

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Agrl.Engg) 2014 Admission

Ist Semester Final Examination- January -2015

Marks: 50.00

Time: 2 hours

Cat. No: Chem.1101

Title: Engineering Chemistry (2+1)

I Match the Following

(10 x 1=10)

- | | |
|-----------------------|---------------------------------------|
| 1. EDTA | a) Rubber |
| 2. Bakelite | b) Neyveli |
| 3. Vulcanization | c) Determination of hardness of water |
| 4. Antiknocking agent | d) Gelatin |
| 5. Bergius process | e) Lubricant |
| 6. Reversible colloid | f) Phospholipid |
| 7. Graphite | g) Aminoacid |
| 8. Lecithin | h) Thermosettingplastic |
| 9. Glycine | I) TEL |
| 10. Lignite | j) Synthetic gasoline |

II Write short notes on any FIVE questions

(5 x 2=10)

1. Reverse osmosis
2. Teflon
3. Dialysis
4. Galvanic corrosion
5. Essential aminoacids
6. Secondary structure of proteins
7. Flavouring agents in food products

III Write short notes on any FIVE questions

(5 x 4=20)

1. What problems arise by the use of hard water in boilers ?Suggest methods to overcome the same.
2. Write a note on the preparation and uses of the following polymers a) HDPE b) Dacron c) PVC
3. Write down the importance of solid lubricants and synthetic lubricants .Give examples for them
4. Discuss various factors that affect corrosion
5. How many buried pipelines be prevented from corrosion
6. Write notes on a) Natural gas b) LPG c) Biogas
7. Compare the properties of lyophilic and lyophobic colloids

IV Write an essay on any ONE

(1 x 10=10)

1. What are the differences between thermoplastics and thermosetting plastics. Give two examples
2. How is petroleum refined .What are the important fractions of petroleum refining. Mention their uses
