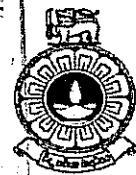
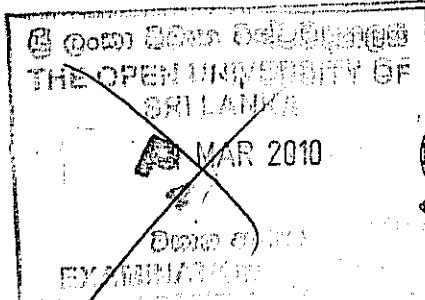


THE OPEN UNIVERSITY OF SRI LANKA
 FACULTY OF ENGINEERING TECHNOLOGY
 DIPLOMA IN TECHNOLOGY – LEVEL 02/03
 FINAL EXAMINATION 2009



MEX2230/MEX3211 – COMMUNICATING ENGINEERING INFORMATION

DATE : 11th MARCH 2010
 TIME : 1330 HRS – 1730 HRS
 DURATION : FOUR HOURS [04]

WRITE YOUR INDEX NUMBER CLEARLY



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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 will carry 60 marks and PART B 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. No additional papers should be used for any answers.
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. Remember to write your index number clearly in the space provided above. If you have not received an index number write your registration number in the space above. Do not write your NAME.
10. If you are in a doubt, consult the supervisor or an invigilator conducting the examination.

PART -A**Question 01**

Answer the questions given below.

- (a) "*Making sense is considered as an important measure of information.*" Elaborate on the statement in relation to the nature of information.

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- (b) "*On one hand, the choice of medium constrains the message that can be delivered. On the other, the medium has to be selected to suit the message.*" Comment on the above statement by taking a suitable example.

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(c) Briefly explain the term '*Information Society*'.

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(d) Discuss the importance of standardizing graphical symbols used in communicating information.

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(e) Define briefly the following terms with particular reference to Communicating Engineering Information.
(i) System of units.

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(ii) Prefixes for decimal multiples.

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(iii) Axonometric views in sketching.

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(iv) Scatter diagrams.

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Question 02

Answer the questions given below.

- (a) Explain the main purpose of a laboratory report and prepare an outline that has to be followed when writing such a report.

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- (b) *Paragraphs and clusters of paragraphs serve several purposes within a report.* Briefly explain two of the purposes that paragraphs serve in a report.

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- (c) State four (04) characteristics that a well constructed table should possess in a technical report.

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- (d) What are the guidelines that require to be complied when using abbreviations in a technical report? State at least five (05) such guidelines.

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Question 03

You are required to deliver a short oral presentation on the progress of a project undertaken in a course you have been registered to the academic staff of the department.

- (a) Briefly explain the main elements that your presentation should contain.

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- (b) What is the method of delivery that you would select to conduct the presentation? Justify your answer with reasons.

- (c) Assuming that you are using visuals in your presentation, explain the criteria that you would follow in order for the visuals to be effective in delivering the message.

- (d) State and explain at least four factors that you need to consider with regard to the presentation environment.

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Question 04

- (a) Write an algorithm to sort a collection of four (04) numbers in an ascending order.

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(b) Using standard symbols depict the above algorithm in a flow chart.

Question 05

(a) Define measure of central tendency for a distribution of data. Explain the types of measure of central tendencies used in statistics. You may take an appropriate numerical example to illustrate the above.

