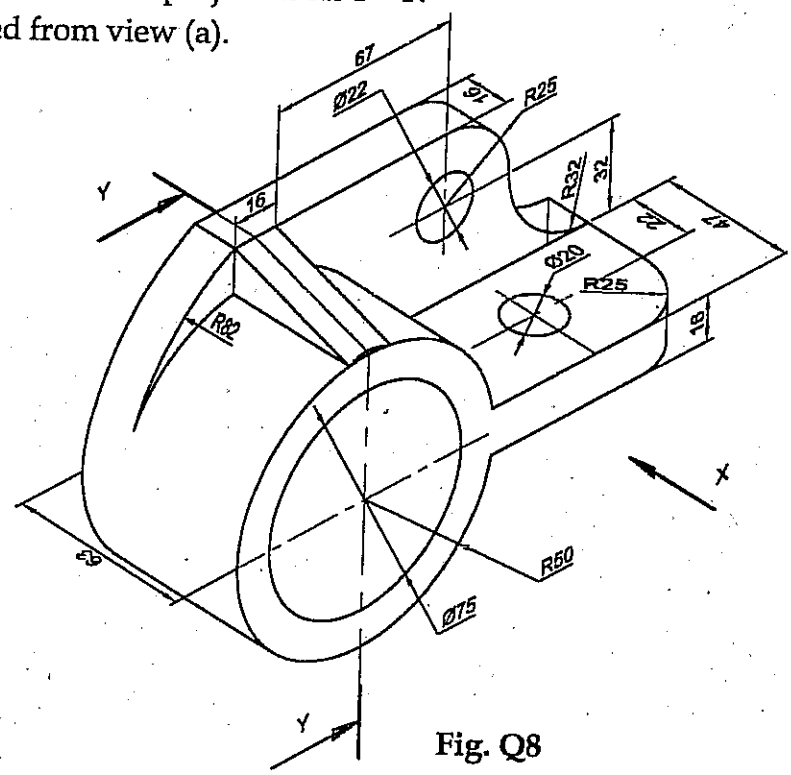


Fig. Q8

Q9. Two orthographic views of a hollow truncated square prism are shown in Fig. Q9. Sk
the development of the prism taking C-C as the seam within the space given below.

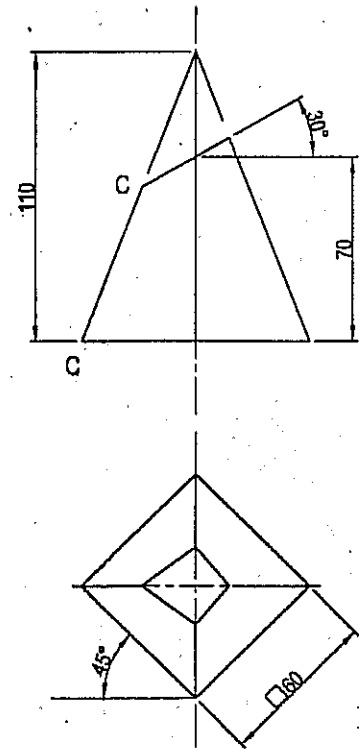


Fig. Q9