AME CET English & General Awareness

Sample Paper – 7

Duration: 30 Minutes **Maximum Marks: 120**

Instructions

- This paper contains **30** Multiple Choice Questions (Single Correct Answer), modelled on the combined **English** (Q1–15) and **General Awareness** (Q16–30) sections of the **AME CET** entrance.
- Each correct answer carries **+4 marks**. Each wrong answer carries -1 **mark**. Unattempted questions carry **0 marks**.
- Only **one** option is correct per question. Choose carefully.
- The General Awareness section emphasises **aviation fundamentals, civil-aviation regulation, and basic science** relevant to an Aircraft Maintenance Engineer.
- Use of mobile phones, calculators, or any electronic gadget is strictly prohibited.

Part A: English

Q1. Choose the word that is most nearly the **SYNONYM** of the word in capitals: **FRAGILE**

(A) Sturdy

(B) Heavy

(C) Delicate

(D) Solid

Q2. Choose the word that is most nearly the **ANTONYM** of the word in capitals: **ARTIFICIAL**

(A) Synthetic

(B) Natural

(C) Fake

(D) Imitation

Q3. Fill in the blank with the correct preposition: "The engine is capable _____ producing huge thrust."

(A) to

(B) for

(C) with

(D) of

Q4. Identify the part of the sentence that contains an error. If there is no error, mark (D).
I have visited (A) *the city of Paris* (B) *last year.* (C) *No error* (D)

(A) I have visited

(B) the city of Paris

(C) last year

(D) No error

Q5. Choose the grammatically **correct** sentence:

(A) This model is completely different from the old one.

(B) This model is completely different than the old one.

(C) This model is completely different to than the old one.

(D) This model is completely different of the old one.

Q6. Choose the single word for the phrase: "The words inscribed on a tomb in memory of the person buried there."

(A) Biography

(B) Epitaph

(C) Manuscript

(D) Obituary

Q7. What does the idiom "**call it a day**" mean?

(A) To begin a new task

(B) To celebrate a holiday

(C) To name a date for an event

(D) To stop working for the day

Q8. Fill in the blank with the most appropriate word: "The wings and tail are attached to the main body of the aircraft, known as the _____."

(A) fuselage

(B) cockpit

(C) nacelle

(D) aileron

Q9. Choose the correct **passive voice** form of: "The company manufactures aircraft engines."

(A) Aircraft engines were manufactured by the company.

(B) Aircraft engines are manufacturing by the company.

(C) Aircraft engines are manufactured by the company.

(D) Aircraft engines have manufactured by the company.

Q10. Choose the correct **indirect (reported) speech** form of: He said, "I can fly this aircraft."

(A) He said that he can fly this aircraft.

(B) He said that he could fly that aircraft.

(C) He said that I could fly that aircraft.

(D) He says that he could fly that aircraft.

Q11. Read the passage and answer Questions 11 and 12.

A busy airport runs like a small city that never sleeps. Passengers first arrive at the terminal, where they complete check-in and hand over their baggage, then pass through security screening before reaching the departure gates. Out on the airfield, the ground crew refuel the aircraft, load cargo, and guide each plane to and from its parking stand. Every take-off and landing is directed from the control tower, where air traffic controllers watch the runways on radar and issue clearances by radio. Because so many activities must happen safely and on time, careful coordination among all these teams is what keeps the airport running smoothly.

Q11. According to the passage, the take-offs and landings at the airport are directed from:

(A) the check-in counter

(B) the security screening area

(C) the departure gates

(D) the control tower

Q12. (Based on the passage above.) Which of the following tasks is performed by the **ground crew**?

(A) Refuelling the aircraft and loading cargo

(B) Completing the passengers' check-in

(C) Issuing radio clearances for take-off

(D) Screening passengers at security

Q13. Fill in the blank with the correct verb: "One of the wings _____ damaged in the storm last night."

(A) were

(B) have been

(C) was

(D) are

Q14. Fill in the blank with the correct verb form: "She _____ at this maintenance hangar for five years."

(A) works

(B) is working

(C) worked

(D) has worked

Q15. Choose the **correctly spelled** word:

(A) Fusilage

(B) Fuselage

(C) Fuslage

(D) Fuselarge

Part B: General Awareness

Q16. In Indian civil aviation, the abbreviation **BCAS** stands for:

(A) Bureau of Civil Aviation Security

(B) Board of Commercial Aviation Standards

(C) Bureau of Central Air Services

(D) Body for Civil Airspace Safety

Q17. Which international body represents the world's scheduled airlines and coordinates matters such as fares, ticketing, and industry standards?