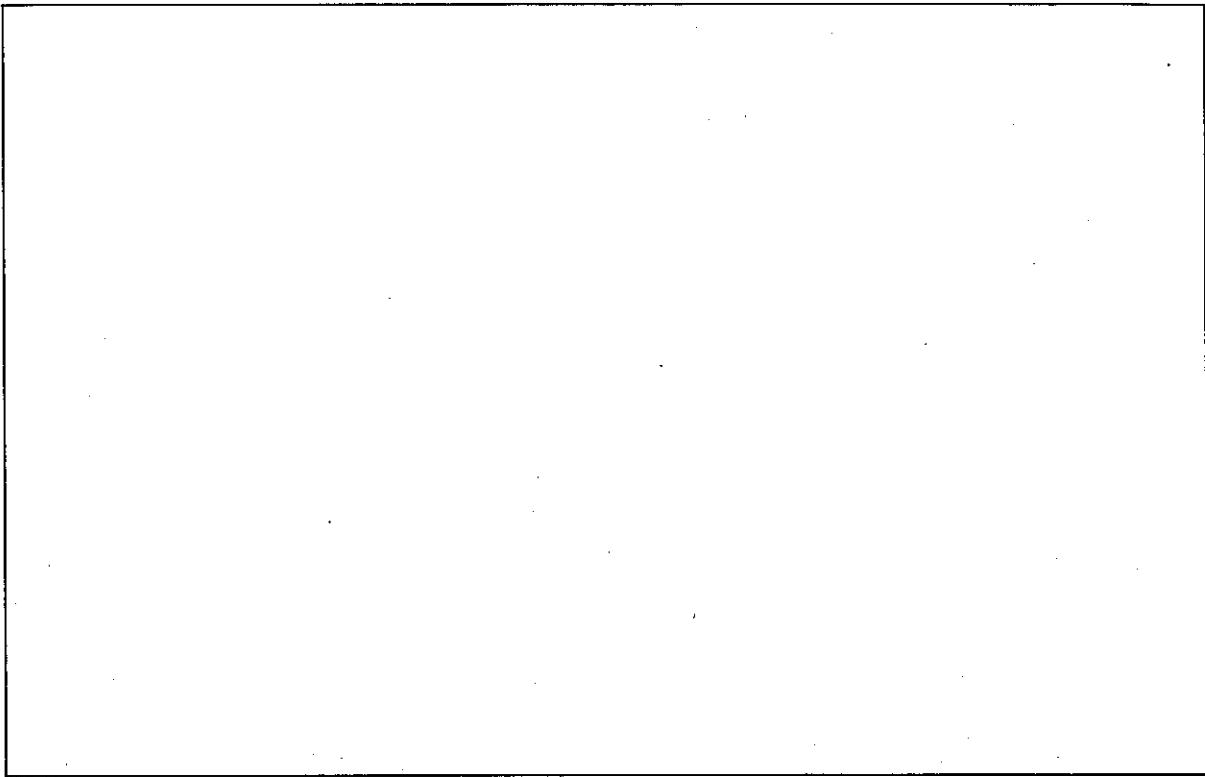
(b) Define skewness and kurtosis in relation to statistical analysis of data.

(c) Using a suitable numerical example, explain the terms 'Range' and 'Semi inter-quartile range' with respect to a set of data.

