

Answer Key & Explanations

Academic Reading Paper 02 — Tunnels, Tree Rings and Targets

Mark your answer sheet before you read this

HOW TO USE THIS

- Mark one point for each correct answer. Spelling must be correct.
- Convert your total with the band table on the next page.
- Then read the explanation for **every** question you got wrong, and for every one you guessed. The explanation names the mechanism the wrong answer was built on.

The band figure is an estimate. A real paper is pre-tested on thousands of candidates and these have not been, so read the band as a position, not a prediction.

Q	Answer	Code	Mechanism	Where
1	mother well	R	Straight retrieval — no trap	Paragraph 2.
2	access shafts / access shaft / shafts	R	Straight retrieval — no trap	Paragraph 2.
3	gallery / the gallery	R	Straight retrieval — no trap	Paragraph 2.
4	water table	R	Straight retrieval — no trap	Paragraphs 1 and 7.
5	muqanni / the muqanni	R	Straight retrieval — no trap	Paragraph 4.
6	baked clay	R	Straight retrieval — no trap	Paragraph 3.
7	300 metres / three hundred metres / 300m / roughly 300 metres / about 300 metres	D1	Statement moved from another paragraph	Paragraph 5.
8	tube wells / tube-wells	R	Straight retrieval — no trap	Paragraph 7.
9	NOT GIVEN	B3	Superlative moved to another dimension	Paragraph 5.
10	FALSE	A7	Time relation reversed	Paragraph 2.
11	NOT GIVEN	B2	Adjacent proposition on the same subject	Paragraphs 5 and 6.
12	FALSE	E1	Synonym substitution, passage keyword parked on a decoy	Paragraph 6.
13	TRUE	R	Straight retrieval — no trap	Paragraph 7.
14	increment borer / increment-borer	R	Straight retrieval — no trap	Paragraph 4.
15	sanded	R	Straight retrieval — no trap	Paragraph 4.
16	hundredth	R	Straight retrieval — no trap	Paragraph 4.
17	master chronology	F2	Word limit decides which words are the answer	Paragraph 4.
18	calendar year	R	Straight retrieval — no trap	Paragraph 4.

19	A	R	Straight retrieval — no trap	Paragraph 1.
20	B	R	Straight retrieval — no trap	Paragraph 5.

Q	Answer	Code	Mechanism	Where
21	C	R	Straight retrieval — no trap	Paragraph 6.
22	D	R	Straight retrieval — no trap	Paragraph 5.
23	E	R	Straight retrieval — no trap	Paragraph 7.
24	B	A1	Quantity re-attached to another noun	Paragraphs 1 and 3.
25	C	C3	A conditional fact stated as universal	Paragraph 2.
26	B	A6	Direction of change reversed	Paragraph 6.
27	NO	A2	Scope widened or narrowed by dropping a qualifier	Paragraphs 1 and 2.
28	NO	A7	Time relation reversed	Paragraph 2.
29	YES	R	Straight retrieval — no trap	Paragraph 2.
30	NOT GIVEN	B2	Adjacent proposition on the same subject	Paragraph 4.
31	NOT GIVEN	B2	Adjacent proposition on the same subject	Paragraph 3.
32	YES	R	Straight retrieval — no trap	Paragraph 8.
33	A	R	Straight retrieval — no trap	Paragraph 1.
34	B	R	Straight retrieval — no trap	Paragraph 3.
35	C	R	Straight retrieval — no trap	Paragraph 3.
36	D	D1	Statement moved from another paragraph	Paragraph 6.
37	E	C2	The extreme version the writer explicitly refused	Paragraph 8.
38	monetary	R	Straight retrieval — no trap	Paragraph 1.
39	performance	R	Straight retrieval — no trap	Paragraph 5.
40	steering / the steering	E1	Synonym substitution, passage keyword parked on a decoy	Paragraph 7.

Score to band

Raw score out of 40	Estimated band
39–40	9
37–38	8.5
35–36	8
33–34	7.5
30–32	7
27–29	6.5
23–26	6
19–22	5.5
15–18	5
13–14	4.5
10–12	4
8–9	3.5
6–7	3
4–5	2.5

Questions 1–4**1 mother well** · Paragraph 2.

