UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Level

MARK SCHEME for the May/June 2011 question paper

for the guidance of teachers

9698 PSYCHOLOGY

9698/32 Paper 3 (Specialist Choices), maximum raw mark 70

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

SECTION A

Q	Description	Marks
(a)	No answer or incorrect answer.	0
	Some understanding, but explanation brief and lacks clarity.	1
	Clear, accurate and explicit explanation of term.	2
	max mark	2
(b)	*Part **(b)** could require one aspect, in which case marks apply once.* *Part **(b)** could require two aspects, in which case marks apply twice.*	
	No answer or incorrect answer.	0
	Answer anecdotal or of peripheral relevance only.	1
	Answer appropriate, some accuracy, brief.	2
	Answer appropriate, accurate, with elaboration.	3
	max mark	3 or 6
(c)	*Part **(c)** could require one aspect, in which case marks apply once.* *Part **(c)** could require two aspects, in which case marks apply twice.*	
	No answer or incorrect answer.	0
	Answer anecdotal or of peripheral relevance only.	1
	Answer appropriate, some accuracy, brief.	2
	Answer appropriate, accurate, with elaboration.	3
	max mark	3 or 6
	Maximum mark for **SECTION A**	11

SECTION B

Q	Description	Marks
(a)	**KNOWLEDGE (1)** [Terminology and concepts]	
	Some appropriate concepts and theories are considered. An attempt is made to use psychological terminology appropriately.	1
	Range of appropriate concepts and theories is considered. The answer shows a confident use of psychological terminology.	2
	KNOWLEDGE (2) [Evidence]	
	Some basic evidence is described and/or it is of peripheral relevance only and/or it is predominantly anecdotal.	1
	Appropriate psychological evidence is accurately described but is limited in scope and detail.	2
	Appropriate psychological evidence is accurately described and is reasonably wide-ranging and detailed.	3
	Appropriate psychological evidence is accurately described and is wide-ranging and detailed.	4
	UNDERSTANDING [What the knowledge means]	
	Some understanding of appropriate concepts and/or evidence is discernible in the answer.	1
	The answer clearly identifies the meaning of the theory/evidence presented.	2
	Maximum mark for part **(a)**	8

(b)	**EVALUATION ISSUES** [Assessing quality of data]	
	General evaluative comment OR issue identified OR evidence (max 2 marks if no analysis/cross ref).	1
	Any two from: general evaluative comment/issue/evidence (max 3 marks if no analysis/cross ref).	2
	Issue plus explanation of issue plus evidence.	3
	Two (or more) issues with elaboration and illustrative evidence.	4
	ANALYSIS [Key points and valid generalisations]	
	Key points (of evidence/study) are identified for a given issue (or number of issues), but no valid generalisations/conclusions are made.	1
	Key points (of evidence/study) are identified for a given issue (or number of issues), and valid generalisations/conclusions are made.	2
	CROSS-REFERENCING [Compare and contrast]	
	Two or more pieces of evidence are offered for a given issue but the relationship between them is not made explicit.	1
	Two or more pieces of evidence are offered for a given issue and the relationship between them (comparison or contrast) is explicit.	2
	ANALYSIS [Structure of answer]	
	The essay has a basic structure (issues, evidence, analysis and cross-referencing) and argument.	1
	Structure sound and argument clear and coherent (issues, evidence, analysis and cross-referencing).	2
	Maximum mark for part **(b)**	10

(c)	**APPLICATION** [Applying to new situations and relating to theory/method]	
	A suggestion (to apply psychological knowledge to the assessment request) has been attempted.	1
	A suggestion (to apply psychological knowledge to the assessment request) has been applied effectively. One detailed or several applications considered.	2
	KNOWLEDGE (2) [Evidence]	
	Basic evidence is referred to but not developed and/or it is of peripheral relevance only and/or it is predominantly anecdotal.	1
	Appropriate psychological theory/evidence is explicitly applied.	2
	UNDERSTANDING [What the knowledge means]	
	Some understanding (of the relationship between application and psychological knowledge) is evident in the answer OR there is clear understanding of the suggested application(s).	1
	The answer shows a clear understanding of the relationship between psychological knowledge and the suggested application AND there is clear understanding of the suggested application(s).	2
	Maximum mark for part **(c)**	6
	Maximum mark for **SECTION B**	24

PSYCHOLOGY AND EDUCATION

SECTION A

1 (a) Explain, in your own words, what is meant by the term 'cultural diversity' in education. [2]

Two types of answer here: a more 'global' answer in which people from different cultures perform the same test or examination such as a CIE psychology paper; more specific answers where in the same classroom there may be children from different cultures.

(b) Describe <u>one</u> cultural difference in educational performance. [3]

Any cultural difference is acceptable. Candidate may well compare their own culture with that of others; flexibility required here.

- Demie (2001) looked at cultural differences in Lambeth (London) with regard to achievement at key stages 1, 2 and GCSE but this is only based in London.

(c) Give <u>two</u> explanations for cultural difference in educational performance. [6]

Wide range of answers possible here. Any two factors from a long list including social class, type of family, position in family, expectation of family, gender, time-orientation, competitiveness and individualism, racism, etc.

2 (a) Explain, in your own words, what is meant by the term 'attribution theory' in education. [2]

Attribution theory applied to education is the way that individuals attribute their success or failure either to **internal** (ability, effort) or **external** (difficulty, luck) factors.

(b) Describe <u>one</u> type of motivation and <u>one</u> theory of motivation in education. [6]

Type: most likely answers will distinguish between **intrinsic** motivation (e.g. reward is learning a skill) and **extrinsic** motivation (e.g. external praise from a teacher).

