

BITSAT 2025 June 25 Shift 1 Question Paper

Time Allowed :3 Hours	Maximum Marks :390	Total Questions :130
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General Instructions

1. The **BITSAT 2025** (Birla Institute of Technology and Science Admission Test) is conducted in **Computer-Based Test (CBT)** mode.
2. The duration of the test is **3 hours (180 minutes)**.
3. The question paper consists of **130 multiple-choice questions (MCQs)** divided into four sections:
 - **Physics – 30 Questions**
 - **Chemistry – 30 Questions**
 - **English Proficiency and Logical Reasoning – 20 Questions**
 - **Mathematics/Biology – 50 Questions**
4. Each correct answer carries **3 marks**, and each incorrect answer leads to a **penalty of 1 mark**.
5. After attempting all 130 questions, candidates can attempt up to **12 additional questions** (4 each from Physics, Chemistry, and Mathematics/Biology) — only if time permits.
6. The language of the question paper is **English only**.
7. Candidates must reach the test center **at least 1 hour before** the commencement of the examination.
8. Candidates must carry:
 - **BITSAT 2025 Hall Ticket**
 - **Valid Photo ID Proof** (Aadhaar, Passport, PAN, Driving Licence, etc.)
9. Rough work must be done only on the provided sheets. Additional sheets will not be supplied.
10. Use of **calculators, mobile phones, smart watches, or any other electronic devices** is strictly prohibited.
11. Follow all **invigilator's instructions** carefully. Any malpractice will result in **cancellation of candidature**.

1. A ball is thrown vertically upward with a speed of 49 m/s. How long will it take to return to the thrower's hand?

- (A) 5 s
 - (B) 7 s
 - (C) 10 s
 - (D) 14 s
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2. The escape velocity from the surface of a planet is v_e . What will be the escape velocity from a planet whose mass and radius are twice that of the original planet?

- (A) v_e
 - (B) $2v_e$
 - (C) $\sqrt{2}v_e$
 - (D) $4v_e$
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3. Which of the following compounds will give a positive Iodoform test?

- (A) Ethanol
 - (B) Propanol
 - (C) Methanol
 - (D) Methanal
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4. Which of the following is not a colligative property?

- (A) Osmotic pressure
 - (B) Depression of freezing point
 - (C) Elevation of boiling point
 - (D) Refractive index
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5. If the roots of the quadratic equation $ax^2 + bx + c = 0$ are real and equal, then:

- (A) $b^2 - 4ac < 0$
 - (B) $b^2 - 4ac = 0$
 - (C) $b^2 - 4ac > 0$
 - (D) $a + b + c = 0$
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6. Let $A = \begin{bmatrix} 2 & 0 \\ 0 & 3 \end{bmatrix}$. The determinant of A^3 is:

- (A) 216
- (B) 27
- (C) 8
- (D) 1

7. Choose the correct word to complete the sentence: "She was so tired that she could keep her eyes open."

- (A) hardly
- (B) hard
- (C) barely
- (D) clearly

**8. Statement: All flowers are beautiful. Some beautiful things are fragile.
Conclusion I: Some flowers are fragile. Conclusion II: All beautiful things are flowers.**

- (A) Only I follows
- (B) Only II follows
- (C) Both follow
- (D) Neither follows

9. Which number comes next in the series? 3, 6, 11, 18, 27, ?

- (A) 36
 - (B) 38
 - (C) 40
 - (D) 48
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