

## Mark schemes

## Q1.

[AO1 = 4 AO3 = 4]

Level	Mark	Description
4	7-8	Knowledge of interference is accurate with some detail. Discussion is effective. Minor detail and/or expansion is sometimes lacking. The answer is clear and coherent. Specialist terminology is used effectively.
3	5-6	Knowledge of interference is evident but there are occasional inaccuracies/omissions. There is some effective discussion. The answer is mostly clear and organised. Specialist terminology is mostly used appropriately.
2	3-4	Limited knowledge of interference is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1-2	Knowledge of interference is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

**Possible content:**

- interference is where different pieces of information become confused in memory
- proactive interference is where old learning affects recall of new information
- retroactive interference is where new learning affects recall of old information
- newer information may overwrite earlier information
- interference is more likely to occur when the pieces of information are similar
- response competition occurs at the moment of retrieval when similar memories compete for access
- the impact of passage of time/intervening events on forgetting
- use of examples and/or description of research evidence to illustrate interference.

**Possible discussion:**

- use of research evidence to support (eg McGeoch and McDonald, 1931) or contradict (eg Tulving and Psotka, 1971) the role of interference
- loss of information may only be temporary, can be overcome using cued recall, therefore interference is not a true explanation for forgetting
- evidence that interference can explain forgetting frequently comes from artificial laboratory experiments using artificial tasks, so interference may not occur to the same extent in more real-life settings

- everyday/real life situations have shown interference can explain forgetting, eg Baddeley and Hitch (1977); Schmidt et al (2000)
- practical applications, eg revision strategies
- alternative explanations can be used to critique.

Credit any other relevant material.

[8]

## Q2.

[AO1 = 2 AO3 = 2]

**2 marks** for a clear and coherent outline of the explanation.

**1 mark** for a limited/partial outline.

### Possible content:

- forgetting is due to an absence of cues, preventing access to long-term memory
- cues may be context dependent (to do with the place where information was originally stored) or state dependent (the person's emotional/physical state at the time of encoding)
- credit explanation of the encoding specificity principle.

Credit other valid content.

### PLUS

**2 marks** for a clear and coherent limitation.

**1 mark** for a brief or muddled limitation.

### Possible limitations:

- the influence of context cues may be overstated so the explanation has difficulty accounting for successful recall in different contexts
- nature of supporting evidence, eg Godden and Baddeley is based on the recall of trivial material which reduced the validity of the explanation
- contradictory findings – the context effect disappears when participants are tested using recognition rather than free recall tasks
- reasoned comparison with alternative explanation, eg interference.

Credit other valid limitations.

[4]

**Q3.****[AO2 = 3]**

**3 marks** for a clear, coherent and detailed explanation of why Kaleb is having difficulty recalling the multi-store model.

**2 marks** for a less detailed explanation using some of the detail given below.

**1 mark** for a muddled or limited explanation.

**Possible content:**

- retroactive interference is occurring
- the newer learning of the working memory model (WMM) is affecting recall of the older information about the multi-store model (MSM)
- information about the WMM may have overwritten the earlier information about the MSM
- interference is more likely to occur because both topics were similar/models of memory
- there may not have been much time between learning the two models and so they have become confused/forgetting of the first model (MSM) is greater.

Credit other relevant material.

**[3]****Q4.****[AO3 = 4]**

Level	Marks	Description
2	3-4	Evaluation of retrieval failure as an explanation for forgetting is clear, mostly effective and has some detail. The answer is generally coherent with effective use of terminology.
1	1-2	Evaluation of retrieval failure as an explanation for forgetting is evident but lacks clarity and/or detail. The answer as a whole is not clearly expressed. Terminology is either absent or inappropriately used.
	0	No relevant content.

**Possible evaluation points:**

- use of evidence from studies showing context/state/category dependent forgetting, eg Abernethy (1940), Godden and Baddeley (1975), Overton (1972), Peters and McGee (1982), Tulving and Pearlstone (1966) suggest that retrieval failure/absence of cues is a valid explanation of forgetting
- application of explanation, eg improving memory using mnemonics, category headings; mentally reinstating the context in cognitive interview improves EWT
- context has to be very different in real life to have any effect
- context effect only occurs when memory is tested in particular ways: free recall vs recognition.

