

## Physics

- 1. A car accelerates from rest to 30 m/s in 5 seconds. What is its acceleration?**
  - a. A)  $6 \text{ m/s}^2$
  - b. B)  $150 \text{ m/s}^2$
  - c. C)  $0.167 \text{ m/s}^2$
  - d. D)  $15 \text{ m/s}^2$
- 2. A ball is thrown vertically upward. At its highest point, its velocity is:**
  - a. A)  $0 \text{ m/s}$
  - b. B)  $9.8 \text{ m/s}$
  - c. C)  $-9.8 \text{ m/s}$
  - d. D)  $4.9 \text{ m/s}$
- 3. A force of 10 N acts on a 2 kg object. What is the acceleration of the object?**
  - a. A)  $5 \text{ m/s}^2$
  - b. B)  $20 \text{ m/s}^2$
  - c. C)  $10 \text{ m/s}^2$
  - d. D)  $0.2 \text{ m/s}^2$
- 4. The magnitude of the resultant vector of the vectors  $2\mathbf{i} + 2\mathbf{j} - \mathbf{k}$  and  $\mathbf{j} + 7\mathbf{k}$  is .**
  - a. A) 0
  - b. B) 5
  - c. C) 7
  - d. D) 10
- 5. If  $g = 9.8 \text{ m/sec}^2$  at the surface of earth, the value of 'g' at a height equal to the radius of earth is .**
  - a. A) 0
  - b. B) 2.45
  - c. C) 4.9
  - d. D) 9.8

## Mathematics

- 1. If  $x = 2$  and  $y = 3$ , what is the value of  $2x + 3y$ ?**
  - o A) 13
  - o B) 7
  - o C) 12
  - o D) 9
- 2. Simplify the expression:  $3x + 4x - 2x$** 
  - o A)  $5x$
  - o B)  $9x$
  - o C)  $7x$
  - o D)  $6x$
- 3. Solve the equation:  $2x + 5 = 13$** 
  - o A)  $x = 4$
  - o B)  $x = 6$
  - o C)  $x = 8$

- D)  $x = 10$
- 4. **Find the slope of the line passing through the points (2, 3) and (5, 9).**
  - A) 2
  - B) 3
  - C) 4
  - D) 5
- 5. **What is the value of  $2^3$ ?**
  - A) 6
  - B) 8
  - C) 9
  - D) 12

## Chemistry

1. **Which of the following is a compound?**
  - A) Oxygen ( $O_2$ )
  - B) Water ( $H_2O$ )
  - C) Carbon (C)
  - D) Gold (Au)
2. **What is the pH of a neutral solution?**
  - A) 7
  - B) 14
  - C) 0
  - D) 10
3. **Which of the following is a covalent bond?**
  - A) The bond between sodium and chlorine in sodium chloride (NaCl)
  - B) The bond between hydrogen and oxygen in water ( $H_2O$ )
  - C) The bond between magnesium and oxygen in magnesium oxide (MgO)
  - D) The bond between potassium and iodine in potassium iodide (KI)
4. **What is the chemical formula of carbon dioxide?**
  - A) CO
  - B)  $CO_2$
  - C)  $CO_3$
  - D)  $C_2O$
5. **Which of the following is an organic compound?**
  - A) Sodium chloride (NaCl)
  - B) Water ( $H_2O$ )
  - C) Methane ( $CH_4$ )
  - D) Carbon dioxide ( $CO_2$ )

## English

1. **Identify the part of speech of the underlined word: "The dog barked loudly."**
  - a. A) Noun
  - b. B) Verb

- c. C) Adjective
  - d. D) Adverb
2. **Choose the correct synonym for the word "abundant":**
- a. A) Scarce
  - b. B) Plentiful
  - c. C) Limited
  - d. D) Insufficient
3. **Choose the best option to complete the sentence. Bilal graduates from this University, he wants to go abroad for higher studies.**
- a. By the time
  - b. After
  - c. Before
  - d. Until
4. **Which sentence is grammatically correct?**
- a. A) I am going to the store.
  - b. B) Me and him are going to the store.
  - c. C) He and I are going to the store.
  - d. D) I and him are going to the store.
5. **Identify the type of sentence: "Can you please pass me the salt?"**
- a. A) Declarative
  - b. B) Interrogative
  - c. C) Imperative
  - d. D) Exclamatory

## Biology

### 1. Which of the following is a characteristic of living organisms?

- a) Photosynthesis
- b) Cellular organization
- c) Sensitivity to light only
- d) Respiration in plants only

**Answer:** b) Cellular organization

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### 2. Which organelle is known as the "powerhouse of the cell"?

