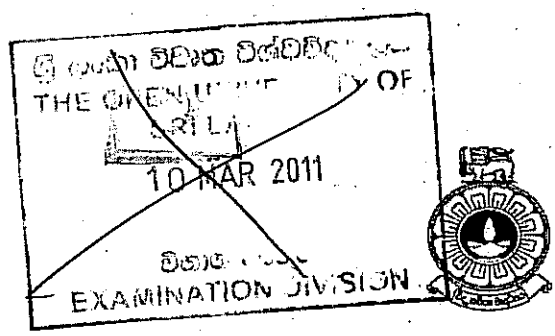
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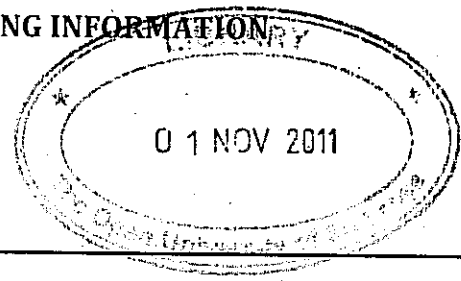
THE OPENUNIVERSITY OF SRI LANKA

FACULTY OF ENGINEERING TECHNOLOGY

DIPLOMA IN TECHNOLOGY – LEVEL 02/03

FINAL EXAMINATION 2010

MEX2230/MEX3211 – COMMUNICATING ENGINEERING INFORMATION



DATE : 10th MARCH 2011

TIME : 1330 HRS – 1730 HRS

DURATION : FOUR HOURS [04]

WRITE YOUR INDEX NUMBER CLEARLY ⇨

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 allquestions. PART A** will carry **60** marks and **PART B** will carry **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 question.*
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 extremelyimportant 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) Explain the meaning of the word 'Communication'.

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(b) Distinguish the difference between *processed data* and *raw data* in relation to information.

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(c) State the six dominant features in an Information Society.

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(d) What are the advantages of standardizing graphical symbols used in communicating information?

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(e) Briefly explain the different phases within an information system. You may use an example to elaborate on your answer.

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Question 02

Answer the questions given below.

(a) List out at least five salient features that a questionnaire should contain in order to gather information effectively.

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(b) What are the other methods of gathering information, apart from the questionnaire? Briefly describe one of the methods.

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(c) *Thinking critically about the information gathered, is often considered as a good practice for making use of the data in a more effective manner.* Elaborate on this statement by taking a suitable example.

(d) Editing data is one of the major steps in processing information. What attributes of data is expected to be ensured by processing of editing? State at least five such attributes.

(e) What are the main objectives of tabulating data?

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Question 03

Answer the questions given below.

(a) Explain the main objective of writing a proposal for a project. List out the subsections that contains in such a typical project proposal.

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(b) What are the precautions to be taken in the context of writing style, when writing a technical report?

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(c) *Abbreviations are typically used in technical report writing to avoid tedious repetition of expressions in full.* What are the rules that need to be followed when using abbreviations in report wring?

(d) List the details that are usually included when quoting references in technical reports. Give an example to make your answer clear.

Question 04

You have been nominated by the Open University of Sri Lanka to conduct an oral presentation on the B.Tech (Engineering) degree programme offered by the university, to the Advanced Level students at your former school.

(a) Briefly explain the importance of having a prior knowledge of the audience, to make your presentation more effective.

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(b) Name the types of delivery methods available for making such a presentation. What type of method would you select? Justify your answer.

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(c) What types of visual aids would you select in conducting your presentation? How are the selected visual aids, enhance the effectiveness of your presentation?

(d) What are the factors you should consider with regard to the presentation environment prior to the presentation?

Question 05

(a) Explain the meaning of the term 'dispersion' with regard to a collection of data.

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(b) List out five parameters available in statistical analysis for measurement of dispersion. Explain two parameters from the above list, giving a numerical example for each parameter.

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(c) Explain the use of line graphs and Gantt charts in relation to data visualization. You may take suitable examples to elaborate on your answer.