Accept other valid points.

**[4]**

**Q5.****[AO1 = 6 AO2 = 4 AO3 = 6]**

Level	Mark	Description
4	13-16	Knowledge of retrieval failure and interference is accurate and generally well detailed. Application is effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9-12	Knowledge of retrieval failure and interference is evident but there are occasional inaccuracies/omissions. Application and/or discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5-8	Limited knowledge of retrieval failure and/or interference is present. Focus is mainly on description. Any discussion and/or application is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR one theory only at Level 3/4.
1	1-4	Knowledge of retrieval failure and/or interference is very limited. Discussion and/or application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. OR one theory only at Level 1/2.
	0	No relevant content.

**Possible content****Retrieval failure:**

- forgetting is due to the absence of cues/tip-of-the-tongue forgetting
- lack of external contextual cues – where environment for learning and recall is different (eg different room)
- lack of internal contextual cues – where physical state for learning and recall is different (eg mood)
- encoding specificity principle
- description of relevant evidence, eg Godden and Baddeley.

Note that focus of description should be on forgetting rather than recall.

**Interference:**

- when two memories conflict/confuse/become mixed up with each other
- more likely when material is similar (creates response competition)
- proactive interference – when an older memory disrupts a newer memory
- retroactive interference – when a newer memory disrupts an older memory
- description of relevant evidence, eg Baddeley and Hitch.

Accept other valid points.

**Possible application:**

- retrieval failure – Natasha is not in the same context as when she learnt the material for her drama exam – on stage vs in her room; Natasha is unlikely to be in the same physical, emotional state as when she learnt the material – in her room alone vs in front of the teacher and examiner
- interference – Natasha has mixed up/confused words from another exam which has caused her to forget; interference is likely in this case because the A-level and GCSE performances/plays may be similar.

Accept other valid points.

**Possible discussion****Retrieval failure:**

- use of evidence to support or contradict, eg Godden and Baddeley suggests that retrieval failure/absence of cues is a valid explanation of forgetting
- application of explanation, eg improving memory using mnemonics, category headings
- context has to be very different in real-life to have any effect
- context effect only occurs when memory is tested in particular ways – free recall vs recognition.

**Interference:**

- use of evidence from lab studies, eg McGeoch and McDonald and real-life, eg Schmidt supports the effects of interference
- application of explanation, eg avoiding similar material when revising for exams
- use of artificial materials in lab studies, eg recall of word lists
- deliberate attempt to induce interference in lab studies, eg by limiting time between learning and recall
- evidence suggests interference can be overcome using cued recall
- interference tends not to occur with experts.

Accept other valid points.

**Q6.****[AO1 = 3]**

**3 marks** for a clear, coherent and detailed explanation of retroactive interference as an explanation of forgetting, using appropriate terminology.

**2 marks** for a less detailed explanation using some of the detail given below.

**1 mark** for a muddled or limited explanation.

**Possible content:**

- retroactive interference is where a newer memory disrupts an older memory: the older information is forgotten
- retroactive interference is where two lots of information become confused/mixed up in memory
- retroactive interference is greater when the two lots of information are similar
- retroactive interference is less likely to occur when there is a gap between the instances of learning.

Credit other relevant information.

**[3]****Q7.****[AO3 = 2]**

**2 marks** for a clear and coherent explanation of a strength of interference as an explanation of forgetting.

**1 mark** for a muddled/limited explanation.

**Possible strengths:**

- use of evidence from lab studies to support the role of interference in forgetting, eg McGeogh & McDonald (1931)
- use of evidence from everyday/real life situations which have shown interference can explain forgetting, eg Baddeley and Hitch (1977); Schmidt et al (2000)
- practical applications, eg avoiding similar material when revising for exams.

Credit other relevant strengths.

**[2]**

**Q8.**

**[AO1 = 3]**

**2 marks** for a clear, elaborated explanation of retroactive interference.

**1 mark** for a limited or muddled explanation.

**Possible content:**

- when new/recently stored information disrupts/affects the recall of old/previously stored information
- more likely if competing information is similar.

**Plus**

**1 mark** for an appropriate example.

**[3]**