- a) Nucleus
- b) Mitochondria
- c) Ribosome
- d) Golgi apparatus

**Answer:** b) Mitochondria

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**3. What is the primary function of the xylem in plants?**

- a) Transport of water and minerals
- b) Transport of food and nutrients
- c) Photosynthesis
- d) Protection against pathogens

**Answer:** a) Transport of water and minerals

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**4. Which of the following is the monomer of proteins?**

- a) Nucleotide
- b) Fatty acid
- c) Amino acid
- d) Glucose

**Answer:** c) Amino acid

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**5. The process by which a cell divides into two identical daughter cells is called:**

- a) Meiosis
- b) Mitosis
- c) Binary fission
- d) Splicing

**Answer:** b) Mitosis

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**6. Which blood component is responsible for transporting oxygen?**

- a) White blood cells
- b) Platelets
- c) Hemoglobin in red blood cells
- d) Plasma

**Answer:** c) Hemoglobin in red blood cells

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**7. Which of the following is a type of RNA involved in protein synthesis?**

- a) mRNA

- b) tRNA
- c) rRNA
- d) All of the above

**Answer:** d) All of the above

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**8. In which part of the human body does digestion of proteins begin?**

- a) Mouth
- b) Stomach
- c) Small intestine
- d) Large intestine

**Answer:** b) Stomach

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**9. Which of the following processes results in genetic variation in populations?**

- a) Asexual reproduction
- b) Binary fission
- c) Sexual reproduction
- d) Cloning

**Answer:** c) Sexual reproduction

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**10. Which part of the plant cell provides structural support and protection?**

- a) Chloroplast
- b) Cell wall
- c) Plasma membrane
- d) Vacuole

**Answer:** b) Cell wall

## General Computer

**1. Which of the following is the brain of the computer?**

- a) Monitor
- b) Central Processing Unit (CPU)

- c) Random Access Memory (RAM)
- d) Hard Disk

**Answer:** b) Central Processing Unit (CPU)

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## 2. Which part of the computer is used to permanently store data?

- a) ROM
- b) RAM
- c) Hard Disk
- d) Cache Memory

**Answer:** c) Hard Disk

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## 3. Which of the following is a secondary storage device?

- a) RAM
- b) ROM
- c) Hard Drive
- d) CPU

**Answer:** c) Hard Drive

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## 4. Which type of software controls the overall operations of a computer?

- a) Application software
- b) Operating system
- c) Utility software
- d) Compiler

**Answer:** b) Operating system

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## 5. Which of the following is a programming language?

- a) HTML
- b) Microsoft Word
- c) Python
- d) SQL Server

**Answer:** c) Python

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**6. What does GUI stand for in computer terminology?**

- a) Graphical User Interface
- b) General Utility Interface
- c) Global User Internet
- d) General Unified Interface

**Answer:** a) Graphical User Interface

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**7. In which of the following storage units, data is lost when the computer is turned off?**

- a) Hard Disk
- b) RAM
- c) ROM
- d) CD-ROM

**Answer:** b) RAM

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**8. Which device is used to convert analog signals to digital signals in a computer?**

- a) Printer
- b) Scanner
- c) Modem
- d) Plotter

**Answer:** c) Modem

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**9. Which key is used to refresh a webpage in a web browser?**

- a) F1
- b) F2
- c) F5
- d) F10

**Answer:** c) F5

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**10. Which of the following is an example of system software?**

- a) Google Chrome
- b) Microsoft Excel
- c) Windows Operating System
- d) Adobe Photoshop

**Answer:** c) Windows Operating System