

Physics

- 1. A car accelerates from rest to 30 m/s in 5 seconds. What is its acceleration?**
 - a. A) 6 m/s^2
 - b. B) 150 m/s^2
 - c. C) 0.167 m/s^2
 - d. D) 15 m/s^2
- 2. A ball is thrown vertically upward. At its highest point, its velocity is:**
 - a. A) 0 m/s
 - b. B) 9.8 m/s
 - c. C) -9.8 m/s
 - d. D) 4.9 m/s
- 3. A force of 10 N acts on a 2 kg object. What is the acceleration of the object?**
 - a. A) 5 m/s^2
 - b. B) 20 m/s^2
 - c. C) 10 m/s^2
 - d. D) 0.2 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