

THE OPEN UNIVERSITY OF SRI LANKA

B.Sc. DEGREE PROGRAMME – Level 5

INDUSTRIAL CHEMISTRY - CHU3237

FINAL EXAMINATION 2013/ 2014

3 hours



Date: 23rd 11. 2014

Time: 9.30 a.m. – 12.30 p.m.

- This question paper consists of two sections. **Part I (Short questions)** and **Part II (Structured type)**
- **Part I** consists of **15** short questions; recommended time to complete this part is one hour.
- **Part II** consists of **six** questions; you are expected to answer **four(04)** questions including **one compulsory question** to be answered out of six. Recommended time to complete this part 2 hours.

Part I (40 marks)

Index Number.....

Staff signature.....

Answer all questions.

1. State two main types of industries based on rubber, giving two examples of products for each.

	Industry	Examples
(i)		
(ii)		

(04 marks)

2. Write **three** important features of the Ellingham diagram for oxides of elements.

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(03 marks)

3. Distinguish between 'flash setting' and 'false setting' of cement paste.

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(04 marks)

4. Define the term, 'corrosion'. Write an equation to illustrate corrosion.

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(03 marks)

5. What is meant by 'metal finishing'?

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(02 marks)

6. Write down **three** types of metal finishing

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(02 marks)

7. Write two major source of sulphur.

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(02 marks)

8. For what specific purpose does a ball mill used in ceramic industry? How does it contribute to the production of quality ceramic ware?

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(04 marks)

09. Why is glass known as an amorphous substance?

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(02 marks)

10. Give **two** value added products of α - pinene.

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(02Marks)

11. Name **three** spices used for oleoresin manufacture in Sri Lanka.

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(03 marks)

12. The important processes carried out in petroleum industry are cracking and reforming. Distinguish between cracking and reforming

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(02 marks)

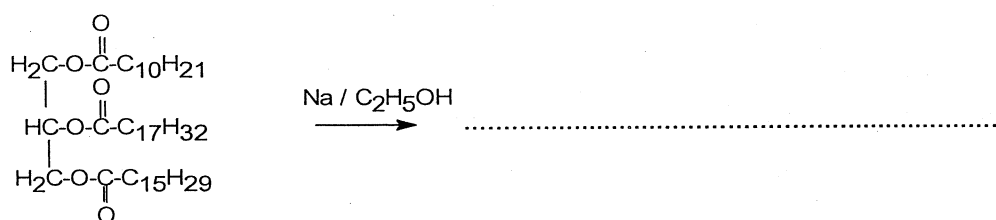
13. What do you understand by the term "Naphtha" in the petrochemical Industry?

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(02 marks)

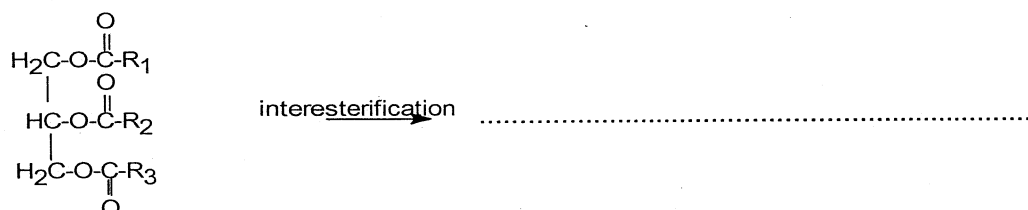
14. Write down the product(s) of the following reaction.

(03 marks)



15. Give **two** products that can be formed by interesterification of the following triglyceride?

(02 marks)



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