

Biological Approach

Q.1) Describe how brain imaging technology is used to study one human behaviour. [4]

Brain imaging technology refers to methods used to observe the structure or activity of the living brain. **Functional magnetic resonance imaging (fMRI)** is a brain imaging technique that measures changes in blood oxygen levels (BOLD signals), helping researchers identify which brain regions are active during a behaviour. One human behaviour that can be studied using fMRI is memory, specifically **flashbulb memory**, which is a vivid and detailed memory of an emotionally significant event.

Sharot et al. aimed to investigate the biological basis of flashbulb memories of the 9/11 terrorist attacks. Twenty-four participants who had been in different locations in Manhattan during the attacks underwent fMRI scans three years later. While in the scanner, they recalled memories of 9/11 when shown the word “September” and ordinary summer memories when shown the word “Summer”. The results showed greater activation of the left amygdala during recall of 9/11 memories, especially among participants who had been closer to the attacks. The researchers concluded that the amygdala plays a role in flashbulb memories.

This study shows how brain imaging technology is used to study human behaviour. By using fMRI to measure brain activity during memory recall, researchers were able to identify the left amygdala as a brain region associated with vivid emotional memories, helping explain the biological basis of memory.

Q.2) Describe how one chemical messenger plays a role in one human behaviour. [4]

A **chemical messenger** is a substance that carries information from one cell to another.

Dopamine is a neurotransmitter, a type of chemical messenger [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Evidence for this comes from **Fisher, Aron, and Brown**, who aimed to investigate the role of dopamine in romantic love. Seventeen participants [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].

This study supports the idea that dopamine influences romantic behaviour because [REDACTED]

[REDACTED]

[REDACTED]

This is a sample preview only. Purchase the complete SAQ pack to unlock all SAQs 1-9 under the biological approach

Cognitive Approach

This is a sample preview only.
Purchase the complete SAQ pack
to unlock all SAQs 1-8 under
the cognitive approach

Sociocultural Approach

This is a sample preview only. Purchase the complete SAQ pack to unlock all SAQs 1-10 under the sociocultural approach

About the Author

With **over 12 years of international teaching experience**, **JYOTIKA VARMANI** has guided students across the world to achieve **7s in IBDP Psychology**, A*s in Cambridge, AQA, Edexcel and OCR A-Levels Psychology, 5s in AP Psychology and top grades in GCSE and IGCSE Psychology. Her students study across the UK, UAE, India, Australia, New Zealand, Europe and the US.

Known for **highly exam-focused teaching**, detailed essay training and markscheme-based preparation, she specializes in simplifying difficult psychological concepts into clear, structured answers that match exactly what examiners expect in IBDP Psychology. Her excellent mentorship encourages both SL and HL students to pursue their **EEs in Psychology** as their preferred subject of choice.

Jyotika is the Psychology Teacher at **Modern College Mauritius** and Subject Expert for at **Podar International School, Mumbai**. Her psychology resources, notes and videos are used internationally by students, teachers and schools, with millions of readers across educational platforms and psychology websites.

These notes are designed not just to help students study Psychology, but to help them write high-scoring answers confidently in the IBDP examination.

Reach out to Jyotika Varmani for scheduling psychology classes, assignment consultation and related services-



Jyotika Varmani
M.A. Hons. in Psychology
SET, NET for Professorship
P.G.D.H.E



+919892507784



jyotika@excellingpsychology.com



<https://www.teacheron.com/tutor/1KH>



psychologytuitionbyjyotika



Psychology Tuition by Jyotika Varmani



excellingpsychology.com