

2005 Psychology

Advanced Higher

Finalised Marking Instructions

These Marking Instructions have been prepared by Examination Teams for use by SQA Appointed Markers when marking External Course Assessments.

Psychology Advanced Higher

General Marking Instructions

- Suitable alternative answers should be credited for all questions.
- As a guide: 8 marks are awarded for knowledge and understanding, 12 marks for evaluation and analysis.

Credit alternative points where appropriate and relevant.

This does not apply to Section A or to the first part of every other Section, eg Section B1, C1, D1 etc.

SECTION A

PERSPECTIVES IN PSYCHOLOGY AND RESEARCH METHODS

Answer ALL questions in this section.

- A1. Compare **two** theoretical perspectives in psychology in relation to **one** key debate. **(25)**

Mark up to 11 marks for knowledge and understanding.

This may include: definition of perspectives, key features of theory for each perspective, main theorists identified; defining position of both sides of debate; historical basis for debate.

14 Marks are available for analysis/evaluation.

Comparisons of the two perspectives should be given; relationship between the debate chosen and the two perspectives should be given.

- A2. Consider the advantages of using qualitative research methods as opposed to quantitative methods. **(10)**

Advantages of qualitative – phenomenological insight, rich in detail, useful for insight into unusual or unexpected/complex behaviours. Realistic and personally valid (high internal and ecological validity). Quantitative methods although arguably more objective lack the richness in detail as outlined above. The answer should be marked holistically.

Total for Section A (35)

[END OF SECTION A]

SECTION B

COGNITIVE PSYCHOLOGY

If you have chosen this option question B1 is compulsory.

B1. Choose **one** of the issues from the following list. Explain the essential arguments of this issue in a balanced way. **(15)**

- Science in cognition
- Animals in research
- Representations
- Computer modelling in cognitive psychology
- False memory

Answers should address the following points:

Discussion of the issue and its importance for psychology, ie an example and/or relevant theories	6
Research cited, indicating the importance of the issue	3
Arguments for and against the issue	4
Conclusions related to the importance of the issue for psychology	2

Answer ONE question from B2–B5.

- B2.** Drawing on research evidence, describe **one** computational or connectionist model of visual perception, and contrast this with **one** other theory of visual perception. **(20)**

Candidates should start by defining perception, including sensation/perception distinction, process of interpretation in which we select/organise/infer, and take past experience and learning into account; reference to various sense modes, then explain focus on visual sense. Top-down and bottom-up processing in perception.

Most likely choice of computational theory/connectionist model is Marr's computational theory of vision (1982); the three stages of representation of the visual environment should be described. Evaluation: supporting evidence, eg cylindrical representation, Marr and Nishihara (1978), and Garnham (1991), Hoffman and Richards (1984). Weaknesses, eg: lack of support for the 3-D model stage (Harris and Humphreys, 1995; Gardner, 1985).

Other computer models: Selfridge's pandemonium theory (1959).

Connectionist models: Parallel Distributed Processing (PDP), Rumelhart et al (1986); Biederman's (1987) recognition-by-components theory (or geon theory of pattern recognition).

Whichever theory is chosen, it should be described, including relevant research evidence.

Any one of a number of theories may be chosen to contrast with the above, eg: Gregory's (1972, 1980) constructivist/hypothesis-testing theory; Gibson's (1966) theory of direct perception; Gestalt principles (eg Koffka 1935); Neisser's (1976) perceptual cycle, analysis-by-synthesis.

Whichever theory is chosen, it should be described, including relevant research evidence.

Analytical and evaluative skills should be demonstrated in comparing/contrasting the two chosen theories. Conclusion should summarise evidence and arguments, and relate to question.

- B3.** Contrast **one** theory of selective attention with **one** theory of divided attention, including research studies on which these are based. **(20)**

Candidates should provide definition of attention; should refer to need for selectivity, probably due to limited processing capacity of brain, and may include example/illustration. Relationship between attention and other aspects of information-processing, ie perception, memory. Illustrative examples of selective and/or divided attention from everyday life can be credited.

Likely choice of selective attention theory: Broadbent (1958), Treisman (1964), Deutsch and Norman (1963, 1968, 1976).

Whichever one is chosen should be referred to as a filter model or single channel model, and associated research (eg dichotic listening) should be described, eg Cherry (1953), Broadbent (1958), Treisman (1964), Gray and Wedderburn (1960). Selection on basis of physical properties of stimulus/meaning, pertinence or relevance to individual.

Likely choice of model of divided attention: Kahneman (1973), Norman and Bobrow (1975), Shiffrin and Schneider (1977). Whichever one is chosen should refer to capacity/automaticity/focused or controlled processing/multi-channel processing/modules/allocation of resources, etc. Appropriate research studies into divided attention are mainly those demonstrating dual-task performance, eg: Allport et al (1972), Shaffer (1975), Spelke et al (1976), Underwood (1974); Stroop (1935), Kahneman and Henik (1979); Shiffrin and Schneider (1977).

Theory and evidence relating to selective visual attention may also gain credit, as long as its relevance to the chosen theories is made clear.

Analytical and evaluative skills should be demonstrated in comparing/contrasting the two chosen theories and their respective research evidence. Conclusion should summarise evidence and arguments, and relate to question.

- B4.** Evaluate structural and working models of memory. Refer to research evidence in your answer.

(20)

Memory should be defined and located within cognitive psychology.

A minimum of one structural and one working model of memory should be evaluated, eg Atkinson and Shiffrin's multistore model.

Sensory memory supported by Sperling's work

STM } Supported by serial position curve; free recall experiments and case
LTM } studies of HM and Clive Wearing.

However the model is simplistic – information must flow in both directions for the model to be realistic. Does not take into account the type of information taken into memory. Ignores effort + strategy participants may show when remembering. Other approaches do not suggest such a clear line between STM and LTM.