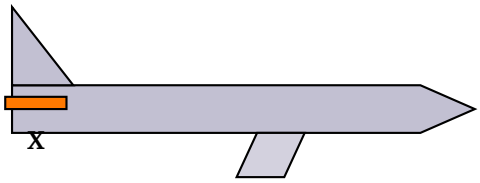
(A) DGCA (Directorate General of Civil Aviation)

(B) ICAO (International Civil Aviation Organization)

(C) NASA (National Aeronautics and Space Administration)

(D) IATA (International Air Transport Association)

Q18. In the side-view diagram of the aircraft below, the small horizontal tail surface marked **X** at the rear keeps the nose from pitching up or down on its own. This surface, which provides longitudinal (pitch) stability, is called the:



(Aircraft, side view)

(A) Vertical stabilizer

(B) Rudder

(C) Horizontal stabilizer

(D) Aileron

Q19. Which Anglo-French supersonic passenger jet, capable of cruising faster than the speed of sound, was retired from service in 2003?

(A) Boeing 747

(B) Concorde

(C) de Havilland Comet

(D) Airbus A380

Q20. India's first aerodrome, opened in 1928 in Mumbai (then Bombay), was the:

(A) Palam Aerodrome

(B) Begumpet Aerodrome

(C) Dum Dum Aerodrome

(D) Juhu Aerodrome

Q21. The cockpit device that warns the crew when the aircraft is flying too slowly and is about to lose lift is the:

(A) Stall warning indicator

(B) Fuel gauge

(C) Tachometer

(D) Altimeter

Q22. The aerodynamic lift force generated by an aircraft wing acts in a direction that is:

(A) parallel to the relative airflow

(B) perpendicular to the relative airflow

(C) always vertically downward

(D) along the direction of thrust

Q23. The headquarters of NASA, the space agency of the United States, is located in:

(A) Houston, Texas

(B) Cape Canaveral, Florida

(C) Washington, D.C.

(D) New York City

Q24. The four forces acting on an aircraft in flight are lift, weight, thrust, and:

(A) torque

(B) friction with the runway

(C) drag

(D) gravity

Q25. The continuous burning of fuel inside a jet engine's combustion chamber requires a steady supply of which gas, drawn from the surrounding air?

(A) Oxygen

(B) Nitrogen

(C) Helium

(D) Carbon dioxide

Q26. In international civil aviation, the standard unit that pilots and controllers use to express an aircraft's altitude is the:

(A) metre

(B) kilometre

(C) foot

(D) nautical mile

Q27. In aviation, the abbreviation **ATC** stands for:

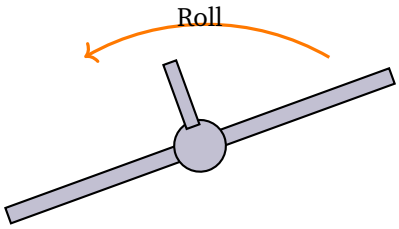
(A) Aircraft Type Certificate

(B) Air Traffic Control

(C) Automatic Trim Computer

(D) Airport Terminal Centre

Q28. The figure shows the rear view of an aircraft whose wings have tilted, with one wingtip raised and the other lowered. This motion, produced by deflecting the ailerons with the control column, is called:



(Aircraft, rear view, banked)

(A) Pitch

(B) Yaw

(C) Thrust

(D) Roll

Q29. The SI base unit of **length**, used for measurements such as runway length and wingspan, is the:

(A) metre

(B) newton

(C) second

(D) kilogram

Q30. On most large airliners, the main fuel tanks are located inside the wings. A key engineering reason for this is that:

(A) it keeps the fuel warmer during flight

(B) the fuel's weight in the wings reduces wing-bending stress and frees up fuselage space

(C) it makes refuelling impossible from the ground

(D) the wings are the only fireproof part of the aircraft

Detailed Solutions

Q1.

Solution

Concept — Synonyms: A synonym is a word that has the same or nearly the same meaning as another word.

Step 1 — Meaning of the key word: "Fragile" means easily broken or damaged; delicate and not strong.

