

GATE 2026 IN Question Paper with Solutions

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

Please read the following instructions carefully:

- This question paper is divided into three sections:
 - General Aptitude (GA):** 10 questions (5 questions \times 1 mark + 5 questions \times 2 marks) for a total of 15 marks.
 - Environmental Science and Engineering + Engineering Mathematics:**
 - Part A (Mandatory):** 36 questions (1 questions \times 1 mark + 19 questions \times 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 \times 1 mark + 11 questions \times 2 marks) for a total of 30 marks.
- The total number of questions is **65**, carrying a maximum of **100 marks**.
- The duration of the exam is **3 hours**.
- 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.
- Ensure you attempt questions only from the optional section (Part B1 or Part B2) you have selected.
- Follow the instructions provided during the exam for submitting your answers.

1. Which of the following transducers is most suitable for measuring very small displacements?

- (A) LVDT
- (B) Strain gauge
- (C) Piezoelectric transducer
- (D) Thermistor

2. For a stable linear time-invariant system, the location of all poles must be:

- (A) On the imaginary axis
 - (B) In the right half of s-plane
 - (C) In the left half of s-plane
 - (D) At the origin
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3. An ideal operational amplifier has:

- (A) Infinite input impedance and zero output impedance
 - (B) Zero input impedance and infinite output impedance
 - (C) Infinite gain and infinite output impedance
 - (D) Finite gain and finite bandwidth
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4. How many flip-flops are required to design a MOD-10 counter?

- (A) 3
 - (B) 4
 - (C) 5
 - (D) 10
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5. Which type of error is caused due to faulty calibration of instruments?

- (A) Gross error
 - (B) Random error
 - (C) Systematic error
 - (D) Environmental error
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6. The Laplace transform of a unit step function $u(t)$ is:

- (A) $\frac{1}{s}$
 - (B) $\frac{1}{s^2}$
 - (C) s
 - (D) e^{-s}
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7. In amplitude modulation, the modulation index should be:

- (A) Less than 0.5
 - (B) Equal to 1
 - (C) Greater than 1
 - (D) Between 0 and 1
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