

Roll No. _____

(For all Sessions)

گروپ-I-Group-I

Chemistry (Essay Type)

کیمیستری (انشائیہ)

Marks: 48

وقت: 1:45 گھنٹے Time: 1:45 Hours

نمبر: 48

Section - I

2x15=30

حصہ اول

2. Write short answers of any five parts from the following. 2 x 5 = 10
- Give two macroscopic characteristics of Reverse reactions.
 - Derive equilibrium constant expression for the synthesis of nitrogen monoxide from N_2 and O_2 .
 - How direction of a reaction can be predicted?
 - Write two possibilities of chemical equilibrium state.
 - Write names of two naturally occurring acids with their sources.
 - Give two uses of Magnesium hydroxide.
 - Define normal salts with one example.
 - Na_2SO_4 is a neutral salt. Write its uses.
3. Write short answers of any five parts from the following. 2 x 5 = 10
- Classify the organic compounds on the basis of skeleton.
 - What is the process of destructive distillation.
 - What is Isomerism?
 - Define process of halogenation with an example.
 - Why alkenes are also known as olifins?
 - What is meant by non essential amino acids?
 - Define carbohydrates and write its general formula.
 - What is meant by genetic code of life?
4. Write short answers of any five parts from the following. 2 x 5 = 10
- Differentiate between primary and secondary air pollutants.
 - How ozone layer forms in stratosphere?
 - State the phenomenon of decreasing temperature in troposphere.
 - Why non-polar compounds are insoluble in water?
 - Differentiate between soft and hard water.
 - Define gravity separation method.
 - Describe the formation of petroleum.
 - Write two uses of kerosene oil.

Section - II

Note: Answer any two questions from the following.

- 5.(a) State the law of mass action and derive the expression for equilibrium constant for a general reaction. 05
- (b) Explain Lewis concept of acids and bases with the help of examples. 04
- 6.(a) Explain the halogenation of Methane in diffused and direct sunlight. 05
- (b) Describe the importance of vitamins. 04
- 7.(a) How is urea manufactured? Explain with the help of flowsheet diagram. 05
- (b) Explain the water pollution because of industrial waste. 04