Step 2 — Match the option: Among the choices, "Delicate" carries exactly this sense of being easily broken and needing careful handling.

Why other options are wrong:

- Option A (Sturdy): The opposite of fragile — it means strong and not easily broken.
- Option B (Heavy): Refers to weight, not to how easily something breaks.
- Option D (Solid): Means firm and strong, the opposite of fragile.

Final Answer: FRAGILE $\approx$ Delicate $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q1

Q2.

Solution

Concept — Antonyms: An antonym is a word opposite in meaning to another word.

Step 1 — Meaning of the key word: "Artificial" means made or produced by human beings rather than occurring naturally; not natural.

Step 2 — Find the opposite: The opposite of human-made is "Natural," which means existing in or formed by nature without human intervention.

Why other options are wrong:

- Option A (Synthetic): A synonym of artificial, not an antonym.
- Option C (Fake): A synonym of artificial, not an antonym.
- Option D (Imitation): A synonym of artificial, not an antonym.

Final Answer: ARTIFICIAL $\leftrightarrow$ Natural $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q2

Q3.

Solution

Concept — Adjective + preposition collocation: Certain adjectives are always followed by a fixed preposition. The adjective "capable" is always followed by "of."

Step 1 — Identify the adjective: The key word in the blank is governed by "capable," which describes having the ability to do something.

Step 2 — Choose the matching preposition: "Capable of" is the correct fixed collocation, and it is followed by the "-ing" form ("producing"): "capable of producing."

Why other options are wrong:

- Option A (to): We say "able to produce," but "capable to" is incorrect.
- Option B (for): Not used after "capable."
- Option C (with): Not used after "capable."

Final Answer: capable of producing $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q3

Q4.

Solution

Concept — Present perfect vs. simple past with a finished time: The present perfect ("have visited") cannot be used with an adverb that names a finished past time, such as "last year." A definite past time requires the simple past tense.

Step 1 — Locate the time expression: The phrase "last year" refers to a completed period in the past.

Step 2 — Apply the rule: Because the time is finished and specified, the verb must be the simple past "visited," not the present perfect "have visited." The error therefore lies in part (A).

Why other options are wrong:

- Option B: "the city of Paris" is a correct noun phrase with no error.
- Option C: "last year" itself is correct; it is the time marker that exposes the tense error in (A), so the error is keyed to (A).
- Option D (No error): Incorrect, because part (A) does contain a clear tense error.

Final Answer: "have visited" should be "visited" (simple past) $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q4

Q5.

Solution

Concept — "Different from": In standard English, the adjective "different" is followed by the preposition "from." "Different than" and "different to" are widely considered incorrect in formal usage.

Step 1 — Identify the correct collocation: The accepted form is "different from."

Step 2 — Test each option: Only option A uses "different from" correctly.

Why other options are wrong:

- Option B (different than): Non-standard in formal English.
- Option C (different to than): A double preposition, clearly ungrammatical.
- Option D (different of): "Of" is never used with "different."

Final Answer: "different from the old one" $\Rightarrow$ A

Answer: (A) Go Back to Q5

Q6.

Solution

Concept — One-word substitution: A single precise word can replace a longer descriptive phrase.

Step 1 — Read the definition: "The words inscribed on a tomb in memory of the person buried there" describes the writing carved on a gravestone.

Step 2 — Select the term: That writing is called an "Epitaph."

Why other options are wrong:

- Option A (Biography): The written life story of a person, not words on a tomb.
- Option C (Manuscript): A handwritten or original document.
- Option D (Obituary): A notice of a death, usually printed in a newspaper, not inscribed on the tomb.

Final Answer: Epitaph $\Rightarrow$ B

Answer: (B) Go Back to Q6

Q7.

Solution

Concept — Idioms: An idiom is a fixed expression whose meaning cannot be guessed from the literal words.

Step 1 — Recall the idiom: "Call it a day" means to decide to stop working on something, usually for the rest of the day.

Step 2 — Match the meaning: The closest meaning is "To stop working for the day."

Why other options are wrong:

- Option A (To begin a new task): The opposite of stopping work.
- Option B (To celebrate a holiday): Not what the idiom means.
- Option C (To name a date for an event): A literal misreading of the word "day."

Final Answer: call it a day = stop working for the day $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q7

Q8.

