00618

The Open University of Sri Lanka
Faculty of Engineering Technology

Study Programme	:	Bachelor of Technology Honors in Engineering
Name of the Examination	:	Final Examination
Course Code and Title	:	**MEX3211 – Communicating Engineering Information**
Academic Year	:	2015/16
Date	:	26 - 11 - 2016
Time	:	13.30 – 17.30hrs
Duration	:	4 hours

PART-A		PART-B		TOTAL	

Write your index number clearly

Index Number	

General instructions

1. This question paper consists of **two sections PART A** (05 questions) and **PART B** (04 questions).
2. Answer all questions. PART A will carry 60 marks and PART B will carry 40 marks.
3. Spend at least two and a half (2 ½) hours for PART A and the remaining time 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 question.
5. Any answers given in separate sheets other than this question paper will not be considered 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

(Five questions – 12 x5 = 60 Marks)

Question 01.

Under each part below, a pair of words/expressions is given. Distinguish clearly the meaning between the two words/expressions in each pair.

a) Data and information

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b) Introduction of a report and Summery of a report

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c) Memory method of delivery and Extemporaneous method of delivery

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d) Algorithm and Flow chart

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Question 02. _

a) Explain clearly the meaning of the word '**communication**'?

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b) List and explain five major elements of a **communication process**?

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c) Discuss clearly the effects of '**noise**' in **communication process**?

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d) Explain briefly the features of engineering drawing, that make it an appropriate medium for technical communication ?

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Question 03

a) List any five types of **technical report**, giving a brief explanation of each type ?

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b) Select any one type of technical report you have listed in a) above and list and briefly five most essential components it should contain ?

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c) List and explain five most important features a **questionnaire** must have, for it to be effective in gathering reliable information for a report ?

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d) List and explain the details that are usually included when quoting the **references** in a report from :

i) a book

ii) internet

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Question 04

List and explain five aspects on each of the following you as a presenter would verify, **prior** to the presentation. Also mention what type of problems you may encounter in these aspects during the presentation and how you would overcome such problems:

a) Presentation audience

b) Presentation venue (or environment)

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Question 05

A given data set has a **mean μ** and a **standard deviation σ**.

a) What are the **new values of the mean** and the **standard deviation** if the same **constant k** is **added** to each data value in the given set? **Explain**.

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b) What are the **new values of the mean** and the **standard deviation** if each data value of the set is **multiplied** by the same **constant k**? Explain.

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PART- B
(Four questions – 40 Marks)

Note : Sketch your answers to suitable proportions. Dimensions are given only for guidance and you are not required to use exact dimensions.

Question 06.

Construct an ellipse whose major and minor axes are 150mm and 100mm respectively, Using following methods.

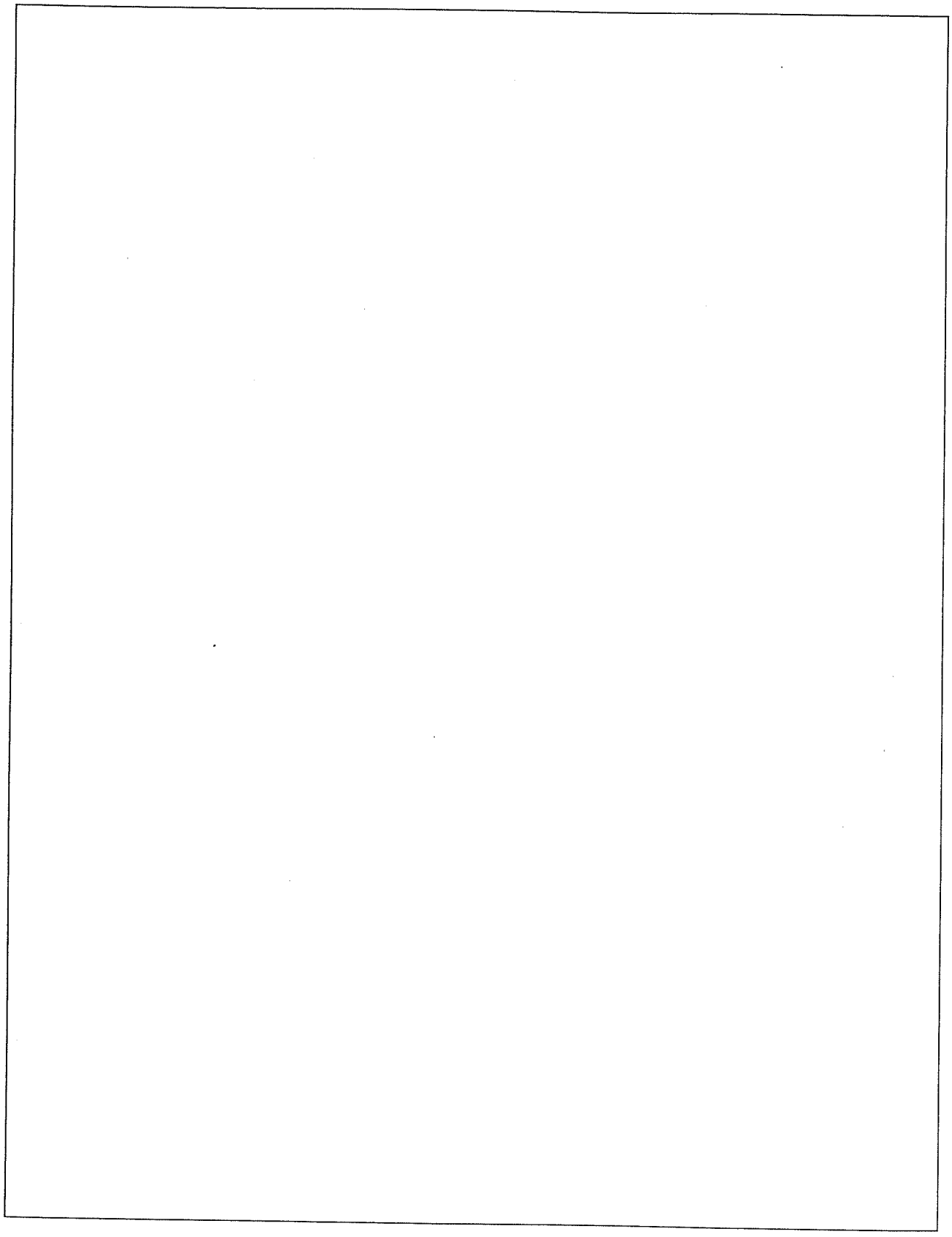
(a) **Rectangular method** **(5 marks)**