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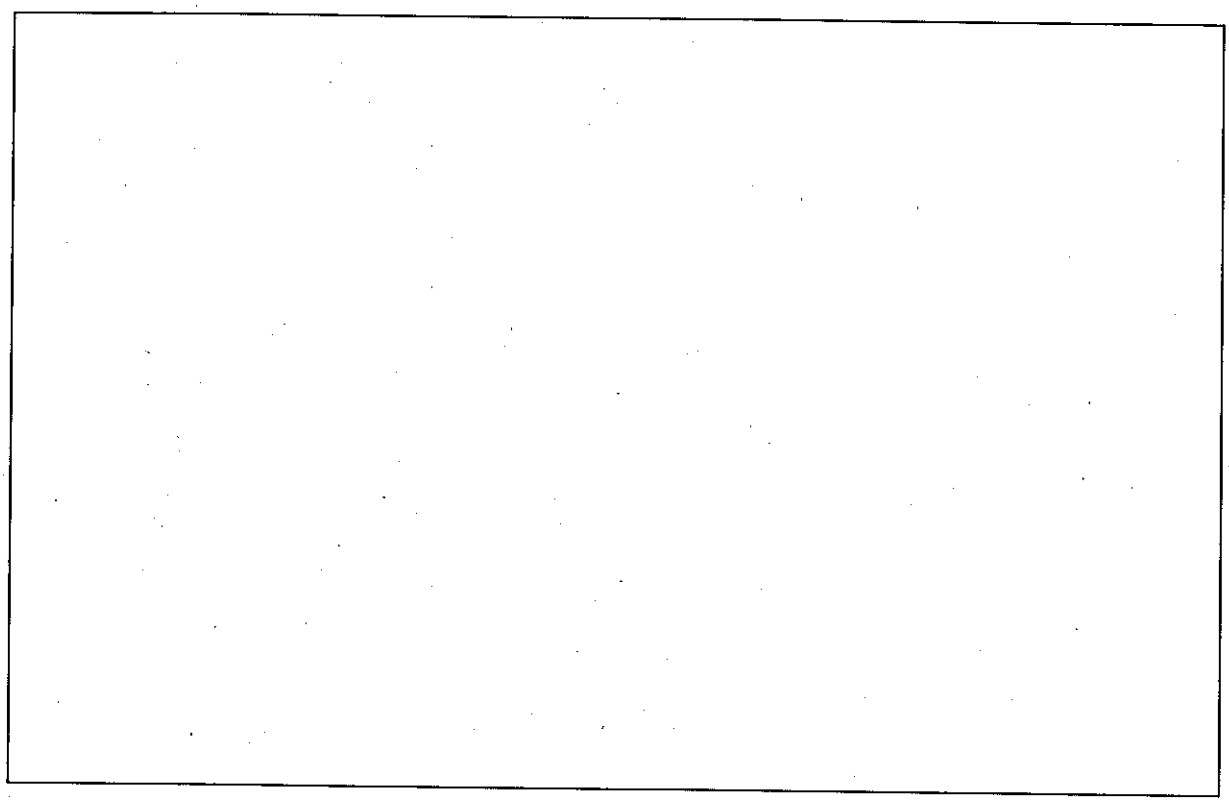
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End of Part A

PART – B

Question 06

Sketch and explain how to draw an involute to a given circle.