Baddeley and Hitch

Challenges unitary + passive view of multistore model. Working memory is 'active'. May be seen as our consciousness.

Consists of 3 components:

- central executive – modality free attentional mechanism with limited capacity. Co-ordinates the operation of the other two components. No research evidence to support its existence
- the phonological loop – 2 sub-systems
 1. Articulatory loop – verbal rehearsal system 'rehearses' subvocally information we wish to prepare
 2. Phonological store – hearing memory trace lasts 1½ - 2 secs.
- visuospatial scratchpad – holds visual + spatial information.

Supporting evidence: concurrent tasks, if one interferes with other then probably using same system, eg if articulatory suppression uses up the phonological loop another task including reading would be difficult; but not a spatial task.

Provides a more thorough explanation of storage and processing than the multistore model. Explains many STM defects shown by brain damaged patients.

- B5.** Are humans capable of thinking without words, or do our thought processes depend on our language ability? Assess the relationship between language and thought, drawing upon evidence from theory and research. **(20)**

NB Marks for knowledge/understanding and analysis/evaluation should be split between the two sections as follows: 4 and 4 respectively in (a) 4 and 8 respectively in (b).

Definition of language, and possibly of thought; key features of language, eg: communication system; set of symbols, including explanation of symbols; a rule system; claimed distinction between human and other animal species.

Evidence from theory/research should include several of the following (three or four in depth, or more, in lesser depth):

Developmental theories:

- Piaget (1950), Piaget and Inhelder (1969): schemas are established, then language is incorporated into schemas, mainly during pre-operational stage; evidence from studies showing that language coaching does/does not hasten conservation ability, eg Sinclair-de-Zwart (1969).
- Bruner (1966): in symbolic mode/stage of development, language amplifies and accelerates thought; eg Sonstroem (1966), Bruner et al (1966).
- Vygotsky (1962): thought and language are initially separate activities which interact at a certain point in development, ie convergence of pre-linguistic thought and pre-intellectual speech, around age two. “Scaffolding” (Bruner) is often in the form of linguistic support for activities in the Zone of Proximal Development. Little empirical evidence other than Vygotsky (1962) – older children and adults revert to overt verbalisation when thinking processes hit a snag.

Sapir-Whorf (Sapir 1929, Whorf 1956): Linguistic Relativity Hypothesis – thought patterns are determined by the words we use; eg Carroll and Casagrande (1958).

Bernstein’s elaborated/restricted codes; Labov’s arguments on “Black English”.

Effects of language on memory, eg Carmichael et al (1932), Loftus and Palmer (1974).

Behaviourist view: Watson (1913) and Skinner (1957): language as “verbal behaviour”; language and thought are the “same thing”, ie language is just expressed thought, and one does not exist without the other. Contradicted by Smith et al, (1947). Language is acquired by reinforcement and imitation, just like any other behaviour. Evidence from various studies show language cannot be adequately explained by reinforcement/imitation, eg Brown, Cazden and Bellugi (1969).

Summary of arguments and conclusions.

Analysis/evaluation may be demonstrated, throughout, by, eg comparison/contrast of theories, and explanations of how evidence supports or challenges theory.

[END OF SECTION B]

SECTION C

SOCIAL PSYCHOLOGY

If you have chosen this option question C1 is compulsory.

C1. Choose **one** of the issues from the following list. Explain the essential arguments of this issue in a balanced way.

- Psychology of advertising
- Propaganda
- Gender bias in psychological theory and research
- Ethics of socially sensitive research
- Research with human participants

(15)

Answers should address the following points:

Discussion of the issue and its importance for psychology, ie an example and/or relevant theories.

6

Research cited, indicating the importance of the issue.

3

Arguments for and against the issue.

4

Conclusions related to the importance of the issue for psychology.

2

Answer ONE question from C2–C6.

C2. Discuss **two** methods of reducing prejudice. Refer to research evidence in your answer.

(20)

For example:

1. **Equal Status Contact** – meeting members of other social groups can reduce prejudice by reducing the effect of stereotypes. This occurs as
 - intergroup similarities are perceived (they are like us)
 - outgroup differences are noted (they are not all the same).

Contact only changes group stereotypes if

- it is between individuals of equal status
- individuals are seen as representative of their group.

Examples of research could include:

Racial de-segregation studies

- Deutsch and Collins (1951)
- Stouffer *et al* (1949).

Evaluation could include, for example:

Sherif, in the Robber's cave study, found inter-group contact alone was insufficient to reduce prejudice between competing groups.

Stephan (1978) reviewed desegregation studies and found no significant reduction in prejudice or increase in black children's self esteem.

2. **Super-ordinate goals** – Star *et al* concluded that 'efforts at integration of white and coloured troops into the same units may well be more successful when attention is focussed on concrete tasks or goals requiring common effort'.

Making groups work together to achieve 'super-ordinate goals' (goals that cannot be achieved by groups working separately) is likely to reduce prejudice according to:

- intergroup conflict theory – super-ordinate goals reduce the competition that causes prejudice
- social identity theory – working together may merge 'in' and 'out' groups to one whole in-group identity.

Examples of research could include:

Sherif *et al* (1961) significantly reduced intergroup hostility between two groups of children, by providing 'super-ordinate goals' in the last phase of their 'Robber's Cave' experiment.

Aronson *et al* (1978) used the 'jigsaw technique' with mixed race classroom groups. Inter-racial liking and the performance of ethnic minorities was increased.

Evaluation

Inter-personal liking in these studies is not always generalised to social groups as a whole. When children leave their jigsaw classrooms they may return to a prejudiced family or society.

Super-ordinate goals cannot always be set up between all groups and failure to achieve them may result in worse prejudice.