Theory: traditional theories of motivation could be considered (such as **Freud** and instinct theory, **Maslow's** hierarchy of needs, etc) but these **must** be related to education in some way to be creditworthy (otherwise it could be an 'organisations' answer). Candidates can be motivated by many things and here they can legitimately write about self-efficacy, self-fulfilling prophecy, locus of control, attribution theory and similar aspects.

Also acceptable would be theories derived from approaches:

Behaviourist: emphasise extrinsic praise and reward. Brophy (1981) lists guidelines for effective and ineffective praise.

Humanistic: emphasise intrinsic motivation. The theories of Maslow (1970) self-actualisation, White (1959) competence motivation and Bandura's (1981) self-efficacy are relevant.

Cognitive: attribution theory of Weiner (1974) is relevant as is Rotter's locus of control. Other: McClelland (1953) achievement motivation and Birney (1969) motivated due to fear of failure.

(c) Describe <u>one</u> example of attribution theory in education. [3]

Any appropriate example that is indicative of this is acceptable.

- Work of **Weiner** (1984) most prominent. He outlines three dimensions: locus, stability and controllability and the examples are positive outcomes and negative outcomes.
- Also Rotter's locus of control is acceptable: whether or not we perceive ourselves as being in control of our destiny.

Candidates may well give an anecdotal example from their own experience. This can get credit as long as it is an example of attribution theory.

SECTION B

3 (a) Describe what psychologists have discovered about special educational needs. [8]

One type may be children who are **gifted**; a second may be children at the other end of the scale who have **learning difficulties or disabilities**. Typically: SEN is where a child has a significantly greater difficulty in learning than most children of the same age, or a child has a disability that needs different educational facilities from those that schools generally provide. SEN includes any type of learning abnormality and most typically this would include **autism**, **dyslexia** (and related difficulties e.g. **dyscalculia**), **ADHD** (attention deficit with/without hyperactivity) or any other learning abnormality. The focus could be on the suggested causes of such abnormalities or could be on the problems a typical child may have in a classroom.

- **Dyslexia** this accounts for 80% of all learning difficulties. **Features**: letter reversal or rotation – the letter 'd' may be shown as 'b' or 'p'; missing syllables – 'famel' for 'family'; transposition of letters – 'brid' for 'bird'; problems keeping place when reading; problems pronouncing unfamiliar words.
- **Dyscalculia** affects mathematical performance in around 1% of the population.
- **Dyspraxia** involves problems with fine and/or gross motor co-ordination leading to problems with physical activities in subjects like science and physical education.
- **Dysgraphia** is a disorder of writing which can involve the physical aspects of writing, e.g. pencil grip and angle. It might also involve poor spelling and difficulties transferring thoughts to paper.

Special needs can include **giftedness**. A definition of giftedness is problematic. Some believe it is **exceptional performance** on an intelligence test. Others believe giftedness is a more **specific ability** such as in sport or music. Bridges (1969) and Tempest (1974) outline **signs of giftedness**, Bridges with seven (e.g. read at 3 years of age; enormous energy) and Tempest with nine (e.g. likely to be highly competitive; able to deal with abstract problems). Hitchfield (1973) found teachers were not good at identifying giftedness and Torrance (1970) claims 'society is savage toward creative thinkers' and Ogilvie (Schools Council Report on gifted children in primary schools, 1973) suggested provision is inadequate.

(b) Evaluate what psychologists have discovered about special educational needs. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the strengths and weaknesses of psychological perspectives
- the implications for teachers
- whether theory applies in practice
- comparing/contrasting differing approaches
- the methods used to gather data
- competing explanations
- the implications for children.

(c) Giving reasons for your answer, suggest how a specific learning difficulty can be assessed. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

If the difficulty is medical (e.g. partial sight), then the assessment will be a medical one.

Alternatively the classroom teacher may observe a difficulty. Solity and Raybould (1988) suggest that teachers adopt an assessment-through-teaching approach. They may then refer the child for more specialist help. In the UK a SENCO is the first stage, followed by assessment by an educational psychologist who may administer specific assessment tests.

4 (a) Describe what psychologists have found out about teaching and learning styles. [8]

Typically: the way in which a child learns best – may be formal or may be via discovery; may be practically-based or reflective. Learning styles are for learners and teaching styles are the way in which teachers present material to be learned. Anything that could be considered a teaching approach or style is acceptable.

- Lefrancois outlines a **'teaching model'** pointing out what is desired before, during and after teaching. He also outlines 28 recommended behaviours for effective teaching.
- Fontana suggests the debate is between **formal** (subject emphasis and to initiate children in essentials) and **informal** (emphasis on child, teacher identifying child's needs) styles. A study on this was carried out by Bennett (1976) and followed up by Aitken et al. (1981). Similarly Flanders (1970) suggests **direct** (lectures, etc) versus **indirect** (accepts that children have ideas and feelings) styles. Evidence exists for each approach.
- Bennett (1976) found progress in three 'Rs' better in primary school using a formal approach.
- Haddon & Lytton (1968) found creativity better when informal approach used.
- Based on the work of Lewin et al., Baumrind (1972) outlines three styles: authoritarian, authoritative (i.e. democratic) and laissez-faire. Baumrind believes the authoritative style is most effective.

It could be argued that learning styles are determined by approach to, or perspective on, learning and so candidates could consider styles adopted if following a **behaviourist** or **cognitivist** or **humanist** approach.

- Learning styles have direct implications for teaching styles. Possible styles include lecturing, discussing, reciting, dictating, questioning, guided discovery, peer tutoring, etc. Advantages and disadvantages of each are relevant.
- An alternative is to consider Kolb's (1976) learning styles whereby a preferred learning style can be identified through a learning kite. Four styles are possible: dynamic, imaginative, analytical and common-sense.
- Curry's onion model (1983): instructional preference, informational processing style and cognitive personality style.
- Grasha's (1996) six categories for learning: independent, dependent, competitive, collaborative, avoidant and participant.