End of Part A

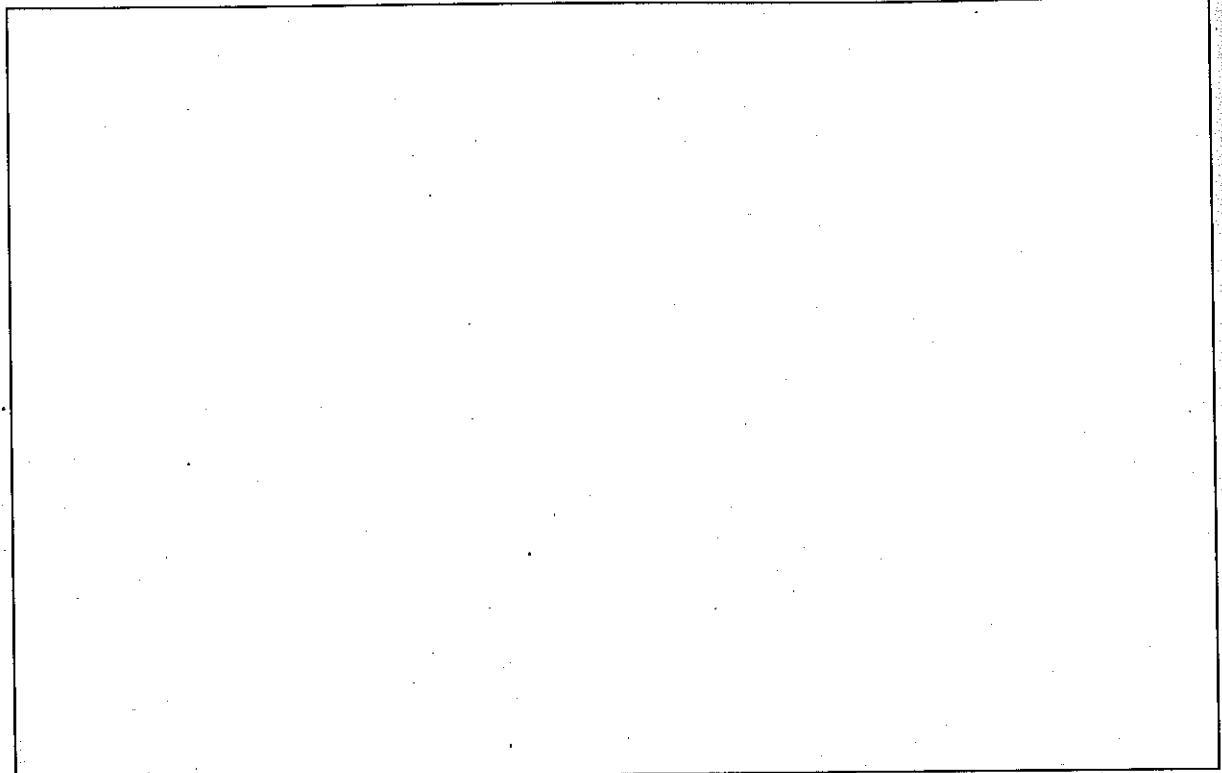
PART - B***Question 06***

Explain with a sketch how a straight line of a given length is converted to an arc with the same length that of the straight line.



Question 07

Explain with a sketch how to draw a circle which is externally tangential to given two circles.



Question 08

Figure Q8 shows two orthographic views of an object in first angle projection. Sketch the isometric view of the object within the space given below taking the near points as shown by two arrows.

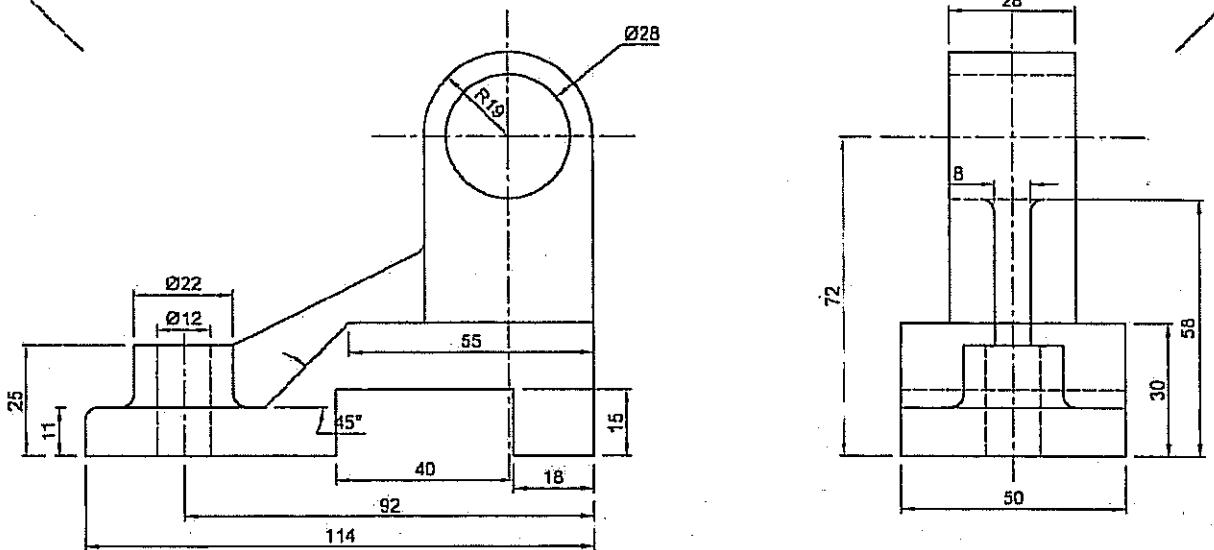
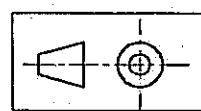


