

**How to use this sheet.** Every cluster question is solved the same way: write all four options as number triples in a vertical column, write the two gaps beneath each, and find the mismatch. For cluster pairs, map across the hyphen instead. Target time is 30 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

*In each set, three items share a rule. Identify the one that does not. The answer is never based on vowels or consonants.*

1. Which cluster does not belong?  
(1) DFH (2) GIK (3) RTW (4) MOQ
2. Which cluster does not belong?  
(1) DYB (2) PKN (3) GBE (4) LGJ
3. Which pair does not belong?  
(1) AC-EG (2) BD-FH (3) CE-GI (4) DF-HK
4. Which pair does not belong?  
(1) MO-QS (2) CE-GI (3) FH-JL (4) RT-VX
5. Which number does not belong?  
(1) 121 (2) 144 (3) 169 (4) 180
6. Which number does not belong?  
(1) 17 (2) 23 (3) 29 (4) 33
7. Which number does not belong?  
(1) 343 (2) 625 (3) 216 (4) 512
8. Which word does not belong?  
(1) Runway (2) Taxiway (3) Apron (4) Altimeter
9. Which word does not belong?  
(1) Radar (2) Transponder (3) Hangar (4) Beacon
10. Which city does not belong?  
(1) Chennai (2) Bhopal (3) Kolkata (4) Mumbai

**Gap analysis space — Questions 1 to 4** *Write the number triples in a vertical column, gaps underneath.*

## Section B · Assertion and reason

*Mark (a) both true and reason explains assertion, (b) both true but reason does not explain, (c) assertion true reason false, (d) assertion false reason true.*

**11. Assertion:** In cluster-pair questions the internal gap is usually irrelevant.

**Reason:** The examiner often makes all four internal gaps identical.

**12. Assertion:** The bracketed note in AAI classification questions is decorative.

**Reason:** Vowel patterns never appear in the four options.

**13. Assertion:** You should look for the rule that three items share.

**Reason:** Hunting for a fault in one item leads to a second, unintended pattern.

**14. Assertion:** 625 is a perfect cube.

**Reason:** 625 equals 5 raised to the fourth power.

## Section C · Match the following

| Column I — question type  | Column II — first thing to do               |
|---------------------------|---------------------------------------------|
| (a) Three-letter clusters | (i) Map across the hyphen                   |
| (b) Cluster pairs         | (ii) Name the category of each word         |
| (c) Number sets           | (iii) Write both gaps under each triple     |
| (d) Word sets             | (iv) Check squares, then cubes, then primes |

Answer: (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ (d) \_\_\_\_\_

## Section D · Fill in the blanks

**15.** In FPJ, BLF and MWQ the shared gap pattern is \_\_\_\_\_ then \_\_\_\_\_.

**16.** In CJE, RYT and MTO the shared gap pattern is \_\_\_\_\_ then \_\_\_\_\_.

**17.** In cluster pairs, the first letter is mapped to the \_\_\_\_\_ letter.

**18.** The number checklist begins with \_\_\_\_\_ and then \_\_\_\_\_.

**19.** The odd word in a word set usually belongs to the same \_\_\_\_\_ but a different \_\_\_\_\_.

## Section E · True or false

**20.** 625 is a perfect cube. ( True / False )

**21.** In 2025, every AAI classification question was letter-cluster based. ( True / False )

**22.** You should start by finding what is wrong with one option. ( True / False )

**23.** Identical internal gaps across all four pairs is a sign the rule lies elsewhere. ( True / False )

**24.** The bracketed note rules out vowels and consonants as the basis of the answer. ( True / False )

### Working space — Sections D and E

Show the arithmetic behind each answer.

## Section F · Short answer

Two to three sentences each.

**25.** Describe the gap method for three-letter clusters in three steps.

26. Explain why the bracketed note about vowels is genuinely useful rather than decorative.
27. State the number checklist in order and explain why you stop at the first successful test.
28. Explain the difference between the field a word belongs to and the category it belongs to.

## Section G · Long answer

29. Take the pair set KQ-WX, JP-TX, FK-PS, BG-LO. Show the full cross-mapping for all four pairs, identify the odd one, and explain precisely why the internal gaps mislead.
30. Compare the 2025 Shift 1 cluster question with the Shift 2 one. Show that both use the same mechanism, then construct a third question of your own on the same pattern with a fresh gap sequence.

### Working space — Question 29

*Four pairs, two arrows each, jumps labelled.*

## Section H · HOTS — higher order thinking

31. Construct a set of four clusters in which two different valid rules isolate two different options, and explain which one an examiner would intend and why.
32. A cluster set wraps around the alphabet from Z back to A. Explain why wrapping is normally excluded from these questions, then design a set in which wrapping is the deciding factor.
33. Explain why a number set built on two rules at once — say, perfect squares that are also multiples of 4 — makes for a poor classification question.

### Working space — Question 31

*Show both rules and the option each one isolates.*

## Section I · Previous year exam style

*Every question in this section appeared in a real AAI ATC Junior Executive paper. Each carries the note that the answer is not based on vowels or consonants.*

34. Three of the following four letter-clusters are alike. Which does NOT belong?  
(1) FPJ (2) BLF (3) JTM (4) MWQ [PYQ 2025 · Shift 1]
35. Three of the following four letter-cluster pairs are alike. Which pair does NOT belong?  
(1) KQ-WX (2) JP-TX (3) FK-PS (4) BG-LO [PYQ 2025 · Shift 1]
36. Three of the following four letter-clusters are alike. Which does NOT belong?  
(1) CJE (2) HOK (3) RYT (4) MTO [PYQ 2025 · Shift 2]

37. Three of the following four letter-cluster pairs are alike. Which pair does NOT belong?

(1) GJ-MQ (2) QT-WU (3) IL-OS (4) BE-HL [PYQ 2025 · Shift 2]

**Gap analysis space — Questions 34 to 37** These four are the real exam pattern. Thirty seconds each.

### Section J · Mixed revision test

Ten questions. Five minutes. No calculator, no phone.

38. Which cluster does not belong: BEG, KNP, TWY, DGJ?
39. Which cluster does not belong: LQN, CHE, PUR, FKI?
40. Which pair does not belong: AD-HK, BE-IL, CF-JM, DG-LO?
41. Which number does not belong: 64, 81, 100, 125?
42. Which number does not belong: 13, 19, 21, 31?
43. Which number does not belong: 27, 64, 125, 144?
44. Which word does not belong: Pilot, Engineer, Controller, Cockpit?
45. Which word does not belong: Delhi, Jaipur, Lucknow, Pune?
46. Which word does not belong: Compass, Altimeter, Propeller, Barometer?
47. Which cluster does not belong: MPS, DGJ, HKN, QTX?

#### 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.

Enquiry form via [aviatelearnings.com](https://aviatelearnings.com) · Telegram: [t.me/aaiatc2026kanishk](https://t.me/aaiatc2026kanishk) · YouTube: [youtube.com/@AAIATCEXamPrep](https://youtube.com/@AAIATCEXamPrep)