(b) Evaluate what psychologists have found out about teaching and learning styles. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the implications of learning styles for teachers
- the implications of teaching styles for pupils
- the usefulness of the evidence
- individual differences in styles
- how psychologists gain their evidence.

(c) Giving reasons for your answer, suggest how the learning styles of students in a psychology class could be measured. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Most likely is Kolb's (1976) learning styles whereby a preferred learning style can be identified through a learning kite. Four styles are possible: dynamic, imaginative, analytical and common-sense.

Any psychological method is creditworthy, such as 'use a questionnaire', and credit can be given for the type of questionnaire. However, the answer must relate to learning styles to receive full credit.

PSYCHOLOGY AND ENVIRONMENT

SECTION A

5 (a) Explain, in your own words, what is meant by 'sources of noise'. [2]

Typically: noise is unwanted sound, but where does the noise originate? The source may be transportation (e.g. air, rail or road). It may be construction or repair. It may be due to a psychology experiment! It may be noisy neighbours.

(b) Describe <u>one</u> study showing the negative effects of noise on performance and describe how such negative effects could be reduced. [6]

Performance:
One of three categories most likely:

- effects during exposure. Lab studies have shown mixed results with a wide range of variables. Effect depends on: volume, predictability and controllability; type of task performed; stress tolerance; individual personality.
- after-effects. Even if performance is not affected at time of study, effect of noise may continue for some time and hinder later performance. E.g. Glass et al. (1969); Sherrod et al. (1977).
- effects on children. Hambrick-Dixon (1986) and Cohen et al. (1986) compared children from noisy and quiet schools near Los Angeles airport. Found those from noisy environment suffered from learned helplessness, lack of achievement and distractibility. Evans et al. (1993) study of those near Munich airport. Bronzaft and noisy elevated subway in New York.

Reducing effects:

- can be physical measures such as inserting soundproofing (and rubber rail tracks as in the Bronzaft study)
- can be psychological such as withdrawal or avoidance of situations
- can be strategies such as teachers in schools near airports adapting to noise conditions.

(c) Describe <u>one</u> study showing the negative effects of noise on social behaviour. [3]

Social behaviour can include a number of factors such as aggression (ASB), helping (PSB) and attraction.

Aggression: likely to be popular as many unethical lab studies involving electric shocks. For example Geen & O'Neal (1969); Donnerstein & Wilson (1976). Noise makes aggressive people more aggressive.

Helping: also popular with both lab and field studies by Matthews & Canon (1975) and Page (1977). Noise decreases helping behaviour, but other variables are important.

Some candidates may look at **attraction** but evidence here reveals no clear conclusion.

6 (a) Explain, in your own words, what is meant by 'density' and 'crowding'. [2]

Typically: density refers to physical conditions (may be social or spatial). Crowding is a psychological state determined by perceptions of restrictiveness when exposed to spatial limitations (Stokols, 1972).

(b) Describe <u>one</u> study showing the effects of crowding on social behaviour and describe <u>one</u> study showing the effects of crowding on performance. [6]

Social behaviour:
Human studies – **social behaviour** – **helping**: studies by Bickman et al. (1973) in dormitories and Jorgenson & Dukes (1976) in a cafeteria requesting return of trays.

Aggression: studies involving children. Price (1971); Loo et al. (1972); Aiello et al. (1979) all found different things. Crucial variable is toys given to children. Studies on male-female differences too. Candidates could look at crowding and attraction.

Animal studies: these could be classified as social behaviour. Most likely is study by Calhoun (1962; 1973).

Performance:
Aiello et al. (1975b) found impaired task performance. In lab studies both Bergman (1971) and Freedman et al. (1971) report that density variations do not affect task performance. But task is crucial: no effect if task is simple; some effect if task is complex. Saegert et al. (1975) in high social density supermarket and railway station found impairment of higher level cognitive skills (e.g. cognitive maps). Heller et al. (1977) suggest there is no effect on task performance when there is high social or spatial density and there is no interaction, but lots of effect when there is interaction.

(c) Describe <u>one</u> way in which a person can reduce the effects of crowding. [3]

Suggestion can be any (candidate's choice). Most likely is to increase cognitive control e.g. Langer & Saegert (1977) or use a technique such as attention diversion.

SECTION B

7 (a) Describe what psychologists have found out about crowd behaviour. [8]

Sears et al. (1991) define a crowd as people in physical proximity to a common situation or stimulus.

Additionally, crowds must involve a number of interacting people; need not be face-to-face; need not be assembled in one place; members must influence one another.

Brown (1965) classifies crowds according to their behaviours:
1. Acquisitive crowd: Mrs Vaught (1928) where banks closed.
2. Apathetic crowd: such as case of Kitty Genovese.
3. Expressive/peaceful crowd: Benewick & Holton (1987) interviewed people attending the visit of the Pope to Britain in 1982.
4. Baiting crowd: in 1964 there was the case of a man, standing on the ledge of a building ten storeys high. The crowd below of some 500 people shouted to him to jump off the ledge.
5. Aggressive crowd (often referred to as 'mob psychology').
6. Escaping crowd (panicky and non-panicky).

Explanations of aggressive crowd behaviour:
Mob Psychology of **Le Bon** (1895): otherwise normally civilised people become 'barbarians' – wild and irrational, giving vent to irrational impulses. **Turner** (1974) proposed the **emergent norm theory. Zimbardo** (1969) **deindividuation**: each person is nameless, faceless, anonymous and has diminished fear of retribution.

