S.B. Roll No……

APPLIED CHEMISTRY-II

2nd Exam/Common/2254/Nov'18

Duration: 3Hrs. **M.Marks:75**

SECTION-A

Q1. Fill in the blanks. (Any ten) **10x1.5=15**

a. Flux + gangue =_____
b. Producer gas is a mixture of CO and _____
c. Viscosity of a lubricant _____ with increase in temperature.
d. A good lubricant should have _____ boiling point.
e. Annealing is the process to make steel _____in nature.
f. _____ the pH, greater is the corrosion.
g. _____glass is used in making laboratory apparatus.
h. Silica is a type of _____refractory.
i. Nylon-66 is an example of _____polymer.
j. The monomer unit of PVC is _____
k. Units of viscosity are_____
l. A good fuel has _____calorific value.
m. _____ is the major component of natural gas.

SECTION-B

Q2. Attempt any ten questions. **10x3=30**

i. How is biogas produced? Name its main constituents.
ii. What are composite materials? Give an example.
iii. Give applications of solid lubricants. Also give an example.
iv. What is the purpose of making alloys?
v. Explain flash point and fire point of a lubricant.
vi. What is the difference between thermoplastic and thermosetting polymers?
vii. Give one use of a) soda lime glass b) flint glass c) borosilicate glass.
viii. Define polymerization and degree of polymerization.
ix. What is the difference between erosion and corrosion?
x. Define calorific value of a fuel. Which variety of coal has the highest calorific value?
xi. What are the advantages of gaseous fuels?
xii. What are the characteristics of a good refractory material?
xiii. Name the various constituents of paint.
xiv. Define the term galvanization.
xv. Explain greenhouse effect.

SECTION-C

Attempt any three questions. **3x10=30**

Q3. a) Define: **i)** metallurgy **ii)** mineral **iii)** ore **iv)** gangue **v)** flux **5**
b) Give composition and uses of **i)** brass **ii)** bronze **5**
Q4. a) Explain the heat treatment methods to prevent corrosion of metals. **5**
b) Explain the process of cementation. **5**
Q5. a)What are the characteristics of a good fuel? **5**
b) Give composition and uses of a) water gas b) producer gas **3**
c) What are anti knock compounds? Give two examples. **2**
Q6. a) What are refractories? Explain its types with examples. **5**
b) What is enamel? What are the constituents and applications of enamels? **5**
Q7. a) Explain addition and condensation polymers with examples. **5**
b) What are the characteristics of a good lubricant? **5**