C3. Compare and contrast **two** theories of relationships, paying particular attention to relationship breakdown.

(20)

For example:

1. **Economic Theories** – researchers such as Homans and Blau explain relationships in terms of the costs and rewards involved in interacting with others. The theory predicts relationship breakdown when:
 - one or both partners are dissatisfied with their comparison levels of rewards
 - the comparison with alternative relationships is high
 - the costs of leaving the relationship are low
 - partners are not similar in the ability to reward each other.

Examples of research could include:

Thibaut and Kelley, (1959).

Evaluation could include for example:

- it is difficult to quantify all psychological costs and rewards in a relationship to test the theories
- the theory is rather ‘mercenary’, no dealing with emotions which can override the calculation of profit in relationships.

2. **Learning Theory** – researchers use learning theory principles of classical and operant conditioning to explain attraction. The theory predicts relationship breakdown when:

- partners are associated with unpleasant life experiences, such as unemployment, poverty, etc (classical conditioning)
- partners do not reinforce each other with pleasant stimuli or inflict more negative than positive stimuli on each other (operant conditioning).

Examples of research could include:

Byrne and Clore (1970)

Evaluation could include for example:

- the theory links well with the economic theory of costs and rewards
- Veitch and Griffith (1976) found the attraction shown towards a stranger depended upon whether he was associated with good or bad news.

- C4. Describe and evaluate **two** of the main theories which have been proposed to explain pro-social behaviour. Refer to research evidence in your answer. (20)

For example:

- define the term ‘altruism’
- describe **two** of the main explanations.

1. **Information Processing** – Latane and Darley (1970) proposed an information processing explanation of helping behaviour that identifies several stages involved in the decision making process of whether to help another.

The decision making sequence is as follows:

- Step 1: is something the matter?
- Step 2: is the event or incident interpreted as one in which assistance is needed?
- Step 3: should the bystander accept personal responsibility?
- Step 4: what kind of help should be provided by the bystander?
- Step 5: should the help worked out at step 4 be carried out?

Evaluation could include for example:

The decision model has at least two strengths:

- it assumes that there are several different reasons why bystanders do not lend assistance. Experimental evidence supports this view. For example: ‘ambiguous situations’ (Brickman *et al* (1982)); ‘victim characteristics’ (Piliavin *et al* (1969)); bystander characteristics – skills and expertise (Huston *et al* (1981))
- the decision model gives a plausible explanation of why it is that bystanders so often fail to help a victim.

The decision model has at least two weaknesses:

- the model does not provide a detailed account of the processes involved in decision-making
- the model de-emphasises the influence of emotional factors on the bystanders’ behaviour. The model assumes a rather logical sequence of thought.

2. **Costs and Rewards of Helping** – Arousal/Cost – reward model Piliavin *et al* (1981). They proposed that there are five steps that bystanders go through before deciding whether or not to assist a victim:

- becoming aware of someone’s need for help; this depends on attention
- experience of arousal
- interpreting cues and labelling their state of arousal
- working out the rewards and costs associated with different actions
- making a decision and acting on it.

The fourth step is perhaps the most important. Some of the major rewards and costs involved in helping and not helping are as follows:

- costs of helping: physical harm; delay in carrying out other activities
- costs of not helping: ignoring personal responsibility; guilt; criticism from others; ignoring perceived similarity
- rewards of helping: praise from victim; satisfaction from having been useful if relevant skills are possessed
- rewards of not helping: able to continue with other activities as normal.

Evaluation could include for example:

The Arousal/Cost – reward model has at least two strengths:

- the model provides a more complete account than the decision model of the processes involved in determining whether to provide help
- also probably true that bystanders are generally more likely to think about the possibility of helping when they experience a state of arousal than when they do not.

The Arousal/Cost – reward model has at least two weaknesses:

- it is implied by the model that bystanders spend some time considering all of the elements in the situation and the other demands on their time before deciding what to do. In fact, people faced by a sudden emergency often respond impulsively and with very little thought.
- it is also not always the case that a bystander needs to experience arousal before helping in an emergency. Someone with much experience of similar emergencies may respond efficiently without becoming aroused.

- C5. “A crowd can be defined as a collection of people gathered around a centre or point of common attention.” (Young, 1946)

Describe and evaluate psychological theory and research relating to crowd behaviour.

(20)

For example:

Turner and Killian (1972) identify several broad theoretical approaches to collective behaviour which have been specifically applied to crowds and mobs. The three most important of these are *contagion theories*; *convergence theories* and *emergent norm theories*.

Describe **two** of the main theories:

1. **Contagion Theories** –

Le Bon’s (1895) book *The Crowd* typified this theoretical approach, arguing that individuals in a crowd lose their conscious individual personalities to the primitive, animalistic, spirit of the crowd. Individuals in a crowd descend ‘several rungs in the ladder of civilisation’, showing impulsive, irritable, highly suggestible and overly emotional behaviour, and an incapacity to reason.

Examples of research could include:

- Lee and Humphrey (1943); Lang and Lang (1961); Freud (1921); Horton and Hunt (1976); Festinger *et al* (1952); Zimbardo (1969).

Evaluation could include for example:

- examples contained within the above research.

2. **Convergence Theory** –

Argues that crowd behaviour arises from the gathering together of people who have the same needs, impulse, dislikes and purposes. Organised gatherings provide settings that integrate crowd behaviour into the social structure (eg religious services, football matches). ‘Controlled emotional contagion’ may serve the useful social function of allowing people to release emotions and tensions they cannot ordinarily express, and stimulate feelings of group solidarity (Durkheim, 1898).

Examples of research could include:

- Broom and Selznick (1977); Benewick and Holton (1987).

Evaluation could include for example:

- examples contained within the above research.

C6. Aggression is learned behaviour. Discuss this statement using psychological theories and research.