Solution

Concept — Vocabulary in context: The correct word must fit both the grammar and the technical meaning of the sentence.

Step 1 — Understand the context: The main body of an aircraft — the long central structure to which the wings and tail are attached — is the "fuselage."

Step 2 — Select the word: "Known as the fuselage" correctly names this central body.

Why other options are wrong:

- Option B (cockpit): The compartment where the pilots sit, not the whole body.
- Option C (nacelle): The streamlined housing for an engine, not the main body.
- Option D (aileron): A control surface on the wing, not a body structure.

Final Answer: the main body = fuselage $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q8

Q9.

Solution

Concept — Active to passive (simple present): In the passive of a simple-present sentence, the object becomes the subject, and the verb becomes "is/are + past participle," with the original subject introduced by "by."

Step 1 — Identify the parts: Subject = "the company," verb = "manufactures," object = "aircraft engines."

Step 2 — Build the passive: Object first: "Aircraft engines" + "are manufactured" (plural subject, present tense) + "by the company."

Why other options are wrong:

- Option A (were manufactured): Past tense; the original sentence is present tense.
- Option B (are manufacturing): Active continuous form, not a passive.
- Option D (have manufactured): An active present-perfect form, not a passive.

Final Answer: "Aircraft engines are manufactured by the company." $\Rightarrow$ C

Answer: (C) Go Back to Q9

Q10.

Solution

Concept — Direct to indirect speech: When the reporting verb is past ("said"), the modal "can" shifts to "could," the pronoun "I" changes to agree with the speaker, and "this" usually becomes "that."

Step 1 — Shift the modal: "I can fly" becomes "he could fly."

Step 2 — Adjust pronoun and demonstrative: "I" refers to the speaker "He," so it becomes "he"; "this aircraft" becomes "that aircraft." The reported clause is joined with "that."

Why other options are wrong:

- Option A (can fly this aircraft): Fails to back-shift "can" and keeps "this."
- Option C (I could fly): Wrongly keeps the first-person pronoun "I."
- Option D (says): Changes the reporting verb to present, which is not required.

Final Answer: "He said that he could fly that aircraft." $\Rightarrow$ B

Answer: (B) Go Back to Q10

Q11.

Solution

Concept — Reading comprehension (locating a stated fact): The answer must come directly from what the passage says, not from outside assumptions.

Step 1 — Find the relevant line: The passage states: "Every take-off and landing is directed from the control tower, where air traffic controllers watch the runways on radar…"

Step 2 — Match to an option: This directly supports "the control tower."

Why other options are wrong:

- Option A (check-in counter): The passage links this to baggage and check-in, not take-offs.
- Option B (security screening area): Where passengers are screened, not where flights are directed.
- Option C (departure gates): Where passengers board, not where take-offs are controlled.

Final Answer: the control tower $\Rightarrow$ D

Answer: (D) Go Back to Q11

Q12.

Solution

Concept — Reading comprehension (detail recall): Choose the option that restates the passage accurately.

Step 1 — Find the relevant line: The passage states: "Out on the airfield, the ground crew refuel the aircraft, load cargo, and guide each plane to and from its parking stand."

Step 2 — Match to an option: Option A repeats the ground crew's tasks of refuelling and loading cargo.

Why other options are wrong:

- Option B (check-in): Done at the terminal by check-in staff, not the ground crew.

- Option C (radio clearances): Issued by air traffic controllers in the tower.
- Option D (security screening): Carried out at the security area, not by the ground crew.

Final Answer: Refuelling the aircraft and loading cargo $\Rightarrow$ A

Answer: (A) Go Back to Q12

Q13.

Solution

Concept — "One of the + plural noun" agreement: In the phrase "one of the wings," the subject is the singular word "one," not the plural "wings." The verb must therefore be singular.

Step 1 — Identify the true subject: The grammatical subject is "One" (singular); "of the wings" is just a modifying phrase.

Step 2 — Choose the verb: A singular subject in the past tense takes "was": "One of the wings was damaged."

Why other options are wrong:

- Option A (were): Plural; wrongly agrees with "wings" instead of "one."
- Option B (have been): Plural present-perfect; does not agree with the singular "one."
- Option D (are): Plural and present tense; wrong number and wrong tense for "last night."

Final Answer: "One of the wings was damaged." $\Rightarrow$ C

Answer: (C) Go Back to Q13

Q14.

