Accelerated AME Apprenticeship Program: 2019 Entrance Test Details

Test Curriculum

The Accelerated AME Apprenticeship Program entrance exam would be conducted in two rounds and would include the below mentioned topics:

Round 1

English Comprehension Test: This test is meant to evaluate English language skills of an individual and is aimed at determining the candidate's ability to understand written text, spoken word and communicate effectively through written documents. The test covers the following areas:

- Vocabulary: Synonyms, Antonyms, Contextual vocabulary, etc.
- Grammar: Error identification, Sentence improvement & construction
- Comprehension: Reading comprehension

Logical Ability: The 'Logical Ability' section assesses capacity of an individual to interpret things objectively, to perceive and interpret trends and make generalizations and be able to analyze assumptions behind an argument. The test covers the following areas:

- Deductive Reasoning: Data sufficiency, Logical word sequence, Objective reasoning, Puzzles, etc.
- Inductive Reasoning: Analogy pattern recognition, Classification pattern recognition, Number series pattern recognition, etc.

Quantitative Ability: The 'Quantitative Ability' section measures the numerical ability and accuracy in mathematical calculations. The questions range from purely numeric calculations to problems of arithmetic reasoning, percentage analysis and quantitative analysis. The test covers the following areas:

- Basic Numbers: Fractions, decimal, negative, positive, rational numbers, etc.
- Number Theory: Concepts related to arithmetic reasoning and basic algebra.
- Applied Mathematics: Practical word problems based on basic quantitative skills.

Domain Test (Topics learnt during 3 years of AME course): This exam will evaluate the candidate's technical knowledge imparted in the AME 3 year course. The Test will cover the below mentioned topics:

- Electrical Fundamentals
- Electronic Fundamentals
- Digital Techniques/ElectronicInstrument Systems
- Materials & Hardware
- Maintenance Practices
- Basic Aerodynamics
- Human Factors

- Aviation Legislation
- Structures
- Powerplant

Round 2

Personality Test: This Test will evaluate habitual behaviors, cognitions and emotional patterns of a candidate.

Virtual Video Interview: The Test is aimed at assessing candidate's skill and competencies in a structured virtual interview.

Test Format

Round 1

Subject	Question Count	Test Duration (mins.)
English Comprehension	18	16
Logical Ability	14	14
Quantitative Ability	14	20
AME Technical Test	50	75

Note: Candidates are required to answer all questions, there is no negative marking for any wrong answer

Round 2

Subject	Question Count	Test Duration (mins.)
Personality Test	90	20
Virtual Video Interview	10	30

Note: Candidates are required to answer all questions, there is no negative marking for any wrong answer

Assessment Dates

Round 1 Test: 22nd Sep 2019

Round 2 Test: 29th Sep 2019

Test Centre Locations

Round 1 Test Locations: Delhi, Mumbai, Kolkata, Bangalore, Chennai, Pune, Chandigarh, Lucknow, Kochi & Hyderabad

Round 2 Test Locations: Delhi, Mumbai, Kolkata, Bangalore

Examination Process Overview

Round 1

- 1) Apply for Accelerated AME Apprenticeship Program on https://www.myamcat.com/ame
- 2) Receive confirmation mail on successful submission of application
- 3) Receive admit card with test center details & timings
- 4) Carry admit card & government issued photo ID proof to test center and take the round 1 test
- 5) Receive mail informing status of candidature shortlisted or rejected

Round 2

- 1) Receive admit Card for Round 2 if shortlisted post Round 1
- 2) Carry admit card & government issued photo ID proof to test center and take the Round 2 Test
 3) Receive mail informing final status of candidature selected or rejected or waitlisted

Sample Questions

English Comprehension sample questions

Question 1. Select the word OPPOSITE in meaning to that of the given word.

ARTIFICIAL

- a. Red
- b. Natural
- c. Solid
- d. Fake

Question 2. Fill in the blanks.

The success that he has gained, though striking enough, does not; however, commensurate ______ the efforts made by him.

- a. about
- b. from
- c. with
- d. beside
- e. over

Logical Ability sample questions

Question 1. If FEATURES is written as GCDPZLLK in a code, what will be the fourth letter from the left if ADVANTAGE is written in that code?