'Work begins with a trial shaft, the **mother well**, sunk where the diggers expect to strike water.' It is the deepest shaft and the one at the inland end.

Mechanism R — Straight retrieval — no trap

2 access shafts / access shaft / shafts · Paragraph 2.

'a series of **access shafts** is sunk from above to meet it'. They appear on the surface as the line of low earth rings described in paragraph 5.

Mechanism R — Straight retrieval — no trap

3 gallery / the gallery · Paragraph 2.

'The channel itself — the **gallery** — is then driven from the village end inland.' The passage gives you the word in an aside between dashes, which is where definitions usually hide.

Mechanism R — Straight retrieval — no trap

4 water table · Paragraphs 1 and 7.

'the tunnel falls a little more steeply than the **water table** it started in'. Paragraph 7 then explains that when this level drops, the qanat dies.

Mechanism R — Straight retrieval — no trap

Questions 5–8**5 muqanni / the muqanni** · Paragraph 4.

'a small hereditary profession, the **muqanni**'.

Mechanism R — Straight retrieval — no trap

6 baked clay · Paragraph 3.

'lined with hoops of **baked clay**'.

Mechanism R — Straight retrieval — no trap

7 300 metres / three hundred metres / 300m / roughly 300 metres / about 300 metres · Paragraph 5.

'a mother well roughly **three hundred metres** deep'. The same sentence offers 33 kilometres and 2,500 years; only one of the three answers the question asked.

Mechanism D1 — Statement moved from another paragraph

8 tube wells / tube-wells · Paragraph 7.

'**Tube wells** spread across the plateau ... the water table fell beneath the mouths of the old galleries.'

Mechanism R — Straight retrieval — no trap

Questions 9–13

9 NOT GIVEN · Paragraph 5.

The passage calls its mother well 'the deepest known' and gives its length as 33 kilometres, but never says the length is a record. A superlative moved from one dimension to another: *deepest* is claimed, *longest* is not.

Mechanism B3 — Superlative moved to another dimension

10 FALSE · Paragraph 2.

'Work begins with a trial shaft, the mother well' — and the gallery is driven only after its depth is recorded and the line is set out.

Mechanism A7 — Time relation reversed

11 NOT GIVEN · Paragraphs 5 and 6.

36,000 are recorded in Iran, and Oman, the Sahara, Spain, Mexico and Peru are all named — with no figure for any of them. One count is not a comparison.

Mechanism B2 — Adjacent proposition on the same subject

12 FALSE · Paragraph 6.

'expressed as a length of time ... **rather than** as a quantity of water'. The statement uses the passage's own words for the option the passage rules out.

Mechanism E1 — Synonym substitution, passage keyword parked on a decoy

13 TRUE · Paragraph 7.

'a qanat cannot take more water than the aquifer yields, because the gravity that delivers the water also limits it'.

Mechanism R — Straight retrieval — no trap

Questions 14–18

- 14** **increment borer** / **increment-borer** · Paragraph 4.

'A hollow bit called an **increment borer** is turned into the trunk'. The passage names the tool in a defining clause — 'called an ...' is where a completion answer usually sits.

Mechanism R — Straight retrieval — no trap

- 15** **sanded** · Paragraph 4.

'glued into a grooved mount and **sanded**, sometimes to a polish'.

Mechanism R — Straight retrieval — no trap

- 16** **hundredth** · Paragraph 4.

'measured to a **hundredth** of a millimetre'.

Mechanism R — Straight retrieval — no trap

- 17** **master chronology** · Paragraph 4.

'compared with the **master chronology** until it locks into position'. Two words exactly — 'chronology' alone would not identify which one.

Mechanism F2 — Word limit decides which words are the answer

- 18** **calendar year** · Paragraph 4.

'the outermost ring has a **calendar year**, and so does every ring behind it'.

Mechanism R — Straight retrieval — no trap

Questions 19–23

- 19** **A** · Paragraph 1.

Douglass, an astronomer, was hunting an eleven-year sunspot cycle.

Mechanism R — Straight retrieval — no trap

- 20** **B** · Paragraph 5.

