GATE 2026 AE 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.

---

1. For a subsonic flow over an airfoil, an increase in velocity leads to:

(A) Increase in pressure
(B) Decrease in pressure
(C) No change in pressure
(D) Zero pressure
(E) None of the above

---

2. Which of the following motions is primarily associated with lateral stability of

an aircraft?

(A) Pitch
(B) Roll
(C) Yaw
(D) Heave
(E) Surge

---

3. Which propulsion system is most suitable for high-speed supersonic aircraft?

(A) Turboprop
(B) Turbojet
(C) Turbofan
(D) Ramjet
(E) Piston Engine

---

4. The primary load-carrying structural component of an aircraft wing is:

(A) Rib
(B) Stringer
(C) Spar
(D) Skin
(E) Bulkhead

---

5. For an isentropic flow of a perfect gas, an increase in Mach number results in:

(A) Increase in temperature
(B) Decrease in temperature
(C) Constant temperature
(D) Infinite temperature
(E) Zero temperature

---

6. Which control surface is mainly used to control the yaw motion of an aircraft?

(A) Aileron
(B) Elevator
(C) Rudder
(D) Flap
(E) Trim Tab

---

7. The velocity required for a satellite to remain in a circular orbit close to Earth is called:

(A) Escape velocity
(B) Orbital velocity
(C) Terminal velocity
(D) Relative velocity
(E) Critical velocity