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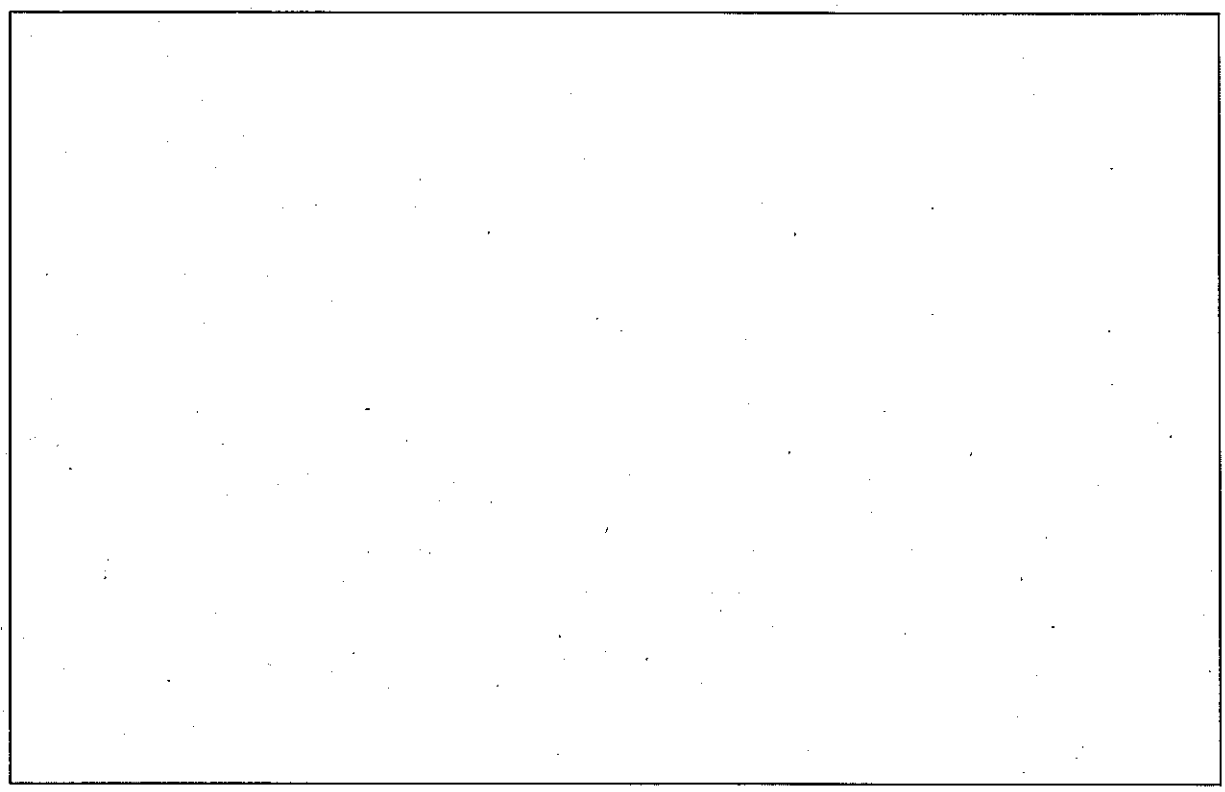
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Question 07

Sketch and explain how an ellipse is constructed by the rectangular method, when the major and minor axes are given.



Question 08

Figure Q8 shows the elevation and plan of an object. Sketch the isometric view of the object within the space given below taking the near points as shown by two arrows.

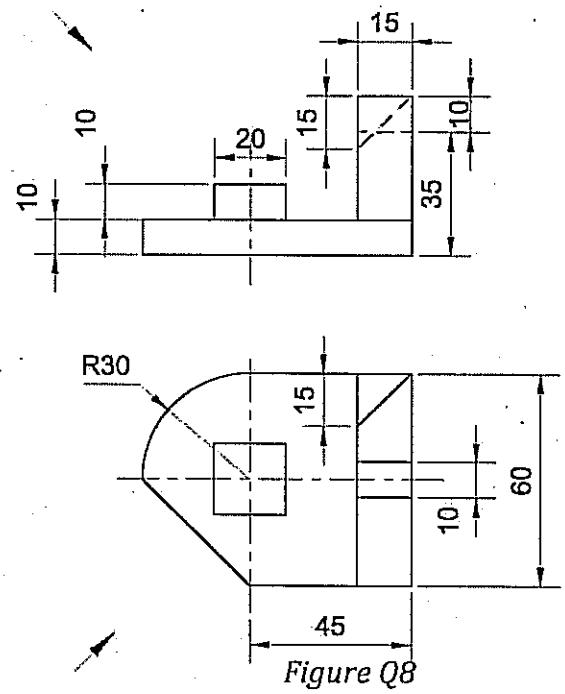


Figure Q8

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)

