

Roll No. _____ امیدوار خود پر کرے

(For all Sessions)

گروپ-II-Group

Chemistry (Essay Type)

کیمسٹری (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
- Define irreversible chemical reaction.
 - Define equilibrium constant.
 - If numerical value of K_c is small then predict the extent of chemical reaction.
 - Write equilibrium constant expression for $N_2 + 3H_2 \rightleftharpoons 2NH_3$
 - Write two uses of pH.
 - Define indicator and give one example.
 - Define acid and base according to Arrhenius concept.
 - How salt is prepared by the reaction of an acid and metallic oxide.
3. Write short answers of any five parts from the following. 2 x 5 = 10
- Define Catenation.
 - Write names of two aromatic compounds found in Coal Tar.
 - Define molecular formula and give one example.
 - Write general formula for saturated and unsaturated hydrocarbons.
 - What is combustion? Give a reaction.
 - What are polysaccharides? Give an example.
 - What are the effects of accumulation of vitamin D in the body?
 - Write down the balanced equation for the formation of glucose.
4. Write short answers of any five parts from the following. 2 x 5 = 10
- Define secondary pollutants and give two examples.
 - Define green house effect.
 - How does combustion of fossil fuels in internal combustion engine produce oxides of nitrogen?
 - Define capillary action.
 - What is Scum?
 - Define electromagnetic separation.
 - Define calcination with chemical equation.
 - How ammonia is prepared by Haber's process?

Section -II

Note: Answer any two questions from the following.

نوٹ: درج ذیل میں سے کوئی سے دو سوالات کے جوابات تحریر کریں۔ 9x2=18

- 5.(a) State the law of mass action and derive the expression for equilibrium constant for general reaction. 05
- (b) Write any four characteristic properties of salts. 04
- 6.(a) Explain saturated and unsaturated hydrocarbons with examples. 05
- (b) Explain the uses and sources of proteins. 04
- 7.(a) What is meant by concentration of an Ore? Describe in detail the various process involved in the concentration of Ore. 05
- (b) Explain the methods of removing permanent hardness of water. 04