Laboratory studies of deindividuation: Zimbardo (1969) participants wore laboratory coats and hoods that masked their faces. Similarly, **Prentice-Dunn & Rogers** 1983, gave participants the opportunity to give a 'victim' an electric shock. **Milgram** (1963) found that people were more willing to administer shocks when the participants could not see the victim and when the victim could not see them.

Deindividuation in children: **Diener et al.** (1976) looked at deindividuation in children, using Hallowe'en and Trick or Treat as the scenario.

Social constructionism and aggressive crowds: **Reicher** (1984b) who cites violent incidents involving aggressive crowds. His classic example is the 'riot' that happened in the St. Paul's district of Bristol in 1980.

(b) Evaluate what psychologists have found out about crowd behaviour. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- comparing and contrasting explanations
- how psychologists gather their data
- the ethics of various studies
- generalisability from studies: sample ethnocentrism; method. .

(c) Giving reasons for your answer, suggest what may be done to prevent panic in a crowd during an emergency situation. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Most likely answers will be based on study by Waddington et al. (1987) who argue that public disorder is predictable (not the outcome of mob psychology) and problems can be avoidable. Crowds should be perceived as collections of individuals who share a social purpose and who are interpreting what is going on around them.

Five recommendations for successful crowd control:

1. Let the crowd self-police wherever possible.
2. Effective liaison should take place between police and organisers.
3. If police are involved, they should use minimum force so are not perceived by crowd as causing trouble.
4. Those involved in managing crowds should be trained in effective interpersonal communication.
5. The police should be perceived as accountable and not able to do what they like.

However, in emergency situations escaping crowds can be controlled by Sugiman and Mitsumi follow me/follow directions. Evacuation messages worded appropriately can reduce panic, e.g. Loftus.

8 (a) Describe what psychologists have discovered about natural disaster and/or technological catastrophe. [8]

Candidates may well begin with a definition (e.g. that of the American president) and a distinction between **disasters** (natural causes) and **catastrophes** (human causes). Catastrophes mean there is some human error/fault and blame can be attributed.

A focus on **methodology** would be pertinent. Lab studies are low in ecological validity or not ethical (e.g. Mintz, 1951). Simulations are more true to life (e.g. simulation following Manchester aeroplane fire) but participants know it is a simulation. Actual events better but not ethical to study injured, stressed, etc and no comparison or control. Candidates could look at how people **behave during** emergencies. Archea (1990) compares behaviours of people during earthquakes in Japan and America. Alternatively, Le Bon (1895) suggests people behave like wild animals with primitive urges and stampede and are crushed (examples of fires where this has happened). Alternatively people may be crushed without stampeding (e.g. Hillsborough). Smelser (1964) suggests people don't panic if in mine or submarine due to escape routes. LaPierre (1938) looks at how panic develops. Alternatively Sime (1985) found in fire people seek companions first and do not behave as individual 'animals'. Candidates may focus on what can be done to **prevent panic** and look at evacuation messages (e.g. Loftus) or the follow me/follow directions dilemma of Sugiman & Misumi (1988). Another focus may be on **preparation for an event** or whether people think it will happen to them (e.g. Stallen, 1988) and study at Dutch chemical plant. Candidates may also look at **behaviour after an event**, typically post-traumatic stress (e.g. source and Herald of Free Enterprise). Some candidates may look at pre-traumatic stress.

Candidates can legitimately look at the effects of **toxic exposure**. It is included in this syllabus subsection, and this should be treated as a technological catastrophe. The Three Mile Island Accident raised fears about the release of radioactive gases for example. It could be argued that sick building syndrome is caused by toxic exposure. Whilst this may well be true, and even though a recommended text includes SBS in the same chapter as disasters, SBS can hardly be categorised as a catastrophe and so should receive no credit.

(b) Evaluate what psychologists have discovered about natural disaster and/or technological catastrophe. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- defining and categorising disaster and catastrophe
- cultural differences in disaster/catastrophe behaviour
- whether theories apply in real life
- the methods psychologists use to gain their evidence.

(c) Using your psychological knowledge, suggest ways in which psychologists could help people <u>after</u> a disaster and/or catastrophe has happened. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Behaviour after an event, typically post-traumatic stress (e.g. Herald of Free Enterprise information). Main solution is systematic desensitisation or some form of counselling. Social support may also be suggested, but this is often a weak alternative. Also PTSD in emergency workers relevant.

PSYCHOLOGY AND HEALTH

SECTION A

9 (a) Explain, in your own words, what is meant by the term 'measuring non-adherence'. [2]

Typically: adherence is the extent to which people carry out the instructions given to them by a medical practitioner, but this question also wants acknowledgement of a way in which non-adherence can be measured (see **(b)** for examples).

(b) Outline <u>two</u> ways in which non-adherence to medical advice can be measured. [6]

Any two from:

- **Subjective**
  - ask practitioner to estimate
  - ask patient to estimate (self report)
  - estimate of family member/medical personnel.

- **Objective**
  - quantity accounting (pill count) where number of pills remaining is measured
  - medication dispensers which record and count times when used
  - biochemical tests such as blood or urine sample
  - tracer/marker method: add tracer to medication e.g. riboflavin (vitamin B2) fluoresces under ultraviolet light
  - recording number of appointments kept.

(c) Describe <u>one</u> reason why people may not adhere to medical advice. [3]

Several possibilities:

1. **Disease/medical treatment programmes**
   - severity of illness
   - side effects of treatment
   - duration of treatment
   - complexity of treatment
   - people are less likely to adhere if the treatment requires a change in long-standing habits and behaviours
   - expense or cost.

2. **Personal characteristics**
   - cognitive and emotional factors
   - social support: adherence is increased if there is appropriate support from family and friends but depends on whether or not the supporters are stable. However, family and friends can have a negative effect, particularly if the patient's family is large.