(a) Front elevation looking in the direction of arrow "X"

(b) End elevation projected to the right of view in (a)

(c) Plan projected from view (a)

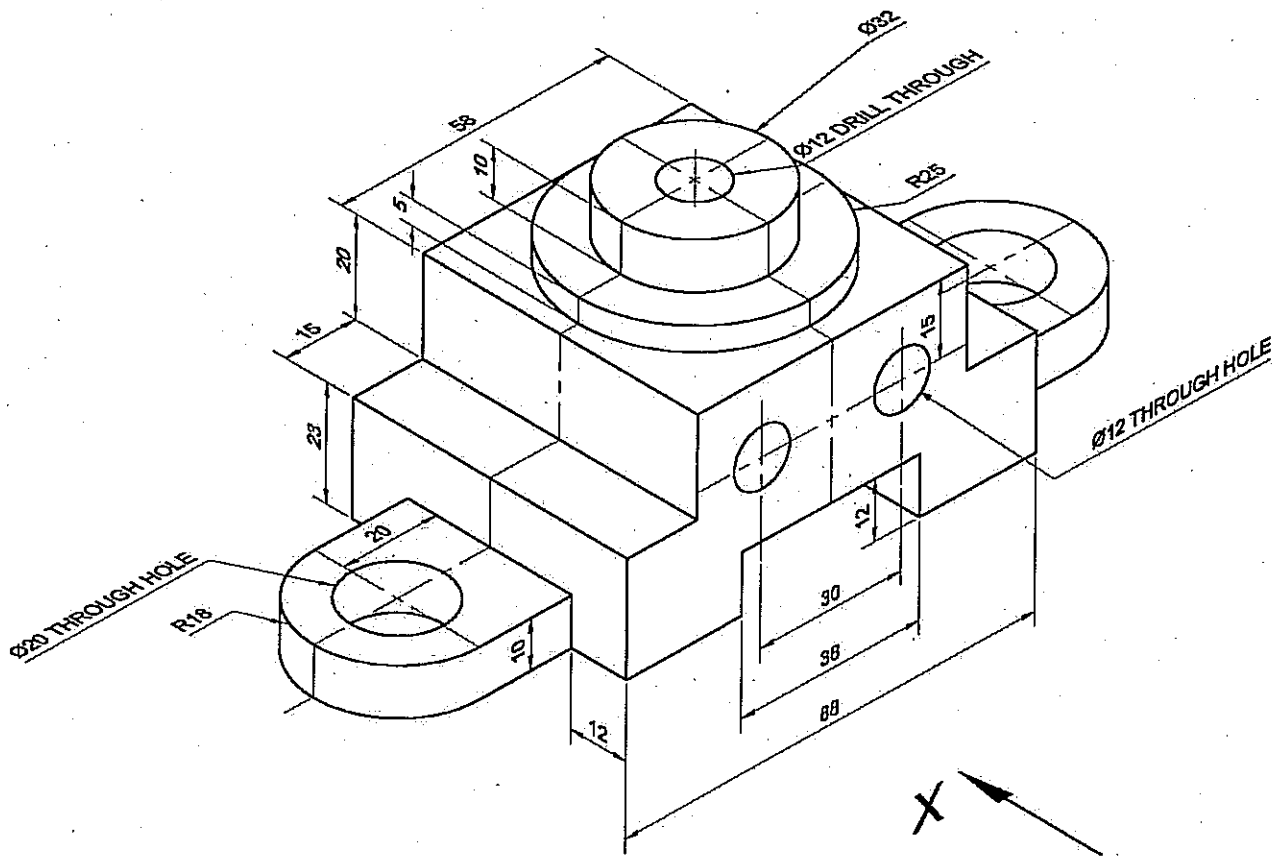
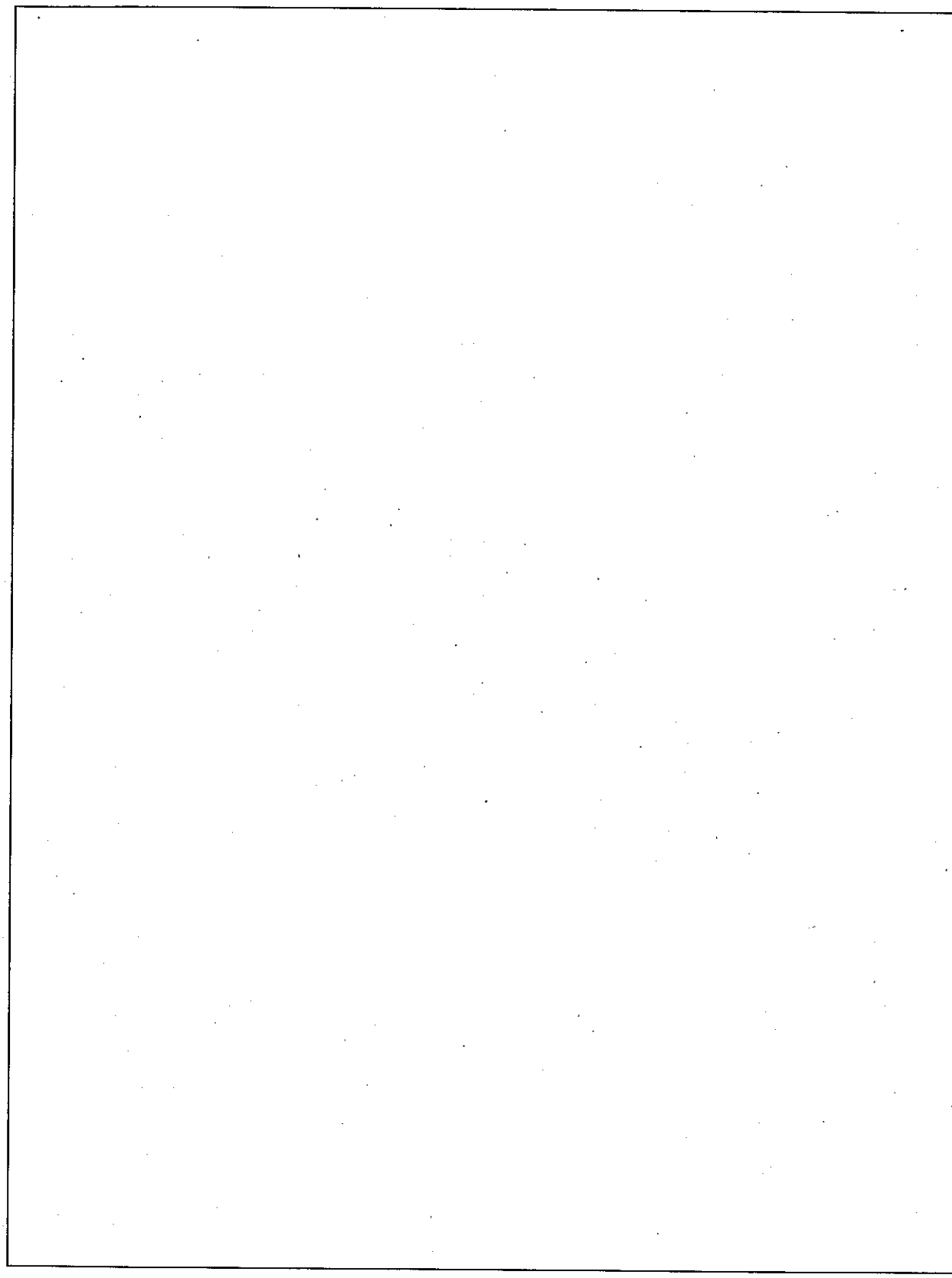


Figure Q9



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