GATE 2026 CY Question Paper

Time Allowed :3 Hour	Maximum Marks :100	Total Questions :65

General Instructions

Please read the following instructions carefully:

1. This question paper is divided into three sections:
   - **General Aptitude (GA):** 10 questions (5 questions × 1 mark + 5 questions × 2 marks) for a total of 15 marks.
   - **Environmental Science and Engineering + Engineering Mathematics:**
     - **Part A (Mandatory):** 36 questions (1 questions × 1 mark + 19 questions × 2 marks) for a total of 55 marks.
     - **Part B (Section 1):** Candidates can choose either Part B1 (Surveying and Mapping) or Part B2 (Section 2). Each part contains 16 questions (8 questions × 1 mark + 11 questions × 2 marks) for a total of 30 marks.
2. The total number of questions is **65**, carrying a maximum of **100 marks**.
3. The duration of the exam is **3 hours**.
4. Marking scheme:
   - For 1-mark MCQs, $\frac{1}{3}$ mark will be deducted for every incorrect response.
   - For 2-mark MCQs, $\frac{2}{3}$ mark will be deducted for every incorrect response.
   - No negative marking for numerical answer type (NAT) questions.
   - No marks will be awarded for unanswered questions.
5. Ensure you attempt questions only from the optional section (Part B1 or Part B2) you have selected.
6. Follow the instructions provided during the exam for submitting your answers.

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1. For an ideal gas, which of the following thermodynamic quantities depends only on temperature?

(A) Enthalpy
(B) Entropy
(C) Gibbs free energy
(D) Pressure

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2. Which of the following reagents converts an aldehyde selectively into a primary alcohol?

(A) PCC
(B) $KMnO_4$
(C) $LiAlH_4$
(D) CrO_3

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3. The magnetic behavior of a compound with all electrons paired is:

(A) Paramagnetic
(B) Ferromagnetic
(C) Diamagnetic
(D) Antiferromagnetic

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4. In IR spectroscopy, which bond absorbs at the highest wavenumber?

(A) C-C
(B) C=C
(C) C $\equiv$ C
(D) O-H

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5. The standard electrode potential of the standard hydrogen electrode (SHE) is:

(A) +1.00 V
(B) -1.00 V
(C) 0.00 V
(D) +0.76 V

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6. Which ligand causes maximum crystal field splitting?

(A) F^-
(B) H_2O
(C) NH_3
(D) CN^-

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7. For a first-order reaction, the unit of rate constant is:

(A) mol $L^{-1}s^{-1}$
(B) s^{-1}
(C) L $mol^{-1}s^{-1}$
(D) mol L^{-1}