- personal beliefs/models:
  - fear of treatments: Leventhal's (1970) parallel response model. People have two beliefs: 'danger control' (seek help because their health is in danger) or 'fear control' (seek ways to reduce fear = avoid treatment, get drunk, etc).
  - common sense: Leventhal (1982) model where patient's own views about their illness can contradict doctor's instructions and treatment.
  - Becker & Rosenstock's (1984) health belief model is relevant. Patients weigh up the pros or benefits of taking action against the cons of or barriers to taking action and make a decision based on their assessment of these factors.
  - Fishbein & Ajzen's theory of reasoned action is appropriate.
  - Stanton's (1987) model of adherence behaviour is pertinent.

3. Cultural factors

4. Relationship between person and medical service

- speed of service
- practitioner's personality: Byrne & Long (1976) distinguish between doctor-centred and patient-centred personality. Savage & Armstrong (1990) study on this. Male/female practitioner: Hall et al. (1994) found female doctors asked more questions of patients and made more positive statements to patients. Patients talked more to female doctor. Law & Britten (1995) Is a woman doctor better than a man?

10 (a) Explain, in your own words, what is meant by 'health promotion in worksites'. [2]

Typically: enhancing good health and preventing illness (for 1 mark) with reference to worksites (1 mark).

(b) Describe <u>two</u> methods for promoting health in people with a specific problem. [6]

Any two from (which are general, and can be applied to any problem):

- **appeals to fear**/fear arousal (Janis & Feshbach, 1953; Leventhal, 1967) is the traditional starting point. The Yale model (source of message/message/recipient) underlies many attempts.
- **providing information** via media (e.g. Flay, 1987) 3 approaches: (1) provide negative info only; (2) for those who want to be helped provide first steps; (3) self-help via TV audience.
- **behavioural methods**: provision of instructions, programmes, diaries to use as reinforcers.

(c) Describe <u>one</u> worksite health promotion study. [3]

Most likely: **Fox et al. (1987)** studied effects of a **token economy** at open cast pits. Employees could earn stamps for various things: working without time lost for injury; being part of a group where nobody had time off for injury; not being involved in accidental damage to equipment; behaviour that prevented accidents or injuries. Workers could also lose stamps if they behaved in a way that could cause accidents. Findings: there was a dramatic decrease in days lost through injury and accidents were reduced and these improvements were maintained over a number of years.

Also Johnson & Johnson's 'live for life' programme is creditworthy.

SECTION B

11 (a) Describe what psychologists have discovered about pain. [8]

Candidates could include types, theories, measures or management of pain.

Theories **of pain include:**
- specificity theory **Descartes (1644), but clinical, physiological and psychological evidence suggests theory is wrong**
- **gate control theory** Melzack (1965), widely accepted as best explanation to date.

Types of pain:
- **acute pain**: following tissue damage the individual adopts behaviour involving protection and care of the damaged area. After a relatively brief time period the pain subsides, the damage heals and the individual returns to a pre-damage state.
- **chronic pain**: following tissue damage the pain does not subside even though the damage is apparently healed, and may continue for many months or years.

Measures of pain include:
- self report/interview methods
- rating scales, e.g. visual analogue scale and category scale
- pain questionnaires, e.g. MPQ (McGill Pain Questionnaire); MMPI often used too but is not pain-specific
- behavioural assessment, e.g. UAB
- psycho-physiological measures, e.g. use of EMG, ECG and EEG.

Management of pain includes:
- **medical** – use of surgical or chemical means: peripherally-acting analgesics such as aspirin, centrally-acting analgesics e.g. morphine or local anaesthetics.
- **psychological** – cognitive: attention diversion, non-pain imagery or cognitive redefinition. Also biofeedback.
- **alternative** such as physical therapy: tens, hydrotherapy and acupuncture.

(b) Evaluate what psychologists have discovered about pain. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.
- comparing and contrasting different approaches
- the relationship between theory and practice
- the assumptions made about human nature
- how psychologists gain their evidence in this area.

(c) Giving reasons for your answer, suggest how acute pain can be measured in a person who cannot speak. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
- rating scales, e.g. visual analogue scale and category scale
- pain questionnaires, e.g. MPQ (McGill Pain Questionnaire); MMPI often used too but is not pain-specific
- behavioural assessment, e.g. UAB
- psycho-physiological measures, e.g. use of EMG, ECG and EEG.

Self report/interview methods are NOT applicable.

12 (a) Describe what psychologists have learned about lifestyles and health behaviour. [8]

Typically: the ways in which people live which may be harmful to their health or maintaining healthy existence through health-protecting behaviours.

Candidates are likely to focus on one or more of three areas:

1. **General:**
Risk factors: behaviours associated with causes of death. **Heart disease**: smoking, high cholesterol, lack of exercise, high blood pressure, stress. **Cancer**: smoking, high alcohol use, diet, environmental factors. **Stroke**: smoking, high cholesterol, high blood pressure, stress. **Accidents**: alcohol use, drug abuse. **Infectious diseases**: smoking, failing to get vaccinated.

What do people do to protect their health? **Primary prevention** (**health behaviour**) consists of actions taken to avoid disease or injury. **Secondary prevention** (**illness behaviour**) is where actions are taken to identify and treat an illness or injury early with the aim of stopping or reversing the problem. **Tertiary prevention** (**sick role behaviour**) ranges from seeing a practitioner and filling a prescription to when a serious injury or a disease progresses beyond the early stages and leads to lasting or irreversible damage.

2. **Studies**:
Harris & Guten (1979): American study which found the three most common health-protecting behaviours were eating sensibly, getting enough sleep and keeping emergency numbers by the phone.

