

Answer Key & Explanations

Academic Reading Paper 11 — Gears, Feathers and Filters

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	zodiac / the zodiac	R	Straight retrieval — no trap	Paragraph 5.
2	gearwheels / gears	R	Straight retrieval — no trap	Paragraph 3.
3	spiral / spirals / spiral dials	R	Straight retrieval — no trap	Paragraph 6.
4	crank / hand crank	R	Straight retrieval — no trap	Paragraph 5.
5	Egyptian calendar	D1	Statement moved from another paragraph	Paragraph 5.
6	phase	R	Straight retrieval — no trap	Paragraph 5.
7	solar	D1	Statement moved from another paragraph	Paragraph 6.
8	eclipses	R	Straight retrieval — no trap	Paragraph 6.
9	slot	F2	Word limit decides which words are the answer	Paragraph 7.
10	FALSE	A1	Quantity re-attached to another noun	Paragraph 3.
11	TRUE	A7	Time relation reversed	Paragraphs 3 and 4.
12	NOT GIVEN	B2	Adjacent proposition on the same subject	Paragraph 4.
13	FALSE	C1	Overstatement — hedge removed	Paragraph 8.
14	i	E4	Minimal-pair options	Section A.
15	iii	E4	Minimal-pair options	Section B.
16	v	E4	Minimal-pair options	Section C.
17	vii	E4	Minimal-pair options	Section E.
18	ix	E4	Minimal-pair options	Section G.
19	xi	E4	Minimal-pair options	Section H.
20	A	R	Straight retrieval — no trap	Section B.

Q	Answer	Code	Mechanism	Where
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21	B	R	Straight retrieval — no trap	Section E.
22	C	D2	Intermediate actor named beside the originator	Section G.
23	B	R	Straight retrieval — no trap	Section E.
24	A	E4	Minimal-pair options	Section C.
25	C	R	Straight retrieval — no trap	Section E.
26	E	D1	Statement moved from another paragraph	Section F.
27	NO	A5	Wrong agent for the action	Paragraph 4.
28	NO	C2	The extreme version the writer explicitly refused	Paragraph 3.
29	NOT GIVEN	B2	Adjacent proposition on the same subject	Paragraphs 1 and 2.
30	YES	R	Straight retrieval — no trap	Paragraph 7.
31	NOT GIVEN	B2	Adjacent proposition on the same subject	Paragraph 7.
32	YES	R	Straight retrieval — no trap	Paragraph 5.
33	A	A1	Quantity re-attached to another noun	Paragraph 1.
34	B	C1	Overstatement — hedge removed	Paragraph 4.
35	B	D1	Statement moved from another paragraph	Paragraph 6.
36	C	C2	The extreme version the writer explicitly refused	Paragraph 8.
37	detecting	R	Straight retrieval — no trap	Paragraph 2.
38	aptitude	E1	Synonym substitution, passage keyword parked on a decoy	Paragraph 3.
39	improvement	R	Straight retrieval — no trap	Paragraph 7.
40	tried	E2	Answer sits after its own distractor	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 **zodiac / the zodiac** · Paragraph 5.

'an outer ring divided into the twelve signs of the **zodiac**'. The inner ring is the Egyptian calendar and is offered by the same sentence.

Mechanism R — Straight retrieval — no trap

2 **gearwheels / gears** · Paragraph 3.

'at least thirty **gearwheels** cut from a single sheet of bronze'.

Mechanism R — Straight retrieval — no trap

3 **spiral / spirals / spiral dials** · Paragraph 6.

'Two **spiral** dials were cut into the plate.'

Mechanism R — Straight retrieval — no trap

4 **crank / hand crank** · Paragraph 5.

'A hand **crank** on the side turned a main drive wheel.'

Mechanism R — Straight retrieval — no trap

Questions 5–9

5 **Egyptian calendar** · Paragraph 5.

'a ring of **three hundred and sixty-five** days'. Twelve and three hundred and sixty are both in the same sentence and belong to the zodiac.

Mechanism D1 — Statement moved from another paragraph

6 **phase** · Paragraph 5.

'rotated to display the **phase**'.

Mechanism R — Straight retrieval — no trap

7 **solar** · Paragraph 6.

'two hundred and thirty-five lunar months fit almost exactly into nineteen **solar** years'. The number nineteen is the tempting answer and is not what the line asks for.

Mechanism D1 — Statement moved from another paragraph

8 **eclipses** · Paragraph 6.

'small inscribed glyphs on that dial predict the **eclipses** themselves'.

Mechanism R — Straight retrieval — no trap

9 **slot** · Paragraph 7.

'a pin on one gearwheel running in a **slot** cut into another'. One word, and the two-word limit rules out copying the whole phrase.

Mechanism F2 — Word limit decides which words are the answer

Questions 10–13

10 FALSE · Paragraph 3.

Eighty-two is the number of *fragments*; the gearwheels number at least thirty. Both figures are correct and the statement has attached one to the other's noun.

Mechanism A1 — Quantity re-attached to another noun

11 TRUE · Paragraphs 3 and 4.

Price published in 1974 that a single input drives many outputs at different rates, and the tooth counts on the buried gears were resolved only by the scans arranged from 2005.

Mechanism A7 — Time relation reversed

12 NOT GIVEN · Paragraph 4.

The machine's weight and the reason it went to Athens are given. Nothing is said about what it cost or what was expected.