Ferguson and the bristlecone pine, which 'rots hardly at all'.

Mechanism R — Straight retrieval — no trap

- 21** **C** · Paragraph 6.

Suess demonstrated that atmospheric carbon-14 has not been constant.

Mechanism R — Straight retrieval — no trap

- 22** **D** · Paragraph 5.

Becker's oaks, dredged from river gravels.

Mechanism R — Straight retrieval — no trap

23 E · Paragraph 7.

Renfrew: the western monuments preceded their supposed models.

Mechanism R — Straight retrieval — no trap

Questions 24–26

24 B · Paragraphs 1 and 3.

'founded the Laboratory of Tree-Ring Research ... in **1937**'. 1901 is the year Douglass began looking at trees, thirty-six years earlier — the two dates sit in different paragraphs and the wrong one is the more memorable.

Mechanism A1 — Quantity re-attached to another noun

25 C · Paragraph 2.

'It means only that the scarce thing was less scarce than usual.' B and D are each true of *one* kind of site — dry ground and the treeline — presented as if true everywhere. The passage even warns that this is the error students make.

Mechanism C3 — A conditional fact stated as universal

26 B · Paragraph 6.

'uncalibrated radiocarbon dates for the more distant past come out **too young**'. Reverse the direction and the whole Renfrew argument in the next paragraph stops making sense — which is the check to run when a direction trap is offered.

Mechanism A6 — Direction of change reversed

Questions 27–32

27 NO · Paragraphs 1 and 2.

'The wider claim he is now credited with, he did not make' — the famous wording is Strathern's, twenty-two years later. The whole first section exists to set up this one item.

Mechanism A2 — Scope widened or narrowed by dropping a qualifier

28 NO · Paragraph 2.

'a year **after** Goodhart'. A date relation reversed, with both names correct — nothing else in the sentence is wrong.

Mechanism A7 — Time relation reversed

29 YES · Paragraph 2.

'it is a better sentence than the one it compresses, which is why it has displaced it'.

Mechanism R — Straight retrieval — no trap

30 NOT GIVEN · Paragraph 4.

Both cases are given one after the other as publication improving something, and neither is measured against the other. Two facts and no comparison between them is the cleanest NOT GIVEN there is.

Mechanism B2 — Adjacent proposition on the same subject

31 NOT GIVEN · Paragraph 3.

The passage says only that holding the ambulances is the *quicker* of the two. Which one hospitals actually do more often is never discussed — speed is not frequency.

Mechanism B2 — Adjacent proposition on the same subject

32 YES · Paragraph 8.

'Discretion cannot be abolished. It can only be put where someone can be asked about it.'

Mechanism R — Straight retrieval — no trap

Questions 33–37

33 A · Paragraph 1.

It was about money-supply relationships collapsing once the Bank steered by them — narrow, technical and about control.

Mechanism R — Straight retrieval — no trap

34 B · Paragraph 3.

'Campbell's version is the useful one, because it names two different failures' — gaming, and coming to believe the number is the thing.

Mechanism R — Straight retrieval — no trap

35 C · Paragraph 3.

'not because anyone is cheating but because that is where the marks are'.

Mechanism R — Straight retrieval — no trap

36 D · Paragraph 6.

'so that the cheap way of moving one of them shows up as damage in another'.

Mechanism D1 — Statement moved from another paragraph

37 E · Paragraph 8.

'ends by relocating the discretion somewhere less visible'. Ending G is the trap: it is the overstated position the writer spends paragraph 4 refuting.

Mechanism C2 — The extreme version the writer explicitly refused

Questions 38–40

38 **monetary** · Paragraph 1.

'a conference paper on **monetary** policy'.

Mechanism R — Straight retrieval — no trap

39 **performance** · Paragraph 5.

'no longer a description but a **performance**, and it should be read as one'.

Mechanism R — Straight retrieval — no trap

40 **steering / the steering** · Paragraph 7.

'an indicator that has been steered by for a decade is measuring the **steering**'. Note that the sentence converts 'a decade' to 'ten years' — the paraphrase is in the question, so scanning for the word *decade* finds nothing.

Mechanism E1 — Synonym substitution, passage keyword parked on a decoy