(b) **Concentric circular** method **(5 marks)**

Briefly state the steps of your construction in (a) and (b)

Answer cage

Answer cage



Question 07

Draw **an Archimedean spiral** of one convolution and briefly explain **constructing steps.**

(10 marks)

Answer cage

Question 08

Figure. 02. shows the pictorial view of **a support bracket.**

(a) Sketch the following views in "first angle projection"

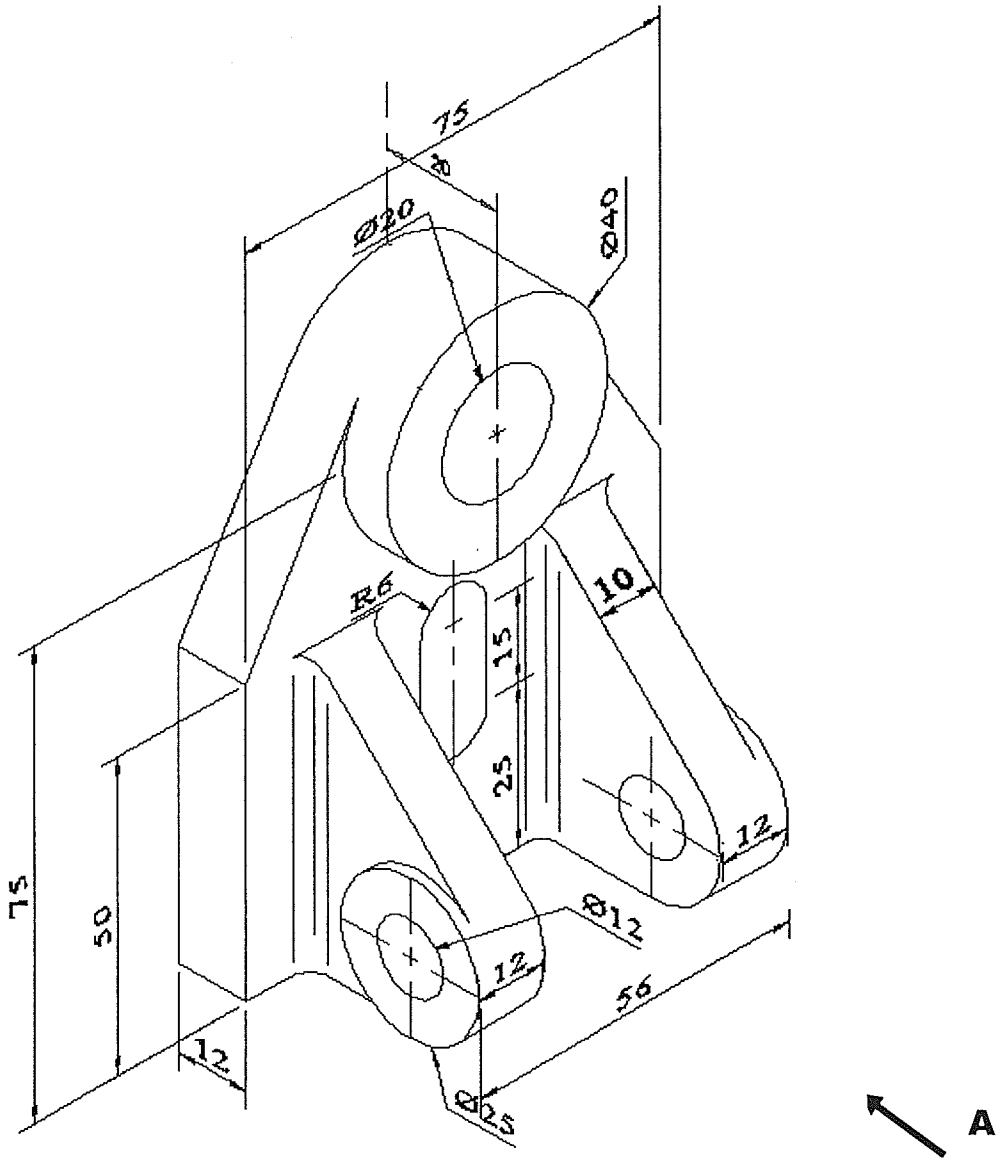
i) **Front Elevation** viewed from the direction '**A**'. **(3 marks)**