Solution

Concept — Present perfect with "for": When an action started in the past and continues up to the present, and a duration is given with "for," the present perfect tense ("has/have + past participle") is used.

Step 1 — Spot the time signal: "For five years" marks a duration running up to now.

Step 2 — Apply the tense: With a third-person singular subject "She," the present

perfect is “has worked.”

Why other options are wrong:

- Option A (works): Simple present; cannot express a span continuing from the past with “for five years.”
- Option B (is working): Present continuous; does not capture the completed-up-to-now span here.
- Option C (worked): Simple past; suggests the action is finished and disconnected from the present.

Final Answer: has worked $\Rightarrow$ D

Answer: (D) Go Back to Q14

Q15.

Solution

Concept — Correct spelling: Recognise the standard spelling of a commonly misspelled aviation word.

Step 1 — Recall the correct form: The main body of an aircraft is spelled **fuselage** (“fu-se-lage”).

Step 2 — Eliminate the misspellings: Only option B matches the dictionary spelling.

Why other options are wrong:

- Option A (Fusilage): Wrong vowel (“i” instead of “e”).
- Option C (Fuslage): Missing the “e” after “Fus.”
- Option D (Fuselarge): An extra “r” that does not belong.

Final Answer: Fuselage $\Rightarrow$ B

Answer: (B) Go Back to Q15

Q16.

Solution

Concept — Indian aviation security body: A dedicated authority sets and audits aviation security standards in India.

Step 1 — Expand the abbreviation: BCAS stands for **Bureau of Civil Aviation**

Security — the regulator for civil aviation security at Indian airports.

Step 2 — Confirm its role: It lays down security standards and oversees their implementation at airports and airlines.

Why other options are wrong:

- Option B (Board of Commercial Aviation Standards): Not a real body; wrong expansion.
- Option C (Bureau of Central Air Services): Not the correct name.
- Option D (Body for Civil Airspace Safety): Invented expansion, not official.

Final Answer: Bureau of Civil Aviation Security $\Rightarrow$ A

Answer: (A) Go Back to Q16

Q17.

Solution

Concept — International airline body: A trade association coordinates commercial matters among the world's airlines.

Step 1 — Identify the body: IATA (International Air Transport Association) is the trade body of the world's scheduled airlines, dealing with fares, ticketing, and industry standards.

Step 2 — Confirm its scope: IATA is an industry association of airlines, distinct from government regulators.

Why other options are wrong:

- Option A (DGCA): India's government regulator for civil aviation, not a global airline trade body.
- Option B (ICAO): A United Nations agency that sets safety standards for states, not an airline trade association.
- Option C (NASA): The US space agency, unrelated to commercial airline fares.

Final Answer: IATA $\Rightarrow$ D

Answer: (D) Go Back to Q17

Q18.

Solution

Concept — Tail surfaces and stability: The tail (empennage) of an aircraft carries surfaces that keep it stable. The horizontal tail surface controls and stabilises pitch.

Step 1 — Locate the marked surface: The mark X is on the small *horizontal* surface at the rear, lying flat like a miniature wing.

Step 2 — Identify its function: This is the **horizontal stabilizer** (tailplane); it provides longitudinal (pitch) stability, stopping the nose from pitching up or down on its own.

Why other options are wrong:

- Option A (Vertical stabilizer): The upright tail fin; provides directional (yaw) stability, not pitch.
- Option B (Rudder): The movable surface on the vertical fin; controls yaw.
- Option D (Aileron): A control surface on the wing, not part of the tail.

Final Answer: The horizontal tail surface is the horizontal stabilizer $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q18

Q19.

Solution

Concept — Supersonic passenger aviation: Only a few aircraft have carried passengers faster than sound.

Step 1 — Recall the aircraft: The **Concorde**, jointly developed by Britain and France, was a supersonic airliner that cruised faster than the speed of sound and was retired in 2003.

Step 2 — Confirm the detail: Its commercial service ran from 1976 until its retirement in 2003.

Why other options are wrong:

- Option A (Boeing 747): A large subsonic "jumbo jet," not supersonic.
- Option C (de Havilland Comet): The world's first commercial jet airliner, but subsonic and from the 1950s.
- Option D (Airbus A380): A modern double-deck subsonic airliner, not supersonic.

Final Answer: Concorde ⇒ B

Answer: (B) Go Back to Q19

Q20.