(20)

For example:

- define the concept of aggression: some behaviour intended to harm or destroy another person who is motivated to avoid such treatment.

Describe at least **two** of the main theories.

Frustration – aggression hypothesis

- Dollard *et al* (1939) translated Freud's work into learning theory terms
- Hypothesis proposes that aggression is always a consequence of frustration and frustration always leads to aggression
- Frustration occurs when our goals are thwarted
- Aggression will emerge in specific situations and may be delayed, disguised or directed toward a scapegoat.

Examples of research/evaluation could include:

- Barker *et al* (1941) children who were shown toys, then prevented from playing with them, were more likely to throw/smash them when allowed to play with them
- Miller (1941) frustration is not sufficient for aggression, it can be expressed in ways other than aggression, and expression will depend partly on other situational factors, eg fear of retaliation.

Social Learning Theory

- Aggressive behaviours are learned through reinforcement and imitation of aggressive models (Bandura, 1965; 1973; 1994)
- Reinforcement can take the form of praise for being tough or rewards for aggression
- Observational learning involves observing others who serve as models for behaviour.

Examples of research/evaluation could include:

- Bobo Doll study: Bandura (1965): children watched a video of an adult being aggressive towards an inflatable Bobo doll. Children who observed the adult being rewarded for behaviour were significantly more aggressive than those who had seen the adult punished (or not rewarded) when placed in the same situation
- Procedure – not completely standardised presentation of model's behaviour
- Artificiality – acts of aggression were shown and imitated against a Bobo Doll, not a real person
- Ethical problems – aggression was induced in, and taught to children.

[END OF SECTION C]

SECTION D

BIOLOGICAL PSYCHOLOGY

If you have chosen this option question D1 is compulsory.

D1. Choose **one** of the issues from the following list. Explain the essential arguments of this issue in a balanced way.

- Psychology as a science
- The use of non-human animals in research
- Heredity and environment
- Biological determinism
- Mind-brain relationships

(15)

Answers should address the following points:

Discussion of the issue and its importance for psychology, ie an example and/or relevant theories.

6

Research cited, indicating the importance of the issue.

3

Arguments for and against the issue.

4

Conclusions related to the importance of the issue for psychology.

2

Answer ONE question from D2–D7.

D2. Discuss the organisation and function of the endocrine system.

(20)

Endocrine glands – ductless glands

Produce hormones – examples should be provided

Hormones enter the bloodstream and are circulated throughout the body

Only act on receptors in particular locations in the body

Influence behaviour in a slower fashion than, eg neurotransmitters

When an immediate action is required the nervous system plays the major role,

ANS

Many hormonal activities help our bodies maintain a steady state

Hormones are released when the state is disturbed

Information is fed back through a negative feedback loop, ie whenever the appropriate level of hormone has been secreted the gland is instructed to stop

The endocrine system is regulated by the hypothalamus, which exerts its influence via the pituitary gland – ‘the master gland’ – controlling release of all other hormones

Examples of hormones should be provided, eg – Somatotrophin (growth hormone) or ADH – anti-diuretic hormone (the roles of the selected hormones should be briefly explained)

The endocrine system includes – the adrenal, parathyroid, pancreas, gonads and thyroid glands, examples should be provided

Research has suggested that the heart may be a major endocrine gland (Cantin and Genest 1986). The heart may produce ANF – atrial natriuretic factor which plays a role in the regulation of blood pressure stability.

For full marks the candidate should answer in detail demonstrating links in knowledge and provide a balanced view of the organisation and function of the endocrine system.

- D3.** According to the *theory of localisation*, different areas of the cortex are specialised for different cognitive functions.

Evaluate the evidence for such a claim.

(20)

The theory can be traced back to the work of Gall (1758-1828), during which time he developed phrenology. Phrenology fell into disrepute, but was 'just right enough' to keep interest going that certain parts of the brain have localised function.

A minimum of two areas of localised function should be discussed (with appropriate research evidence for a full mark answer).

eg

Penfield (1940s and 50s) demonstrated that stimulation of parts of the cortex just in front of the central fissure caused patients to twitch certain muscles in the opposite side of the body – the primary motor cortex (PMC).

Similar studies were conducted by Delgado (1969) during which patients were asked to try and prevent the movements taking place – they could not.

Further research from Penfield has demonstrated that the primary motor cortex is not responsible for the command to move the body part; these are instigated elsewhere in the cortex. The PMC is activated once the commands are given and sends messages to the muscles involved.

Damage to the PMC does not produce complete paralysis, however it often results in a loss of control over fine movements, eg the fingers.

Paul Broca – considered the case of 'Tan' – so called as this was his only word

On Post Mortem – Broca found lesions in the frontal lobe of the left hemisphere (several other cases were also identified as having damage to the same area).

Around the same time Wernicke reported cases of people who could not understand but could produce speech.

An area of the temporal lobe was identified as being responsible for the deficit.

A few cases have been identified where people have language centres on the right side of the brain – and some who have language centres in both hemispheres (McIlveen and Gross 1996).

The findings therefore suggest that although localisation does occur to a degree, however the theory has not been universally accepted. Supporters of Holistic theory suggest neurones throughout the brain are involved in most functions. Karl Lashley (1920s) studied the effects of destroying parts of rats' brains on their ability to remember their way through a maze. Although some loss of memory was demonstrated, he found that destruction of a particular area did lead to greater difficulty than destruction of another area. Follow up research demonstrated that the amount of cortex destroyed seemed to be more significant than the actual part destroyed – the law of mass action.

- D4.** Consider the physiological **and** psychological effects associated with a disruption in body rhythms.

(20)

A minimum of two bodily rhythms should be discussed for full marks.

Circadian rhythms – consistent cyclical variations over a period of about 24 hours; they are a feature of human behaviour.

