

How to use this sheet. Before you look at the options, state the relationship in one short sentence. For letter analogies find the shift on the first letter and confirm it on the last. For number pairs run the checklist: add, multiply, square, root after adding, digit operations. Target time is 35 seconds per question.

A1 B2 C3 D4 E5 F6 G7 H8 I9 J10 K11 L12 M13

N14 O15 P16 Q17 R18 S19 T20 U21 V22 W23 X24 Y25 Z26

Section A · Multiple choice questions

Questions marked PYQ appeared in a real AAI ATC Junior Executive paper.

- TOWER is related to VQYGT. In the same way RADAR is related to:
(1) TBFCT (2) SCECS (3) TCFCT (4) TCFDT
- PARENTS is related to TEVIRXW, and ACHIEVE to EGLMIZI. To what is PROUDLY related? [PYQ 2025 · Shift 1]
(1) TSVYHRC (2) TVSYHPC (3) TWSZIQC (4) TVTZIPC
- FLIGHT is related to UORTSG. In the same way PILOT is related to:
(1) KRLOG (2) KROMG (3) LSPMH (4) KROLG
- SIGNAL is related to TJHOBM. In the same way BEACON is related to:
(1) CFBPDO (2) CFBEPO (3) CGBDPO (4) DFBPDO

Working space — Questions 1 to 4

Letter positions for letter analogies, checklist tests for number analogies.

5. 7 : 49 :: 11 : ?
(1) 99 (2) 121 (3) 111 (4) 132
6. Select the option related to the third number as the second is to the first: 15 : 5 :: 26 : ? [PYQ 2021 · Shift 3]
(1) 6 (2) 9 (3) 4 (4) 8
7. 63 : 8 :: 143 : ?
(1) 11 (2) 13 (3) 12 (4) 14
8. 48 : 7 :: 80 : ?
(1) 8 (2) 9 (3) 10 (4) 11
9. Which set follows the same relationship as (12, 4, 24)?
(1) (20, 10, 40) (2) (21, 7, 42) (3) (16, 4, 32) (4) (15, 5, 45)
10. Select the option in which the numbers are related in the same way as (18, 6, 36). [PYQ 2021 · Shift 3]
(1) (30, 15, 60) (2) (40, 10, 80) (3) (24, 8, 48) (4) (25, 5, 50)
11. Which set follows the same relationship as (7, 50, 12)?
(1) (5, 26, 9) (2) (8, 65, 12) (3) (6, 37, 12) (4) (9, 82, 14)

Working space — Questions 8 to 11

Letter positions for letter analogies, checklist tests for number analogies.

12. RADAR – ADARR – DARRA. Which follows the same logic?

- (1) TOWER – OWERT – WERTO (2) TOWER – OWETR – WETRO
(3) TOWER – EWORT – WROTE (4) TOWER – OWERT – WEROT

13. NAMASTE – AMASTEN – MASTENA; ETHICAL – THICALE – HICALET. Which option follows the same logic?

[PYQ 2025 · Shift 2]

- (1) CURTAIN – URTAINC – RTAINCU (2) CURTAIN – URTAINC – RTIANCU
(3) CURTAIN – URTIANC – RTAINCU (4) CURTAIN – URATINC – RTAINCU

14. SIGNAL – LANGIS – ANGISL. Which follows the same logic?

- (1) RUNWAY – YAWNUR – YWNURA (2) RUNWAY – YAWNUR – WNURAY
(3) RUNWAY – YAWNUR – AWNURY (4) RUNWAY – YAWNUR – NURAYW

15. Pilot : Aircraft :: Driver : ?

- (1) Road (2) Bus (3) Licence (4) Passenger

16. Wing : Aircraft :: Rudder : ?

- (1) Water (2) Sailor (3) Anchor (4) Ship

17. Drizzle : Downpour :: Breeze : ?

- (1) Gale (2) Air (3) Cool (4) Weather

18. Controller : Radar :: Carpenter : ?

- (1) Wood (2) Chisel (3) Furniture (4) Workshop

19. Milk : Curd :: Grapes : ?

- (1) Juice (2) Vine (3) Wine (4) Fruit

20. Petal : Flower :: Aileron : ?

- (1) Sky (2) Wing (3) Pilot (4) Engine

Working space — Questions 12 to 14

Rotation questions: check that every option keeps the same letters.

Section B · Assertion and reason

For each pair mark (a) both true and the reason explains the assertion, (b) both true but the reason does not explain it, (c) the assertion is true and the reason false, (d) the assertion is false and the reason true.

21. **Assertion:** A letter analogy should be confirmed on both given pairs before it is applied.

Reason: The second pair exists so that a misread letter in the first can be caught.

22. **Assertion:** In a rotation analogy, any option that reorders interior letters can be rejected immediately.

Reason: Rotation moves letters without altering their relative order.

23. Assertion: A number triad should be described as a chain from first to second to third.

Reason: Chains are faster to test against four options than two separate relations.

24. Assertion: If a plain square root fails on a number pair, adding a constant first is worth testing.

Reason: AAI used exactly this construction in the 2021 paper, where 15 gives 5 and 26 gives 6.

25. Assertion: In a meaning analogy, a relationship sentence that is true for two options is good enough.

Reason: Word analogies always have more than one defensible answer.

26. Assertion: The last letter of a letter-analogy answer should always be computed rather than assumed.

Reason: Wrong options in these questions usually differ from the answer only at the end.

27. Assertion: Pilot is to Aircraft as Wing is to Aircraft.

Reason: Both pairs describe the relationship between a person and the machine they operate.

28. Assertion: A uniform shift of +4 turns Y into C.

Reason: When a letter position exceeds 26, subtract 26 to wrap back to the start of the alphabet.

Stuck on any of these? Bring them to a live class.

Live online batches and 1-on-1 mentoring for AAI ATC Junior Executive — every reasoning, aptitude, English and GK topic taught straight from the real question papers. Fees are kept deliberately low so any serious aspirant can join.

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