Solution

Concept — Early Indian aviation infrastructure: India's first civil airfields date to the 1920s.

Step 1 — Recall the aerodrome: The **Juhu Aerodrome** in Mumbai (then Bombay), opened in 1928, was India's first aerodrome.

Step 2 — Confirm its significance: Early Tata Airlines mail flights of the 1930s were associated with Juhu.

Why other options are wrong:

- Option A (Palam): A later Delhi airfield, not India's first aerodrome.
- Option B (Begumpet): The Hyderabad airfield, established later.
- Option C (Dum Dum): The Kolkata airfield (now NSCBI Airport), not the 1928 Mumbai first.

Final Answer: Juhu Aerodrome ⇒ D

Answer: (D) Go Back to Q20

Q21.

Solution

Concept — Flight instruments and warnings: Some cockpit devices warn the crew of dangerous flight conditions.

Step 1 — Match instrument to function: The **stall warning indicator** alerts the crew when the wing's angle of attack is so high (and speed so low) that the wing is about to stop producing enough lift — a stall.

Step 2 — Confirm: It typically sounds a horn or shakes the control column to warn the pilot in time.

Why other options are wrong:

- Option B (Fuel gauge): Shows how much fuel remains, not impending loss of lift.
- Option C (Tachometer): Measures engine speed in RPM.

- Option D (Altimeter): Measures altitude, not the approach to a stall.

Final Answer: Stall warning indicator $\Rightarrow$ A

Answer: (A) Go Back to Q21

Q22.

Solution

Concept — Direction of the lift force: Lift and drag are defined relative to the oncoming (relative) airflow. By definition, lift acts *perpendicular* to the relative airflow, while drag acts *parallel* to it.

Step 1 — Recall the definition: The aerodynamic force on a wing is split into two components: lift (perpendicular to the airflow) and drag (along the airflow).

Step 2 — Apply it: Therefore the lift force acts perpendicular to the relative airflow.

Why other options are wrong:

- Option A (parallel to the airflow): That direction defines drag, not lift.
- Option C (always vertically downward): Lift acts upward away from the airflow, not downward.
- Option D (along the direction of thrust): Thrust is produced by the engine; lift is a separate, perpendicular force.

Final Answer: perpendicular to the relative airflow $\Rightarrow$ B

Answer: (B) Go Back to Q22

Q23.

Solution

Concept — Aerospace organisations and locations: NASA is the civilian space agency of the United States.

Step 1 — Recall the headquarters: NASA is headquartered in **Washington, D.C.**

Step 2 — Distinguish from its field centres: Famous NASA sites like the Kennedy Space Center and Johnson Space Center are operational centres, not the agency headquarters.

Why other options are wrong:

- Option A (Houston, Texas): Home to the Johnson Space Center (mission control), not the HQ.
- Option B (Cape Canaveral, Florida): A launch site near the Kennedy Space Center, not the HQ.
- Option D (New York City): Not associated with NASA's headquarters.

Final Answer: Washington, D.C. ⇒ C

Answer: (C) Go Back to Q23

Q24.

Solution

Concept — The four forces of flight: An aircraft in flight is acted on by four forces: lift, weight, thrust, and drag.

Step 1 — List the forces: Lift acts upward, weight downward, thrust forward, and the fourth force acts backward, opposing motion.

Step 2 — Name the fourth force: The backward force resisting the aircraft's motion through the air is **drag**.

Why other options are wrong:

- Option A (torque): A turning effect, not one of the four basic flight forces.
- Option B (friction with the runway): Acts only on the ground, not during flight.
- Option D (gravity): Gravity produces the weight, which is already listed; the missing fourth force is drag.

Final Answer: drag ⇒ C

Answer: (C) Go Back to Q24

Q25.

Solution

Concept — Combustion needs an oxidiser: Fuel can burn only when combined with an oxidiser. In a jet engine, that oxidiser is the oxygen present in the incoming air.

Step 1 — Identify the requirement: The combustion chamber continuously burns fuel, which needs a continuous supply of **oxygen**.

Step 2 — Apply to the engine: The engine draws in atmospheric air, and the oxygen in that air sustains the burning of the fuel.

Why other options are wrong:

- Option B (Nitrogen): The most abundant atmospheric gas, but it is largely inert and does not support combustion.
- Option C (Helium): An inert gas; it does not support burning.
- Option D (Carbon dioxide): A product of combustion, often used to extinguish fires, not to sustain them.