They include – heart rate, breathing rate, body temperature, all of which have maximum values in late afternoon/early evening and minimum values in the early hours of the morning. Hormones also vary over the course of the day.

‘There is hardly a tissue or function that has not been shown to have some 24 hour variation’ Aschoff and Wever (1981).

Such patterns persist even if we are awake during the night and sleep during the day.

Even when time givers – Zeitgebers – are eliminated the patterns persist, eg Michel Siffre (1972).

We can alter the bodily patterns over periods of time – however jet-lag may occur when we change from one time zone to the other – body temperature, heart and breathing rates remain lagged behind in the previous time zone, these usually alter within a few days. Psychological difficulties of inability to concentrate, and extreme tiredness may be problematic. Adrenocortical hormone production may take longer to alter.

Infradian rhythms – those that last longer than one day. Menstruation would be an example. It is a 28-day cycle with two possible outcomes, menstruation or conception.

Over a lifetime occurs approximately 400 times.

Evidence exists to suggest the cycle can change with the environment eg women living together tend to menstruate at the same time (Sabbagh and Barnard 1984) PMS may occur around 4-5 days before the onset of menstruation – estimated that 60% of women have some effect at this time – mild irritations, headaches and decline in visual alertness have been reported.

Lethargy is a common complaint.

Most pervasive social impact is that psychological and behavioural changes Dalton (1964) reported a large number of female crimes were clustered in the pre-menstrual interval. Most recent research contradicts this evidence eg, Keye (1983). PMS was commonly attributed to a denial of femininity, however Oscar Janiger showed that the effects occurred in all cultures suggesting a physiological cycle, the effects are also found in primates.

Menstruation has been linked to the amount of light a woman is exposed to – Reinberg (1967). Studies from Germany have demonstrated menarche is more likely to occur in winter, Blind girls also reach menarche before sighted girls.

Concluding comments should be given.

D5. Compare and contrast any **two** theories of motivation.

(20)

Any two theories may be used

eg

Instinct theories of motivation – behaviour can be explained in terms of innate or genetically predetermined dispositions to act in a particular way when confronted by certain stimuli.

Physiological theory of motivation.

May be seen as an internal ‘push’ towards behaviour.

Popular at the turn of the century, eg Darwin and James

McDougall (1908) identified instincts for self-survival – hunger and sex.

Tolman (1923) noted 15000 instincts.

Revived by ethologists in the 1930s – fixed action patterns (FAPs).

Tinbergen (1951) – sign stimulus.

Ethologists today accept environmental modification of instincts can occur.

Innateness is debatable – Gottlieb (1975) demonstrated experiences before birth can affect our ‘instincts’.

More recently sociobiologists have suggested humans have important instinctual behaviours – our behaviour is basically selfish, there to ensure survival of the genes.

Incentive theory of motivation takes the view of an external ‘pull’ on behaviour.

Non-physiological theory of motivation.

Such stimuli are called incentives.

Influential application in work motivation – Mitchell and Larson (1987) suggest we will demonstrate a high level of work motivation if we believe our performance will improve and we will receive rewards.

Intrinsic reward – pleasure and satisfaction.

Extrinsic reward – rewards beyond the pleasure of the task itself.

Conclusions should be reached.

D6. Critically consider the role of the brain and nervous system in our emotional experiences.

(20)

eg

Brain – frontal cortex has been implemented in aggressive behaviour. Bard removed the cortex of cats - causing attack behaviour and lacked appropriateness.

Usage of pre-frontal lobotomies in treating violent schizophrenics (although the reason is not understood).

The modifying nature of the frontal lobe in aggressive response was demonstrated by Delgado.

Brain scan images have also demonstrated the hemispheric specialisation of emotions – the right hemisphere seems more involved in perception and expression of emotion. The left in negative emotions – also demonstrated by people who have suffered strokes. Davidson (1992) would challenge this assumption and suggested the left hemisphere to be more active during positive emotions.

The limbic system is also thought to play a role in emotional experience and behaviour.

Limbic system contains many structures including the hypothalamus, cingulate gyrus and amygdala.

Papez (1937) proposed a circuit of how these were interlinked to regulate emotional behaviour. The model was modified by McLean and still used today.

Amygdala – seems to be particularly involved in strong emotions such as aggression and fear – removal of the amygdala reduces aggression and stimulation produces aggression. Kluver and Bucy (1930s onwards) have conducted much research in this area.

Le Doux (1989) suggests amygdala acts as an early warning system and allows us to experience emotions without cognition. The cortex then assesses the situation and determines whether the system is responding effectively or not.

Concluding comments should be offered.

D7. Discuss **two** ways in which individuals cope with stress.

(20)

The ways people deal with stress varies from person to person.

Two ways of coping with stress could come from the Biological and Psychological approaches.

Biological-anti-stress drugs (beta blockers) act on the ANS to reduce physiological arousal.

Anti-depressants – less often used but could be appropriate in dealing with anxiety.

Anxiolytics – minor tranquillisers, eg valium combat anxiety without causing sleepiness.

Other drugs – alcohol – sedative effects slow down neural and bodily functions, loosens inhibitions.

Although effective, drugs are only short-term treatments – do not deal with the causes. Dependency on drugs can become a problem.

Psychological – CBT – Meichenbaum and Kobosa – designed to increase stress hardiness by getting them to:

Learn to analyse the source of stress.

Learn coping strategies.

Practice skills in simulated and real life situations.

Positive thinking – being optimistic and developing an internal locus of control.

Social support – a sympathetic support system aids in dealing with stress.

CBT is effective although the behavioural aspects seem more important than the cognitive ones.

Social support is significantly correlated with lower mortality.

Concluding comments should be offered.

[END OF SECTION D]

SECTION E

DEVELOPMENTAL PSYCHOLOGY

If you have chosen this option question E1 is compulsory.