Mechanism B2 — Adjacent proposition on the same subject

13 FALSE · Paragraph 8.

'No object of remotely comparable complexity survives from the following thousand years.'

Mechanism C1 — Overstatement — hedge removed

Questions 14–19

14 i · Section A.

'There was no dishonesty in it. There was simply no evidence.' *ii* is contradicted by that sentence rather than merely fitting less well.

Mechanism E4 — Minimal-pair options

15 iii · Section B.

The structures 'had been described repeatedly as fossilised bacteria' and were something else.

Mechanism E4 — Minimal-pair options

16 v · Section C.

Elongated against spherical: 'melanosome shape is not arbitrary'. *vi* substitutes size, which the section gives only as a scale measurement in the previous paragraph.

Mechanism E4 — Minimal-pair options

17 vii · Section E.

Lingham-Soliar's objection and the argument from arrangement that answered it. *viii* states the opposite of the section's outcome.

Mechanism E4 — Minimal-pair options

18 ix · Section G.

'A separate caution comes from the artists rather than the chemists' — which makes *x* the wrong half of the pair the sentence itself sets up.

Mechanism E4 — Minimal-pair options

19 xi · Section H.

'What it has not done is make the pictures true. It has made a specific and limited part of them evidence-based.'

Mechanism E4 — Minimal-pair options

Questions 20–23

20 A · Section B.

Vinther, 2008.

Mechanism R — Straight retrieval — no trap

21 B · Section E.

Lingham-Soliar's objection.

Mechanism R — Straight retrieval — no trap

22 C · Section G.

Witton and Conway on shrink-wrapping. Lingham-Soliar is the tempting answer because he is the other critic in the passage, but his objection is about the microscopic structures rather than about the drawings.

Mechanism D2 — Intermediate actor named beside the originator

23 B · Section E.

'or the remains of collagen fibres broken down'.

Mechanism R — Straight retrieval — no trap

Questions 24–26

24 A · Section C.

'melanosome **shape** is not arbitrary' — elongated for dark, spherical for rufous. *Size* is offered because the passage gives a measurement in the previous section.

Mechanism E4 — Minimal-pair options

25 C · Section E.

'The reply that carried the field was not about the bodies themselves but about their **arrangement**.'

Mechanism R — Straight retrieval — no trap

26 E · Section F.

'The reds and yellows that many living birds obtain from **carotenoids** in their food leave no structure behind.' *Scattering* is the other unrecoverable case in the same sentence, and the gap takes the first of the two.

Mechanism D1 — Statement moved from another paragraph

Questions 27–32

27 NO · Paragraph 4.

His work 'was popularised into a claim that practice was very nearly everything'. What he established and what it was turned into are separated in the same sentence.

Mechanism A5 — Wrong agent for the action

28 NO · Paragraph 3.

'It does not show that ability is entirely made. Individual differences are real.' The concession is placed early precisely to block this reading.

Mechanism C2 — The extreme version the writer explicitly refused

29 NOT GIVEN · Paragraphs 1 and 2.

Hockey is where it was first found and other sports are listed after it. How thoroughly each has been studied is never discussed.

Mechanism B2 — Adjacent proposition on the same subject

30 YES · Paragraph 7.

Banding by developmental stage is 'harder administratively' — the writer states the cost of his own proposal.

Mechanism R — Straight retrieval — no trap

31 NOT GIVEN · Paragraph 7.

He proposes selecting later, more than once, and keeping the door open afterwards, all of which assume selection continues. Abolishing it is never raised.

Mechanism B2 — Adjacent proposition on the same subject

32 YES · Paragraph 5.

'The word describes the output of a process while appearing to describe an input to it.'

Mechanism R — Straight retrieval — no trap

Questions 33–36

33 A · Paragraph 1.

'roughly four times as many players had been born in the first quarter ... as in the last'. C takes the eleven months from the following sentence, where it describes the gap between two individual children.

Mechanism A1 — Quantity re-attached to another noun

34 B · Paragraph 4.

Stated directly, and 'considerably less in some other fields' rules out D. A is the popularised version the paragraph before it describes.

Mechanism C1 — Overstatement — hedge removed

35 B · Paragraph 6.

It is the third item in a list introduced by 'the biases in the process ... are knowable'. D belongs to the sentence about family income immediately before it.

Mechanism D1 — Statement moved from another paragraph

36 C · Paragraph 8.

'the filter is ours, we built it, and it can be built differently'. A is disowned in the first line of the same paragraph, and D reverses the proposal to select later.

Mechanism C2 — The extreme version the writer explicitly refused

Questions 37–40

37 **detecting** · Paragraph 2.

'Selection has manufactured the difference it believed it was **detecting**.'

Mechanism R — Straight retrieval — no trap

38 **aptitude** · Paragraph 3.

'will systematically mistake maturity for **aptitude**'. The question drops *systematically*, so the passage's own phrase cannot simply be scanned for.

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

39 **improvement** · Paragraph 7.

'Judge candidates on rate of **improvement** rather than current level'.

Mechanism R — Straight retrieval — no trap

40 **tried** · Paragraph 7.

'removes the effect almost entirely where it has been **tried**'. The answer is the last word of a long clause, after two other verbs.

Mechanism E2 — Answer sits after its own distractor