

THE OPEN UNIVERSITY OF SRI LANKA

B.SC.DEGREE PROGRAMME

INDUSTRIAL CHEMISTRY – CMU3232

FINAL EXAMINATION - 2017/18

Duration: Three hours (03)



Date: 05.04.2019

Time: 9.30 a.m. – 12.30 p.m.

This question paper consists of two parts. **Part I** and **Part II**.

- Part I consists of **15 short questions**; recommended time to complete this part is **one** hour.
- Part II consists of **six (06)** questions; you are expected to answer **four (04)** questions. Recommended time to complete this part is **two** hours.

Handover the Answer scripts of Part I and II separately

Part I (40 marks)

Index Number:

Staff signature:

Answer all questions.

1. What is natural rubber?

.....

(01 marks)

2. What is meant by the term “metal finishing” in metal industry?

.....

(02 marks)

3. What is the most important property a refractory clay should have? How is it achieved in the preparation of refractory clay for a specific application?

.....

(04 marks)

4. For what specific purpose does the "power pressing" used in a ceramic industry? Name one application.

.....

(04 marks)

5. Distinguish between setting and hardening.

.....

(02 marks)

6. Identify the crystalline phase(s) responsible for

Early development of strength:

Rapid setting:

(04 marks)

7. Give the metal that could be extracted from the following minerals.

Mineral	Rutile	Monozone	Zircon
Extractable metal			

(03 marks)

8. Give **two** factors that affect the melting points of fats and oils?

.....

(04 marks)

9. Briefly explain the term "Iodine number" of a fat.

.....

.....

.....

.....

.....

(04 marks)

10. List **three** simple tests used to characterize crude petroleum in a refinery laboratory.

.....

.....

.....

(03 marks)

11. What is the **major** technique used to refine petroleum?

.....

.....

(01 marks)

12. List the **major** components (natural isolates) of the following essential oils:

Clove oil

Citronella oil

(02 marks)

13. List **two** value added products of citral.

.....

.....

.....

(02 marks)

14. What is biodiesel?

.....

.....

.....

.....

(02marks)

15. What is meant by the term "blends of biodiesel"?

.....

.....

.....

.....

(02 marks)