E1. Choose **one** of the issues from the following list. Explain the essential arguments of this issue in a balanced way.

- Heredity and environment
- Attachment and separation
- Genetic research in developmental psychology
- Developmental psychology as a science
- Cultural and/or gender bias in developmental psychology
- The use of non-human animals in research

(15)

Answers should address the following points:

Discussion of the issue and its importance for psychology, ie an example and/or relevant theories.

6

Research cited, indicating the importance of the issue.

3

Arguments for and against the issue.

4

Conclusions related to the importance of the issue for psychology.

2

Answer ONE question from E2-E6

E2. Discuss social and cross-cultural differences in child rearing.

Use relevant research to support your answer.

(20)

Cultural differences are usually due to either:

Environmental conditions – Barry *et al* (1959) found a correlation between child rearing practice and food accumulation.

Social norms – Mead (1935) found wide variations in the way children are treated.

For full marks the candidate should discuss a variety of examples of social and cross-cultural differences, a minimum of two should be provided, for example:

Attachment – using the same strange situation as Ainsworth, cross-cultural differences have been revealed:

USA – Ainsworth (1978) – using middle class mothers who spent much time with children – 68% secure attachments, 23% anxious avoidant, 12% anxious resistant.

Israel – Sagi *et al* (1985) – mainly communal child-rearing practice – found 37% secure attachments, 13% anxious avoidant, 50% anxious resistant.

Germany – Grossman *et al* (1985) – found 33% secure attachment, 49% anxious avoidant and 18% anxious resistant.

Kagan *et al* (1978) suggests a great deal of consistency across cultures in the onset of distress separation from attachment figures (7 months) and the onset of overcoming distress (15 months). Possibly indicating the role of genetics in the underlying effects of child-rearing practices.

Social behaviour – raising of American children to be independent seems to start at birth. Whiting (1984) found unusually American babies do not usually sleep in the same bedroom as parents. Harkness and Super (1992) suggests this is evident in language used to describe offspring – USA – intelligent, inquisitive; Kenya – dependable, respectful.

Social conduct – Goodnow *et al* (1984) parental expectations at different ages vary – Japanese mothers expect their children to be more emotionally mature, compliant and polite earlier than mothers in USA or Australia, who in turn expect social skills at an earlier age.

Cognitive abilities – Feldman (1994) suggests cognitive abilities are influenced by child-rearing practices eg by controlling the occurrence, frequency and acceptability of certain activities, as well as responsibility given to the child. For example language development – parents of the Kaluli in Papua New Guinea rarely talk to their children yet children learn to speak to normal standards.

Lambert (1974) suggests there are just as many child-rearing differences in any given culture, as there are cultural differences. Cross-cultural differences are useful in shedding light on alternative practices and the generalisability of Western research.

E3. Compare and contrast Piaget's and Vygotsky's theories of cognitive development. (20)

According to Piaget, cognitive development is a process that occurs through active interaction with the world. Individuals construct their understanding of the world. Children build schemata or internal representations.

Schemata continue to develop complexity throughout life. Higher order mental operations develop in middle childhood, which enable the child to understand more complex ideas. Maturational processes are important in Piaget's theory – the child cannot carry out cognitive processes before they are biologically ready.

The child carries out these processes by the process of assimilation and accommodation.

Assimilation-Equilibrium-New situation-Disequilibrium-Accommodation.

Piaget proposed 4 stages of cognitive development;

Sensori-motor – the infant only knows the world through immediate senses and the actions it performs. Pre-operational – internal world continues to develop but is still dominated by the external world and appearance of things; shows centration. Concrete operational – can carry out mental operations; can compensate, reverse and decentre. Formal operational – ideas can be manipulated inside the head; reasoning and deduction can be performed.

Vygotsky – focussed on social interaction and language as major influences in a child's cognitive development. Vygotsky suggests the whole process of development as being social – 'We become ourselves through others'.

Internalisation and language – cognitive development proceeds as the child internalises the meanings provided by the social interactions. When language becomes internalised it converges with thought 'thought becomes verbal and speech rational'. We develop an abbreviated inner voice for thinking with and a more articulated voice for communicating with.

ZPD – because cognitive development results as a joint effort between the child and society it follows that working in conjunction with a more expert person will aid development more than working alone. Scaffolding is seen as an essential element of development – stretching the child's intellect.

Both Piaget and Vygotsky see the child as active participants in their own cognitive development, children construct their worlds. However Vygotsky highlights the role of the social context and the importance of language in this development. Children can develop cognitively given the social support. Piaget is criticised for underplaying the social elements involved in development and possibly putting an over emphasis of requiring to be biologically ready to learn. Vygotsky may be seen as explaining development through the social context whilst Piaget offers more individualistic explanations.

- E4.** “*O wad some Pow’r the giftie gie us, to see oursels as others see us!*”
(Robert Burns)

(Translated: “Oh that some power would give us the ability to see ourselves as others see us!”)

Discuss research evidence of the development of self-concept in humans and consider to what extent our self-understanding is influenced by the ways that others perceive us.

(20)

Self-concept/self-understanding should be defined, including some/most of the following points: components – self-image, self esteem, ideal self; division into descriptive and evaluative aspects; categories of facts, roles, body-image, personality, etc; cognitive self-schemata; developmental basis of identity; possibly species-specific in humans etc.

For the first part of the question, the emphasis of the answer should be on research evidence from developmental studies, however, credit may be given where these are related to a theoretical perspective. Description/evaluation of means of measurement of self-concept can be credited (eg 20 Statements Test, Kuhn and McPartland, 1954). Candidates are likely to discuss some of the following studies (amongst others): Lewis and Brooks-Gunn (1979); Jersild (1952); Jones and Bayley (1950); Kuhn (1960).

