

I B. Tech I Semester Supplementary Examinations, May - 2017**APPLIED CHEMISTRY**

(Electrical and Electronics Engineering)

Time: 3 hours

Max. Marks: 70

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- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **FOUR** Questions from **Part-B**
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PART -A

1. a) What is natural rubber? (2M)
- b) What is octane rating? (2M)
- c) Explain electroless plating. (2M)
- d) What are carbon fullerenes? (2M)
- e) Define super conductors and give two examples. (2M)
- f) Define ferro magnetic material give examples. (2M)
- g) What is the importance of tidal energy? (2M)

PART -B

2. a) Explain suspension polymerization method. (6M)
- b) Give preparation, properties and engineering applications of polyethene and Bakelite. (8M)
3. a) Explain flue gas analysis by Orsat operates with neat sketch. (8M)
- b) Explain petrol and diesel knocking. (6M)
4. a) Give brief note on differential aeration and waterline corrosion. (8M)
- b) Explain galvanic cells. (6M)
5. a) Explain solgel method of nano material with suitable example. (8M)
- b) Explain R₄M₄ principles. (6M)
6. a) Define semiconductors explain their preparation. (8M)
- b) What are insulators explain their electrical and electronic applications? (6M)
7. a) Explain thermal and photo conversion of solar energy. (6M)
- b) Describe closed and open cycle ocean thermal energy conversion. (8M)