Final Answer: Oxygen $\Rightarrow$ A

Answer: (A) Go Back to Q25

Q26.

Solution

Concept — Standard aviation units: Civil aviation worldwide uses certain conventional units for consistency. Altitude is conventionally expressed in *feet*.

Step 1 — Recall the convention: Pilots and air traffic controllers state an aircraft's altitude (and flight levels) in **feet**.

Step 2 — Confirm: For example, a cruising altitude is commonly quoted as "35,000 feet," not in metres.

Why other options are wrong:

- Option A (metre): The SI unit of length, but not the standard altitude unit in aviation practice.
- Option B (kilometre): Not used to state altitude in standard aviation phraseology.
- Option D (nautical mile): Used for horizontal distance, not for altitude.

Final Answer: foot $\Rightarrow$ C

Answer: (C) Go Back to Q26

Q27.

Solution

Concept — Aviation abbreviations: Air traffic is managed by ground-based controllers who direct aircraft safely.

Step 1 — Expand the abbreviation: ATC stands for **Air Traffic Control** — the service that directs aircraft on the ground and in controlled airspace.

Step 2 — Confirm its role: Controllers keep aircraft safely separated and sequence take-offs and landings.

Why other options are wrong:

- Option A (Aircraft Type Certificate): A real document, but not what "ATC" denotes in everyday usage.
- Option C (Automatic Trim Computer): Not the standard meaning of ATC.
- Option D (Airport Terminal Centre): An invented expansion, not the correct one.

Final Answer: Air Traffic Control $\Rightarrow$ B

Answer: (B) Go Back to Q27

Q28.

Solution

Concept — Aircraft motion about its axes: An aircraft rotates about three axes — roll (longitudinal), pitch (lateral), and yaw (vertical). Tilting the wings (one tip up, one down) is rotation about the longitudinal axis.

Step 1 — Read the figure: The rear view shows the wings banked, with one wingtip raised and the other lowered.

Step 2 — Name the motion: Tilting the wings this way — by deflecting the ailerons with the control column — is **roll**, the rotation about the nose-to-tail (longitudinal) axis.

Why other options are wrong:

- Option A (Pitch): Nose up or down about the lateral axis, controlled by the elevators, not a wing tilt.
- Option B (Yaw): Nose left or right about the vertical axis, controlled by the rudder.
- Option C (Thrust): A forward force from the engine, not a rotation.

Final Answer: Roll $\Rightarrow$ D

Answer: (D) Go Back to Q28

Q29.

Solution

Concept — SI base units: The SI system defines a base unit for each fundamental quantity.

Step 1 — Recall the unit of length: The SI base unit of length is the **metre** (m).

Step 2 — Apply to aviation: Runway length, wingspan, and similar lengths are fundamentally expressed in metres.

Why other options are wrong:

- Option B (newton): The SI unit of force, not length.
- Option C (second): The SI base unit of time, not length.
- Option D (kilogram): The SI base unit of mass, not length.

Final Answer: metre $\Rightarrow$ A

Answer: (A) Go Back to Q29

Q30.

Solution

Concept — Why fuel is carried in the wings: The placement of fuel tanks is an engineering choice that affects structural loads and usable space.

Step 1 — Consider wing loading: In flight, lift acts upward on the wings while their weight (and any fuel weight) acts downward. Carrying fuel in the wings lets the fuel weight partly oppose the upward lift, which *reduces the bending stress* at the wing root.

Step 2 — Consider space: Putting fuel in the wings also frees up the fuselage for passengers and cargo.

Why other options are wrong:

- Option A (keeps fuel warmer): At altitude the wings are very cold, so this is false.
- Option C (makes refuelling impossible): Wing tanks are routinely refuelled from the ground.

- Option D (only fireproof part): Wings are not specially fireproof; this is not the reason.

Final Answer: reduces wing-bending stress and frees fuselage space $\Rightarrow$ B

Answer: (B) Go Back to Q30

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	B	3	D	4	A	5	A
6	B	7	D	8	A	9	C	10	B
11	D	12	A	13	C	14	D	15	B
16	A	17	D	18	C	19	B	20	D
21	A	22	B	23	C	24	C	25	A
26	C	27	B	28	D	29	A	30	B