Candidates should discuss in some detail the evidence of development of the psychological self, eg Flavell (1977).

For the second part of the question, candidates should consider the effects of others’ views, starting perhaps with Cooley’s “looking-glass theory” (1902). Effects of parental treatment on self-esteem (Coopersmith 1967), effects on peers’ views (eg Guthrie 1938). Erikson’s views on influence of significant others, in identity formation (1968). Influence of social roles, social comparison, identification and social feedback (eg Argyle 1983). Psychoanalytic concepts may be applied, in particular the superego, with its moral sense/ability to evaluate one’s self. Sociological perspectives eg Goffman’s dramaturgical analysis (1959), Mead’s symbolic interactionism (1934) may be credited, as long as these are shown to be relevant to the question. Cultural differences in the idea of “self” may be discussed (eg Moscovici 1985).

Cognitive-developmental perspective: the role of self-understanding in relation to an individual’s understanding of others may be discussed, eg Piaget’s and later researchers’ studies on egocentrism and decentring; theory of mind studies, eg Wimmer and Perner (1983), and link with autism (Baron-Cohen *et al*, 1985).

Evidence (studies and theory) should be evaluated.

- E5.** Why has adolescence been described as “the search for identity”? Discuss, with reference to research evidence and theories of developmental processes in adolescence.

(20)

Adolescence should be defined. An outline of nature and nurture influences, and their interaction with development should be provided.

Candidates should provide an overview of the various transitional factors and processes occurring during adolescence: biological/maturational (puberty etc); cognitive, eg Piaget’s formal operations, and moral development; personality and sexual development (eg Freud’s genital stage). Credit may be given for brief description of development of self-concept/self-esteem in childhood, eg Coopersmith, (1967). Impact of attachment type on adolescent adjustment may be considered.

Main focus of answer should be on Erikson (1968) and other identity theorists, eg Marcia (1980), Coleman (1980). Erikson’s theory should be discussed: the overall theory should be outlined, then his fifth stage (adolescence) should be considered in detail – identity v role confusion, influence of significant others, positive or negative outcome of conflict. Coleman’s focal theory claims adolescents cope with issues one at a time, so progress gradually towards adulthood. Rapid role change, and speeding-up of the socialisation process is demanded by society.

Candidates should discuss range of social and cultural influences/pressures on adolescent, eg from parents and teachers, from peers, from media (eg body image), etc, ie towards adult role and independence. Ambiguous pressures as source of conflict; conflicting values and demands. Potential long-term impact of adolescent experiences on adult identity. Cross-cultural variation may be considered, eg establishment of adult identity facilitated by ritual (Mead), which is less evident in Western societies; little evidence of “generation gap” (Offer *et al*, 1988).

Difficulties and disorder associated with the “search for identity” may be described, eg eating disorders, depression, etc; these may be related to the theories described. Humanistic arguments can be credited, eg search for positive regard and positive self-regard (Rogers), self-actualisation (Maslow).

Theories and research evidence should be evaluated.

E6. “Society’s stereotypes of older people lead to a self-fulfilling prophecy.”

Discuss the above statement with reference to relevant theory and/or research.

(20)

Adjustment to old age is hard for many reasons. Older people have typically retired from employment, physical health may be deteriorating and friends/family members may have died. In addition they have to cope with negative stereotypes of old age Goldman and Goldman (1981). Examples of negative stereotyping include: wrinkled skin, sickness, feebleness and emotional negativity. Many older people recognise the view held of them.

Social disengagement theory – Cummings and Henry (1961) – people may become less and less involved in society due to factors outwith their control (external factors), eg society has few expectations of older people in terms of some of the roles they play; including a reduced need for the skills and abilities they possess. Cummings also acknowledges the role of internal factors and social disengagement, eg deteriorating health. He further suggests that older people ‘choose’ to disengage from society. He argues that there is a gradual shrinkage of life space in older people.

Activity theory – Hainghurst (1964) would suggest that disengagement results as the way people are treated by society – enforced retirement as an example, and assumes the best way to cope with old age is by being as active as possible for as long as possible. Older people need to maintain their ‘role count’. These principles also apply to older people in care homes – Langer and Rodin (1976) found those people who were active and took responsibility for themselves tended to live longer than those who were less active.

Cultural differences – in western societies the individualistic emphasis on personal achievement and declining powers have been linked to a partial rejection by society. In the collectivist societies of eg, Asia, there is a greater emphasis on co-operation and support, leading older people to be more integrated and engaged with society, eg Triandis (1994) and Tout (1989). However, Turnbull (1989) suggests that western influences to old age can now be seen in many areas of the world. For example – Uganda is seeing a growing tendency towards exclusion of the elderly; when outsiders offered medication to the elderly considerable resentment was shown for helping the ‘dead’.

Conclusions may suggest a complexity of factors contribute to the way people view and cope with old age. For example: based on personality types, Reichard *et al* (1962) suggests there are a number of ways of coping with old age. His approach permits a synthesis of disengagement and activity theory suggesting that negative stereotypes offer only a part of the answer as to why people may have a self-fulfilling prophecy of old age.

[END OF SECTION E]

SECTION F

THE PSYCHOLOGY OF INDIVIDUAL DIFFERENCES

If you have chosen this option question F1 is compulsory.

F1. Choose **one** of the issues from the following list. Explain the essential arguments of this issue in a balanced way.

- Psychometric testing
- Race and IQ
- Gender and personality
- Ethical issues in socially sensitive research
- Labelling and stigma
- Psychology as a science

(15)

Answers should address the following points:

Discussion of the issue and its importance for psychology, ie an example and/or relevant theories.

6

Research cited, indicating the importance of the issue.

3

Arguments for and against the issue.

4

Conclusions related to the importance of the issue for psychology.