ii) Plan viewed from top. **(3 marks)**

iii) **End Elevation** viewed from the right **(2 marks)**

(b) Do major **dimensions** in each view without repeating the same, name views, show hidden details.

(2 marks)



Answer cage

Question 09

Fig. 03 shows the front elevation and plan of an object. Sketch the **isometric view of the object** taking the **nearest point** as given by the arrows.

(Correct near point- 3marks+Isomertic view-7marks = 10marks)

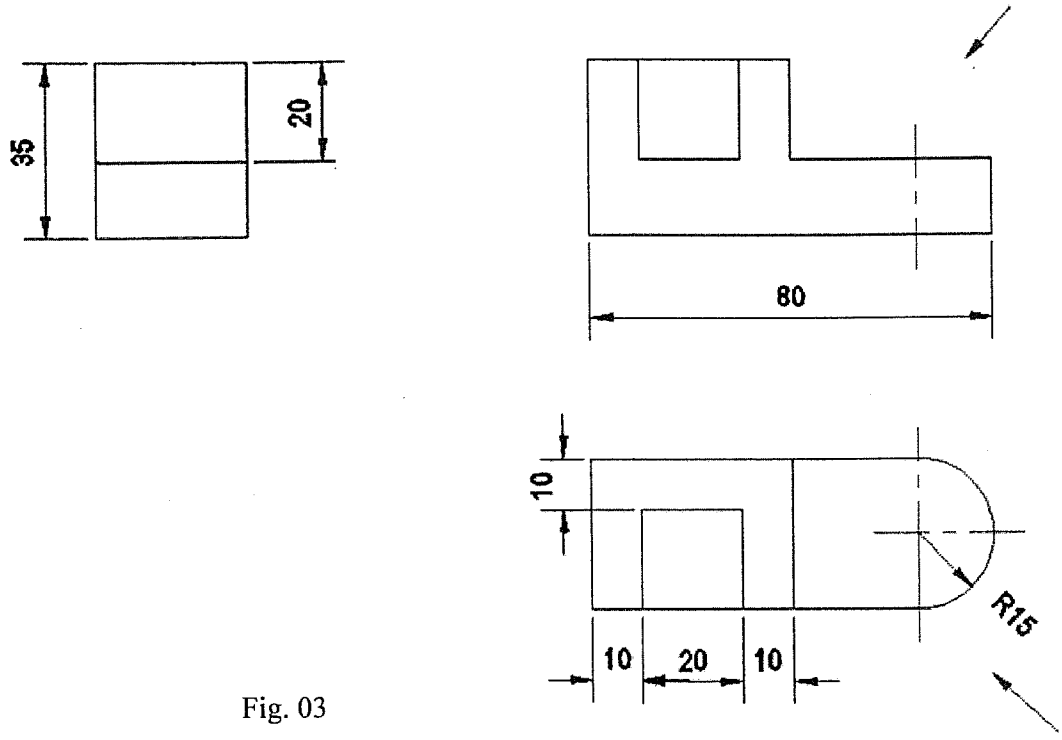


Fig. 03

Answer cage

*** END OF QUESTION PAPER ***