Turk et al. (1984) studied American nurses, teachers and college students. Found three highest behaviours in each category: nurses = emergency numbers, destroying old medicines, having first aid kit. Teachers = watching weight, seeing dentist regularly, eating sensibly. Students = getting exercise, not smoking, spending time outdoors.

Mechanic (1979) in a longitudinal study found little correlation (0.1 or 0.2) between subjects tested when children and 16 years later.

3. **Models:**
Becker & Rosenstock (1984): The health belief model. Related studies: Champion (1994) used HBM to inform women about benefits of mammography. Hyman et al. (1994) perceived susceptibility not good predictor. Barriers and benefits better but ethnicity best. Aiken et al. (1994) regular place to go and practitioner recommendation much better predictor than HBM.

Ajzen & Fishbein (1975): theory of reasoned action. Related studies: Montano et al. (1997) low income women questioned regarding attitude, subjective norm and intentions towards mammography. Found all significantly related to use. O'Callaghan et al. (1997): better predictor is past experience/behaviour.

Ajzen (1985): theory of planned behaviour. As above model but adds **perceived behavioural control**.

Weinstein et al. (1998): the precaution adoption process model. Above merely identify variables. Stages people go through in their readiness to adopt a health-related behaviour.

Prochaska et al. (1992): the transtheoretical model. Five stages of behaviour change: *pre-contemplation* – no intention of changing. Isn't a problem. *Contemplation* – awareness of problem. Thoughts about changing but no action. *Preparation* – plans made to change behaviour. *Action* – plans put into action. *Maintenance* – attempt to sustain changes and resistance to relapse.

(b) Evaluate what psychologists have learned about lifestyles and health behaviour. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the methods used by psychologists
- comparing and contrasting health belief theories
- ethical issues involved in research
- generalisation of results from participants used.

(c) Giving reasons for your answer, suggest how lifestyles can be assessed or measured. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Most likely:

- **Harris & Guten** (1979) list what people do to aid their lifestyle. American study which found the three most common health-protecting behaviours were eating sensibly, getting enough sleep and keeping emergency numbers by the phone.
- **Turk et al.** (1984) studied American nurses, teachers and college students. Found three highest behaviours in each category: nurses = emergency numbers, destroying old medicines, having first aid kit. Teachers = watching weight, seeing dentist regularly, eating sensibly. Students = getting exercise, not smoking, spending time outdoors.
- **Mechanic** (1979) in a longitudinal study found little correlation (0.1 or 0.2) between subjects tested when children and 16 years later.
- Measures of physiology (cholesterol) over time.

Any psychological method is creditworthy, such as 'use a questionnaire' and credit can be given for the type of questionnaire. However, the answer must relate to lifestyles to receive full credit.

PSYCHOLOGY AND ABNORMALITY

SECTION A

13 (a) Explain, in your own words, what is meant by 'types of abnormal affect'. [2]

Typically: a type is a kind or category into which various forms are placed. Abnormal affect concerns disorders of mood and emotion, most typically depression and mania or manic depression (bipolar).

(b) Describe <u>two</u> types of abnormal affect. [6]

Types:

- **mania** – person displays spontaneity, activity, has outbursts of exuberance, has heightened good humour and is talkative and entertaining. They are often full of good ideas, plans and have grand visions. They are full of energy; appear to be physically inexhaustible.
- **depression (unipolar)**: person is extremely despondent, melancholic and self-deprecating. They may be physically lethargic; struggle to think out simple problems. They believe they are utterly worthless and have hopeless guilt.
- **bipolar** – manic-depressive
- **seasonal affective disorder**: summer and winter versions also a legitimate possibility.

(c) Outline <u>one</u> way in which a type of abnormal affect may be treated. [3]

Most likely:

- The catecholamine hypothesis of affective disorders where the chemical imbalance hypothesis for mental health disorders, especially for depression, was outlined. There are four main types of drug that relieve the symptoms of depression: Tricyclics; MAOIs (Monoamine Oxidase Inhibitors); SSRIs (Selective Serotonin Reuptake Inhibitors); SNRIs (Serotonin and Noradrenaline Reuptake Inhibitors).
- ECT (electroconvulsive therapy)/electroplexy is very common for severe depression.
- Beck et al. (1979) believe in cognitive restructuring. Ellis (1962) outlined rational emotive therapy which was developed into rational emotive behaviour therapy (REBT).
- SAD treated using a lightbox (Watkins, 1977). Studies looking at acclimatisation may be a possibility and telling people about the negative effects gives perceived control.
- Any appropriate treatment to receive credit.

14 (a) Explain, in your own words, what is meant by 'types of somatoform disorder'. [2]

Types:

Hypochondriasis: preoccupation with and exaggerated concerns about health, or having a serious illness.

Conversion: where patients present with neurological symptoms such as numbness, paralysis or fits, but where no neurological explanation can be found.

Somatisation: (Briquet's syndrome) patients who chronically and persistently complain of varied physical symptoms that have no identifiable physical origin.

Psychogenic pain: reports of pain with no physical cause.

Body dysmorphic disorder: in which the affected person is excessively concerned about and preoccupied by an imagined or minor defect in his or her physical features.

(b) Describe the characteristics of hypochondriasis and the characteristics of body dysmorphic disorder. [6]

Hypochondriasis: preoccupation with and exaggerated concerns about health, or having a serious illness.

Body dysmorphic disorder: in which the affected person is excessively concerned about and preoccupied by an imagined or minor defect in his or her physical features.