2

F2. Evaluate the **idiographic** and **nomothetic** approaches to the study of personality. **(20)**

Nomothetic is the approach of investigating large groups in order to discover **general laws** of behaviour and personality that applies to everyone.

Idiographic is the approach of looking at **individuals in depth and a high degree of detail** to achieve a **unique understanding** of them.

Both approaches make different assumptions and draw on different methodologies in order to study personality.

The nomothetic assumes that individuals are the complex combinations of universal laws and therefore are best studied by large scale, preferably **experimental methods** in order to identify these elements within their personality. The individual would then be classified upon a given dimension supporting a general rule eg neurotic.

The idiographic means private or personal and assumes that each human being is **unique** and would be investigated using the **case study** method to provide a more intimate and complete understanding of the individual. People are studied using detailed procedures in order to identify them as totally unique.

Nomothetic analysis of personality takes a more scientific approach that can be generalised to everyone. Trait theory is concerned with identifying and quantifying personality traits of the personality, some of the theories are sometimes referred to as **psychometric theories** because of their emphasis on measuring personality by using scientific tests.

The three main nomothetic theories are those developed by **Eysenck, Cattell**, and the **five factor model** by **Costa/McCrae** (**the student should give an outline of one of these to show intrinsic knowledge**).

The nomothetic approach fits comfortably with natural sciences and determinism and has the advantage of applying general laws to the prediction and control of behaviour. This helps in the prediction of classifying personality types. This approach is used consistently within the framework of commerce and industry. The major drawback, however, is that the approach leaves us with only a superficial understanding of a person's personality – it also applies general labels to individuals and can lead to stereotyping and discrimination. Nomothetic generalisations are too inaccurate for the individual person.

Idiographic approach has developed from Freud through Piaget up until a new set of approaches to personality which emphasised the individual and their situation. This is known as the **phenomenological** approach which identifies that to understand the personality one has to understand the individual as a unique person in their own unique situation.

Carl Rogers, and **George Kelly** are the two most prominent theorists who used the approach to provide a more complete and global understanding of the individual. (**The student should give an outline of one of these to show intrinsic knowledge**) eg **Construct Theory**.

However, the disadvantage of using this approach is that it cannot be legitimately applied to generalise for other people and their personality. Idiographic techniques also tend to be unreliable and unscientific when dealing with the principle of personality problems.

Clearly both approaches seem necessary for a complete understanding of personality – if the aims of science are to describe, understand, predict and control - then idiographic methods may be more suitable for the first two aims and nomothetic for the latter.

A healthy balance between both approaches is needed if we are truly to succeed in understanding the true nature of personality.

F3. Evaluate the nature-nurture debate in intellectual development.

(20)

Credit appropriate answers as required.

As a guide, 8 marks should be given for description. 12 marks should be given to evaluation/analysis.

NATURE APPROACH:

Selective breeding studies in animals – this forms evidence for genetic causes

In the evaluation, the studies cannot be generalised to human beings

Genetic relatedness and IQ

Family resemblance studies on the heritability of IQ

Studies on monozygotic twins

Bouchard *et al* (1990) Minnesota Twin Study

Methodological problems

Difficult to control environmental influences

Role of experimenter bias, eg Cyril Burt

NURTURE APPROACH

Evidence for environmental causes, eg Koluchova (1972)

Evaluation of correlational studies

Environmental enrichment and IQ

Academic support for environmental enrichment, eg Operation Headstart

Criticisms of enrichment programmes

All researchers in the area agree both genetic and environmental influences interact in a very complex way – the genotype of an individual can only be expressed through a phenotype that is the product of genes building physical structures from environmental resources.

The precise genes involved in intelligence have proven difficult to locate, eg Human Genome Project.

IQ tests are often lacking in any form of reliability as measures of intelligence – but intelligence may not be a unitary phenomenon – some aspects show clearly different kinds of intelligence.

- F4. Compare and contrast the medical/biological model of atypical behaviour with the behavioural model.

(20)

As a guide, 8 marks should be given for description. 12 marks should be given to evaluation/analysis.

Credit should be given for alternative suitable answers.

MEDICAL MODEL

Proposes that all mental disorders are actually forms of physical illness (pathology) which should be treated with appropriate medical techniques

Proposes that the brain plays a central role in the “psychic functioning”

Genetic, organic, chemical disorders cause mental illness, which gives rise to behavioural and psychological symptoms

Symptoms can be classified to diagnose the psychopathology which can then be treated through various therapies

SOMATIC THERAPIES

Chemotherapy – alleviates symptoms

Electroconvulsive therapy

Psychosurgery

THEORIES

Biochemical – explains mental disorders in terms of an imbalance of neurotransmitters.

Genetic – derive from the discovery that some disorders run in families.

ETHICAL

The assumption that mentally ill people are distinctly different from mentally well people can lead to labelling and prejudice against those defined as abnormal under the medical model.

BEHAVIOURAL MODEL

Rejects references to internal factors and claims that mental disorders are maladaptive behaviours.

Sees maladaptive behaviour as learned and maintained in the same way as adaptive behaviour (conditioning).

Maintains that the best way of explaining disorder is to consider the environmental condition in which it is displayed.

Behaviourist may use the research of Little Albert as a model to show how disorders are learned.

Abnormal behaviour is **not** a symptom of any underlying cause.

THERAPIES

Therapies attempt to change systematical behaviour by applying learning principles.

The success or failure of treatment is based on specific and observable changes in behaviour.

Therapists believe that the value of therapy must be supported by empirical evidence.

ETHICS

Directed therapy – patients are basically reprogrammed.

Stressful – behaviour therapy can be painful and disturbing eg flooding.

The student should be able to make a clear distinction of both models and offer the pros and cons of both.

[END OF SECTION F]

[END OF MARKING INSTRUCTIONS]