

Roll No. _____

(For all Sessions)

Paper Code 7 4 8 3

Group-I-گروپ-1

Chemistry (Objective Type)

کیمسٹری (معروضی)

Marks: 12

Time: 15 Minutes وقت: 15 منٹ

نمبر: 12

نوٹ: تمام سوالات کے جوابات دی گئی معروضی جوابی کاپی پر لکھیں ہر سوال کے چار ممکنہ جوابات A, B, C, D دیے گئے ہیں، جس جواب کو آپ درست سمجھیں، جوابی کاپی پر اس سوال نمبر کے سامنے جڑو A, B, C یا D کے دائروں میں سے متعلقہ دائرے کو مار کر یا چین کی سیاہی سے بھر دیں۔

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A, B, C & D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or pen ink on the answer sheet provided.

- 1.1. Swimming pools are cleaned by which process?
(A) Nitration نائٹریشن (B) Hydrogenation ہائیڈروجنیشن (C) Bromination برومینیشن (D) Chlorination کلورینیشن
2. Which disease causes bones and teeth damage?
(A) Fluorosis فلوروسس (B) Hepatitis ہیپاٹائٹس (C) Cholera ہیضہ (D) Joundice برقان
3. The fraction of residual oil is:
(A) Petroleum gas پٹرولیم گیس (B) Petroleum ether پٹرولیم ایٹر (C) Diesel oil ڈیزل آئل (D) Lubricants لبریکنٹس
4. The colour of Iodine is:
(A) White سفید (B) Red سرخ (C) Pink گلابی (D) Purple جامنی
5. The units of molar concentration are:
(A) mol cm² (B) mol dm³ (C) mol dm⁻³ (D) mol m²
6. The acid used for food preservation is:
(A) Sulphuric acid سلفورک ایسڈ (B) Nitric acid نائٹرک ایسڈ (C) Hydrochloric acid ہائیڈروکلورک ایسڈ (D) Benzoic acid بینزویک ایسڈ
7. Sum of pH and pOH of solution at 25°C is always:
(A) 14 (B) 12 (C) 10 (D) 8
8. The first organic compound was prepared by:
(A) Dalton ڈالٹن (B) Berzelluis برزلیس (C) Wohler وہلر (D) Lavoisier لیویئر
9. The general formula of alkenes is:
(A) C_nH_{2n+2} (B) C_nH_{2n} (C) C_nH_{2n+1} (D) C_nH_{2n-2}
10. Which one of the following is tasteless compound?
(A) Starch شارج (B) Glucose گلوکوز (C) Fructose فروکٹوز (D) Sucrose سکروز
11. Which organic compounds are used as drug to control bleeding?
(A) Vitamins وٹامنز (B) Glucose گلوکوز (C) Lipids لیپڈز (D) Proteins پروٹینز
12. Just above the earth's surface is:
(A) Mesosphere میوسفر (B) Stratosphere سٹریٹوسفیر (C) Thermosphere تھرموسفیر (D) Troposphere ٹروپوسفیر

Roll No. RP-10-19-91

(For all Sessions)

گروپ-I

Chemistry (Essay Type)

کیمیستری (انشائیہ)

Marks: 48

وقت: 1:45 گھنٹے 1:45 Hours

نمبر: 48

Section - I

2x15=30

حصہ اول

2. Write short answers of any five parts from the following. $2 \times 5 = 10$
- 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. $2 \times 5 = 10$
- 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. $2 \times 5 = 10$
- 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

حصہ دوم

Note: Answer any two questions from the following.

نوٹ: درج ذیل میں سے کوئی سے دو سوالات کے جوابات تحریر کریں۔ $9 \times 2 = 18$

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