(c) Describe <u>one</u> non-medical treatment for somatoform disorders. [3]

Most likely:

- **Psychoanalytic**: emotionally charged conflicts were repressed then converted into physical symptoms that serve as outlets.
- **Behavioural**: often maladaptive behaviour – attention-seeking?
- **Cognitive Behaviour Therapy**: an approach that aims to influence dysfunctional emotions, behaviours and cognitions through a goal-oriented, systematic procedure. Phillips found that patients with BDD who were randomly assigned to Cognitive Behaviour Therapy or no treatment, BDD symptoms decreased significantly in those patients undergoing CBT. BDD was eliminated in 82% of cases at post-treatment and 77% at follow-up.

SECTION B

15 (a) Describe what psychologists have found out about abnormal affect due to trauma. [8]

Most likely focus will be on post-traumatic stress disorder, amnesia and fugue.

Psychogenic fugue is leaving one's home, work and life and taking a new identity with loss of memory for the previous identity.

Psychogenic amnesia is losing one's memory because of psychological reasons. Amnesia can be

- **localised** (e.g. loss for 3 days after accident)
- **selective** (e.g. some but not all events)
- **continuous** (e.g. permanent) or
- **generalised** (loss of all memory of one's life).

PTSD is a stress response caused by events outside the range of normal human experience. Characteristics of PTSD include:

- **Flashbacks and nightmares**: you find yourself re-living the event, again and again.
- **Avoidance and numbing**: it can be just too upsetting to re-live your experience over and over again.
- **Being 'on guard'**: you find that you stay alert all the time, as if you are looking out for danger.
- **Other symptoms:** muscle aches and pains, diarrhoea, irregular heartbeats, headaches, feelings of panic and fear, depression, drinking too much alcohol, using drugs (including painkillers).

(b) Evaluate what psychologists have found out about abnormal affect due to trauma. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- points about defining and categorising abnormal affect disorders
- cultural and individual differences in abnormal affect disorders
- comparing and contrasting explanations
- implications for person with abnormal affect disorders.

(c) Giving reasons for your answer, suggest ways in which the effects of trauma such as post-traumatic stress can be reduced. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Systematic desensitisation is a therapy based on the principles of classical conditioning. It was developed by Wolpe in 1958, specifically for counter-conditioning fears, phobias and anxieties. The idea behind systematic desensitisation is to replace the conditioned fear, which is maladaptive, with one of relaxation, which is an adaptive and desirable response. The pairing of the feared stimulus with relaxation induces the desensitisation.

16 (a) Describe what psychologists have discovered about anxiety disorders. [8]

Anxiety disorders: a general feeling of dread or apprehensiveness accompanied by various physiological reactions such as increased heart rate, sweating, muscle tension, rapid and shallow breathing.

Three main types:

- **phobias** – agoraphobia, social phobia and specific phobia (many types). Explanations provided by behavioural and psychodynamic approaches.
- **obsessive-compulsive**: obsessions – recurring thoughts that interfere with normal behaviour; compulsions – recurring actions which the individual is forced to enact. Obsessive-compulsive = irresistible thoughts or actions that must be acted on.
- **PTSD** (Post-traumatic stress disorder).Typically: obsessions – recurring thoughts that interfere with normal behaviour; compulsions – recurring actions which the individual is forced to enact.

Obsessive-compulsive disorder can also be credited. There can be obsessions and compulsions and more commonly a mixture of the two. Obsessions: repetitive thoughts, images or impulses that invade consciousness and that are difficult to dismiss or control. Compulsions consist of stereotyped or rigid rituals or mental acts that the person feels driven to perform in response to an obsession. Obsessions and compulsions cause distress:

- they are time-consuming: they interfere with normal routine, work or social relations
- they are distressing and unwelcome
- they arise from within and are not from an external situation
- they are difficult to control.

Psychoanalytic: traced to anal stage.

Behavioural: hypercritical, demanding parents reward similar behaviour in children.

Superstition: must go through rituals (O'Leary & Wilson).

Chemical: individuals with OCD have increased activity in frontal lobe of left hemisphere.

(b) Evaluate what psychologists have discovered about anxiety disorders. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- points about defining and categorising abnormality
- cultural and individual differences
- comparing and contrasting explanations of cause
- implications of individual and society.

(c) Using your psychological knowledge, suggest how obsessive-compulsive disorder may be treated. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

- Behavioural therapy, cognitive therapy and medications are first-line treatments for OCD.
- Psychodynamic psychotherapy may help in managing some aspects of the disorder.

PSYCHOLOGY AND ORGANISATIONS

SECTION A

17 (a) Explain, in your own words, what is meant by the term 'selection interviews'. [2]

Typically: the choosing from a sample of job applicants the individuals best suited to the jobs available.

(b) Describe <u>one</u> type and <u>one</u> pitfall of selection interviewing. [6]

Types:
Most likely: formal or informal interview. Riggio suggests:

- use structured interviews
- make sure that interview questions are job-related
- provide rating or scoring of applicant responses
- use trained interviewers
- use a panel interview
- use time efficiently.

Whilst these are not types, they should still be given credit.

Pitfalls:

- A weakness could be if any of the list above is not adhered to.
- In addition, bias or misinterpretation on the part of the personnel officer/selection panel; failure to adhere to equal opportunities.

(c) Describe <u>one</u> way in which personnel selection decisions are made. [3]

Most likely:
Once all information about applicants has been gathered, how is a final decision made? Many decisions are subjective, but other strategies operate:

- **multiple regression model**: combines each factor statistically
- **multiple cut-off model**: applicants must obtain a minimum score on each factor to be successful
- **multiple hurdle model**: decisions made at various stages (e.g. end of day 1 if interview is two-day or even short-listing for interview.

18 (a) Explain, in your own words, what is meant by the term 'human resource practices'. [2]

Typically: HRM looks at performance appraisal, reward systems and personnel selection processes.