1) E

2) F

3) W

4) X

Question: 2 Is Ram taller than Shyam?

Statement I. Ravi is of the same height as Ram and Shyam.

Statement II. Smith is shorter than Ravi.

1) Statement I alone is sufficient to answer the question.

2) Statement II alone is sufficient to answer the question.

3) Both statements put together are sufficient to answer the question.

4) Both statements put together are not sufficient to answer the question.

5) Either statement is sufficient to answer the question.

Quantitative Ability sample questions

Question 1. Which of the following numbers is not divisible by 14?

1) 3542

2) 2086

3) 1998

4) 2996

Question 2. A storekeeper sold a wrist watch for Rs. 660, including a sales tax of 10%. If the cost price of the watch is Rs. 500, what is the percentage profit for shop keeper?

1) 10%

2) 15%

3) 20%

4) 25%

AME Technical sample questions

Electrical Fundamentals

Question: An alternator has to produce an output at a frequency of 70 Hz. If it uses a 4-pole rotor, determine the shaft speed (rev/min) at which it must be driven.

Option 1: 1800

Option 2: 2400

Option 3: 2100

Electronic Fundamentals

Question: What is the purpose of using limiting resistors in engine's starting circuit?

Option 1: To minimize heat losses

Option 2: To limit current surges Option 3: To minimize electromagnetic interference

Digital Techniques/ Electronic Instrument Systems

Question 3: What is/are the probable cause(s) in case the turn and bank indicator fails to respond?

- 1. No vacuum supplied to the instrument
- 2. Filter of the instrument is clogged
- 3. Vacuum relief valve is dirty
- 4. Inaccurate vacuum gauge
- Option 1: 3 and 4

Option 2: Only 3

Option 3: 1 and 2

Materials & Hardware

Question: Identify the self-locking nut from the given options.





Maintenance Practices

Question: Which of the given practices is NOT correct while refueling an aircraft?

Option 1: The refueling of an aircraft should be done in an open place.

Option 2: Wheel chocks should be removed before commencing fuelling operation.

Option 3: The aircraft should not be refueled when it is within 30 meters of radar equipment under test.

Basic Aerodynamics

Question: Identify the mode of a stable aircraft which consists of a slow sinusoidal motion in which the height and the forward speed of the aircraft vary while the angle of incidence remains practically constant.

Option 1: Spiral

Option 2: Dutch Roll

Option 3: Phugoid/long oscillations

Human Factors

Question: Which of the given statements is/are true with respect to Team Resource Management (TRM)?

A. TRM has enhanced Threat and Error Management capabilities.

- B. TRM is intended as a replacement for technical training and to counteract poor procedures and documentation.
- C. The main objective of TRM training for operational staff is the development of behavior that will contribute to enhanced teamwork skills.

Option 1: Statements B and C

Option 2: Statements A and B

Option 3: Statements A and C

Aviation Legislation

Question: Identify the correct statement related to CAR 66. Option 1: It covers details and requirements to obtain Aircraft Maintenance Engineer's License.

Option 2: It contains requirements for the approval of design and production as per the provision of Aircraft Rule 133B.

Option 3: It covers requirements related to design, manufacture and repairs for obtaining airworthiness clearance.

Power plants

Question: While starting a turbine engine, which of the given conditions indicates a 'hung start'?

Option 1: When there is blockage in the fuel nozzle.

Option 2: When the engine is stabilized and the exhaust gas temperature exceeds specified limits.

Option 3: When the engine continues running on the idle RPM.

Structures

Question: How is pressure contained within the fuselage of an aircraft?

Option 1: By two pressure bulkheads

Option 2: By L1 and R1 engines

Option 3: By FWD and AFT cargo containers

Personality Test sample question

Question. Choose an option for the following statements according to your view. Give your honest view. There is no right or wrong answer. Provide your first reaction.

I go out for dinner with friends at least once every week.

- a. Very inaccurate
- b. Somewhat in accurate
- c. Neither inaccurate nor accurate
- d. Somewhat accurate
- e. <u>Very accurate</u>