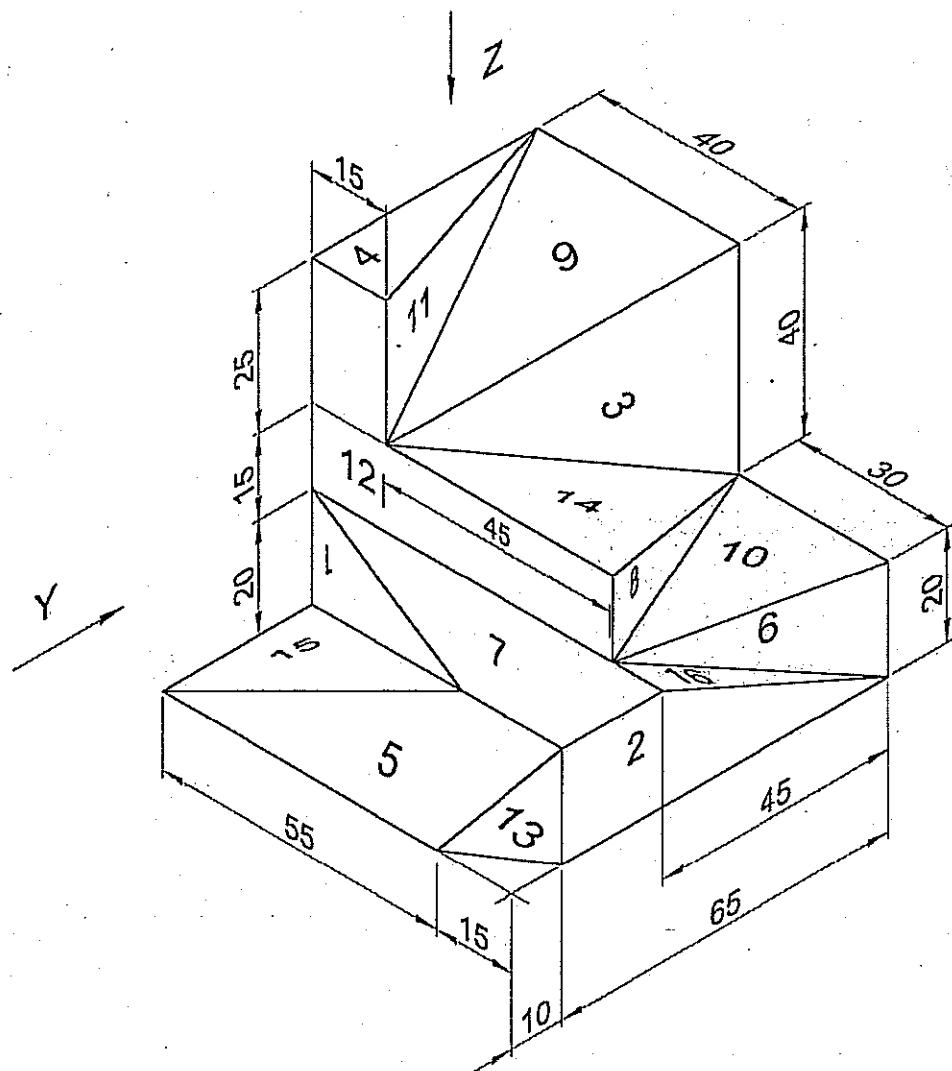
Figure Q8



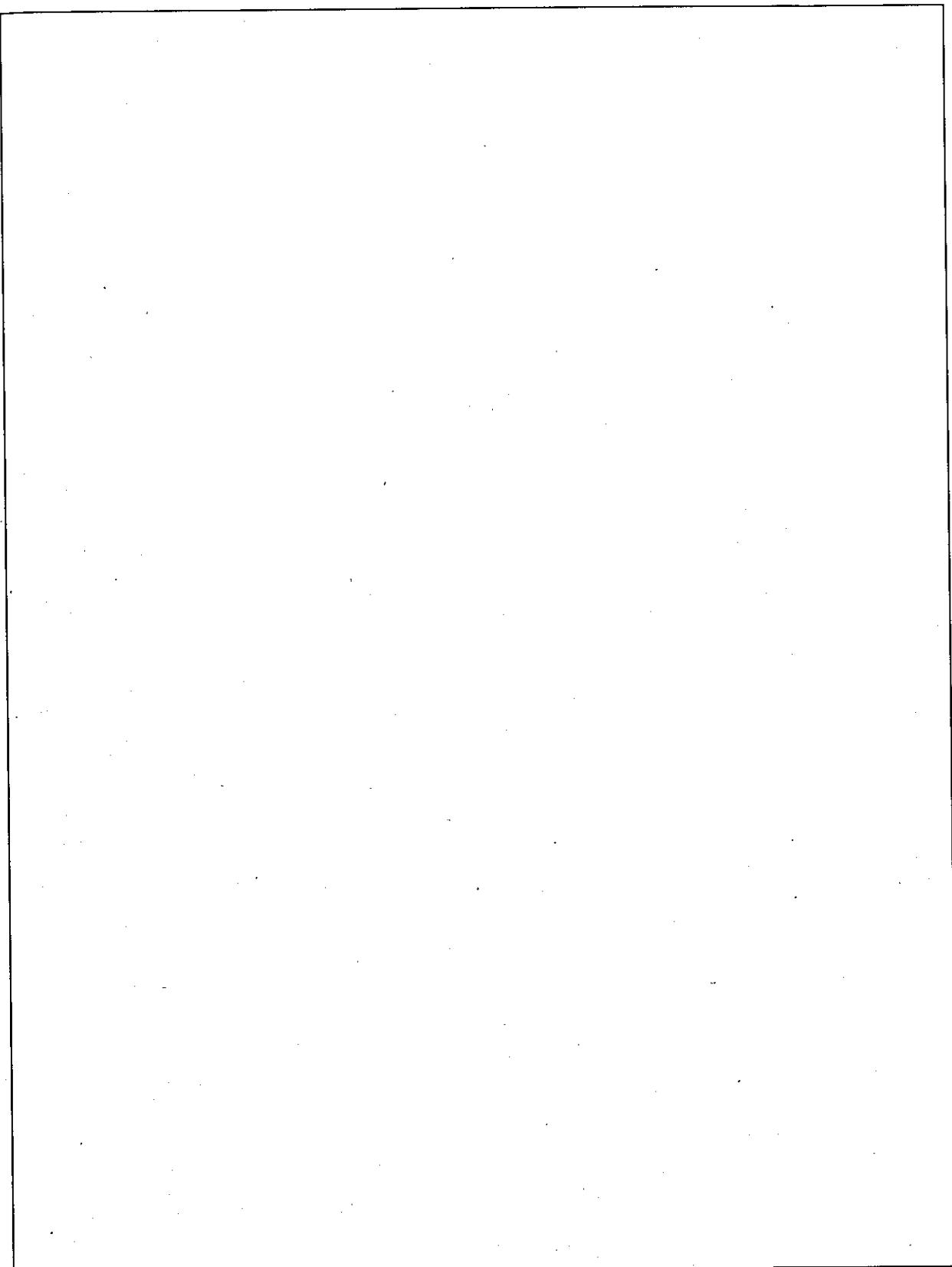
Question 09

Figure Q9 shows an isometric view of an object. Sketch the following orthographic views within the space given below in first angle projection. (Assume any missing dimensions)

- Front elevation looking in the direction of arrow "X"
- End elevation projected to the left of view (a)
- Plan projected from view (a)

**Figure Q9**

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