(b) Describe <u>two</u> reasons why performance is appraised. [6]

Most likely:

- For organisation – assessing productivity – decide on promotions, demotions, bonuses and firing. Gives information on training needs; validates employee selection; evaluates effectiveness of organisational change.
- For individual – basis of career advancement; feedback on improving performance and recognising weaknesses.

(c) Outline <u>one</u> weakness of a performance appraisal technique. [3]

Any appropriate comment acceptable. Could focus on methods of rating, e.g. comparisons, checklists or rating scales. Weakness could be with assessor being too lenient/severe; halo or recency effect.

- Ratings may vary according to expectation (e.g. study by Hogan on bank managers).
- The 'similar-to-me' effect – people perceive people similar to them as better (e.g. Wayne & Liden).
- Attribution theory also relevant.

SECTION B

19 (a) Describe what psychologists have discovered about motivation to work. [8]

A number of theories to choose from. Can do a range with less detail or few in more detail.

1. **Need theories** of motivation: individual needs.
   - Maslow's **need-hierarchy** (1965). Five-tier hierarchy: physiological, safety, social, esteem and self-actualisation. Starting with physiological, each must be satisfied in order. Lots of attention received, but not much support; not a good predictor of behaviour and no useful application.
   - Alderfer's **ERG theory** (1972). Three levels: existence, relatedness and growth. Little support.
   - McClelland's **achievement-motivation theory** (1961). Three work-related needs: need for achievement (get job done, success, etc); need for power (direct and control others; be influential); need for affiliation (desire to be liked and accepted; friendship). Methodology used: TAT (thematic apperception test) – look at picture then relate story it suggests. Is a projective test and scoring can be unreliable. Good application: match profiles to jobs; achievement training programmes.

2. **Job design theories**: if job well designed and satisfying needs = good motivation.
   - Herzberg's **two factor theory** (1966). Job satisfaction and job dissatisfaction are two separate factors. Motivators = responsibility, achievement, recognition, etc = job satisfaction. Hygienes = supervision, salary, conditions, etc = job dissatisfaction. Some support but led to job enrichment (redesigning jobs to give workers greater role).
   - **Job characteristics model** (Hackman & Oldham, 1976). Workers must perceive job as meaningful (skill variety, task identity and task significance) responsible (autonomy) and gain knowledge of outcome (feedback). These can be scored. Also JDS (job diagnostic survey) is questionnaire measuring above characteristics.

3. **Rational (cognitive) theories**: people weigh costs and rewards of job.
   - **Equity theory** (Adams, 1965) fair treatment = motivation. Worker brings inputs (skills, etc) and expects outcomes (pay, etc). Equality determined by comparison with others.
   - **VIE theory** (or expectancy) (Vroom, 1964): workers are rational and decision-making and guided by potential costs (negative outcomes) and rewards (positive outcomes).

4. **Goal-setting theory** (Locke, 1968): for motivation goals must be specific, clear and challenging.

5. **Reinforcement theory** (traditional): positive and negative reinforcers and punishment.

(b) Evaluate what psychologists have discovered about motivation to work. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- comparing and contrasting theoretical explanations
- the measures used to gain data
- the assumptions made about human behaviour
- individual differences in motivation to work.

(c) Using your psychological knowledge, suggest how the management of any company could increase performance through team building. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Team building is where groups of workers meet to discuss ways to improve their performance by identifying strengths and weaknesses in their interaction with one another (Riggio, 1990).

Most likely team building strategies include:

- Tuckman (1965) 4 stages: forming, storming, norming and performing.
- Woodcock (1979) 4 stages of team development.
- Zander's (1982) achievement-orientated and help-orientated people is pertinent.
- McGregor's (1960) effective and ineffective groups.

20 (a) Describe what psychologists have discovered about organisational work conditions. [8]

Riggio (1990) divides work conditions into **physical conditions** such as illumination, temperature, noise, motion, pollution and aesthetic factors such as music and colour; and **psychological conditions** such as privacy or crowding, status/anonymity and importance/unimportance. Vibration, body movement and posture (e.g. seating or lifting) can be added to the list of physical conditions. The amount of evidence available for each of these, particularly physical conditions, is vast. However, it should not be too difficult to judge whether the evidence has psychological foundation rather than being largely anecdotal.

Another distinction is between a **mechanistic design** (chip-making at McDonalds has 19 distinct steps and so has distinct rules to follow but little satisfaction) and an **organic structure** where a broad knowledge of many different jobs, with increased satisfaction, is required. Mintzberg (1983) has gone a step further and he outlines **five organisational types**: simple, machine, professional, divisional and adhocracy which involve five elements (operating core e.g. teachers; strategic apex e.g. management; support staff, etc).

Work schedules are somewhat more specific but can include *compressed work weeks* and *flexitime* in addition to *shift work*. Pheasant (1991) outlines primary chronic fatigue, extremely karoshi (Japanese for sudden death due to overload). Minor effects = sleep disturbance, physical and mental.

(b) Evaluate what psychologists have discovered about organisational work conditions. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- individual differences in responses to work conditions
- the assumptions made about human behaviour
- the methods used by psychologists to gain their evidence
- implications for the design of work conditions.

(c) Giving reasons for your answer, suggest how the temporal conditions of work environments can be improved. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Typically temporal (from tempus) conditions = time. Most likely is shiftwork. Two schools of thought:

- **Rapid rotation theory**: based on frequent change and preferred by workers who only do same shift for short time. Two options:
  1. *metropolitan rota*: 2 early, 2 late, 2 night, 2 rest.
  2. *continental rota*: 2 early, 2 late, 3 night, 2 rest, then 2 early, 3 late, 2 night, 2 rest etc.
- **Slow rotation theory** – should change as infrequently as possible to minimise effects but not popular (night shift for 1 month?!).

Also relevant are: **compressed work weeks** and **flexitime**.