



SHEIKHA FATIMA BINT MUBARAK

GIRLS CADET COLLEGE TURBAT

ENTRY TEST FOR CLASS.XI

Time allowed: 3 hours

Total marks: (100)

Part (1)

(1x15=15)

Objective

Qno1: Choose the correct answer.

- I. Which of the following is an example of longitudinal waves.
a. Microwave b. Radio wave c. Light wave d. Sound wave
- II. The image formed by a convex mirror
a. Real b. Virtual c. Real and virtual d. None
- III. The s.i unit of charge is
a. Ohm b. Coulomb c. Ampere d. Volt
- IV. How many maximum roots of quadratic equation are
a. 2 b. 3 c. 1 d. None of them
- V. All Cube roots of unity are
a. 1 b. 1, ω c. 1, ω, ω^2 d. ω, ω^2
- VI. A set having no element is called
a. Subset b. Empty set c. Power set d. Singleton set
- VII. Number of periods in periodic table are
a. 8 b. 7 c. 16 d. 5
- VIII. As you move from to right to left in periodic table, which of following does not increase
a. Electron affinity b. Ionization energy c. Nuclear charge d. Shielding effect
- IX. Which one of the following is simplest alkyne
a. Acetylene b. Propyne c. Butyne d. Ethene
- X. Life span of RBCs
a. 4 days b. 30 days c. 60 days d. 120 days
- XI. Pneumonia is an infection of:
a. Throat b. Liver c. Lungs d. Kidney
- XII. Chest cage is made up of _____ pairs of Ribs.
a. 6 pairs b. 12 pairs c. 16 pairs d. 24 pairs
- XIII. Aliya was looking for a way ____ earn money.
a. for b. in c. on d. to
- XIV. Nature is the gift _____ ALLAH.
a. in b. off c. of d. to
- XV. Honesty _____ liked by everyone.
a. are b. is c. were d. am

Subjective

Qno 2: Write the short answer of the following question. (Any fifteen)

- i. What is meant by electrostatic induction?
- ii. How an electric charge is produced?
- iii. What is frequency?
- iv. Define electric current.
- v. Discuss the nature of roots of $x^2 + 4x + 5 = 0$
- vi. Show that $1 + \omega^{46} + \omega^{47} = 0$
- vii. Find the fourth proportional of 6,24,15
- viii. Find arithmetic mean by direct method of the data 15,29,25,18,45,34,39,32,41,26
- ix. Find the value of the trigonometric function without using table or calculator 390°
- x. What is percentage of methane in natural gas?
- xi. Differentiate between saturated and unsaturated hydrocarbon.
- xii. What is Lewis acid and base?
- xiii. What is functional group?
- xiv. What is Ulcer?
- xv. Enlist the types of granulocytes
- xvi. What is osmoregulation?
- xvii. What is mutualism?
- xviii. Define law of independent assortment?
- xix. Write 2 function of hypothalamus.
- xx. Translate the following into Urdu.
 - a. Work whole heartedly
 - b. Sip the hot tea slowly.
 - c. Please put down all that I say.
- xxi. Define syllable and similes.
- xxii. Write down comparative and superlative degrees of the given adverb.
 - a. Quietly b. heavily c. freely d. hard e. soon
- xxiii. Define direct speech and indirect speech with examples.
- xxiv. Define material and abstract nouns.
- xxv. Use collective, countable and uncountable nouns in sentences.
- xxvi. Define Pure Quadratic equation with example.
- xxvii. Draw the speed time graph.
- xxviii. Define Proper and improper fractions with examples.
- xxix. State the Newton's Laws.
- xxx. State coulomb's law.

Long Question

Qno 3: Answer the following questions. (Any five).

- I. (a) Explain Coloumb's Law of electrostatics and write it's mathematical form.
 (b) Two bodies are oppositely charged with $500 \mu\text{c}$ and $100 \mu\text{c}$ charged. Find the force between the two charges if the distance between them in air is 0.5m .
- II. What do you understand by the longitudinal waves? Describe the longitudinal nature of sound wave.
- III. Show that $\frac{1-\tan^2\theta}{1+\tan^2\theta} = \cos^2\theta - \sin^2\theta$
- IV. Resolve into Partial Fractions $\frac{7x+25}{(x+3)(x+4)}$
- V. Draw and briefly explain the structures of neuron?
- VI. Describe the Contributions that Rutherford made to the development of atomic model?
- VII. Write an Essay on any one of the following topic.
 a) We Should grow trees b) Money is Everything
- VIII. Write a formal letter to your "City Mayor / District Chairman" highlighting the need of a park in your area.

Or

Write an application to the Principal to start "Sport Week" in School.

Qno4: Analytical Reasoning.

Statement: 7 persons live in a street, having houses in line consider the following:

- a. A live in the corner's house.
 - b. C is between E and G.
 - c. There is 1 house between D and F.
 - d. F is neighbor of G.
 - e. There are two houses between A and G.
- I. Who live in the second corner?
 - a. B
 - b. C
 - c. D
 - d. E
 - II. Who lives in the middle?
 - a. C
 - b. D
 - c. E
 - d. G
 - III. Who lives between B and G?
 - a. D
 - b. E
 - c. F
 - d. G
 - IV. _____ is neighbor of A.
 - a. F
 - b. E
 - c. D
 - d. C

- V. There are _____ houses between (B) and (E).
- 0
 - 1
 - 2
 - 3

Question 5: In a game, exactly six inverted caps stand side by side in a straight line, and each has exactly one paper hidden under it. The caps are numbered consecutively through 6. Each of the papers is painted a singled solid color. The colors of the papers are gold, mauve, olive, ping, silver, and white. The papers have been hidden under the caps in a manner that confirms to the following conditions:

G M O P S W

- ❖ The pink papers must be hidden under a lower numbered cap than olive.

(Rule No. 1) $P < o$

- ❖ The silver papers must be hidden under a cap under which a cap immediately adjacent to the cap under which the mauve paper is hidden.

(Rule No. 2) SM or MS

- ❖ The Gold paper must be hidden under the cap 5.

(Rule No. 3) $G = 5$

- Which of the following could be the color of the papers under the caps, in order from 1 through 6?
 - Gold, White, Mauve, Silver, Pink, Olive
 - Mauve, Gold, Pink, Silver, Olive, White
 - Mauve, Silver, Pink, White, Gold, Olive
 - Olive, White, Silver, Mauve, Gold, Pink
 - Silver, Pink, Mauve, White, Gold, Olive
- If the mauve papers is under cap 4, the silver paper must be under cap?
 - 1
 - 2
 - 3
 - 5
 - 6
- A paper of which of the following color could be under cap?
 - Gold
 - Mauve
 - Pink
 - Silver
 - White

Best of Luck