

**MARK SCHEME for the October/November 2010 question paper  
for the guidance of teachers**

**9698 PSYCHOLOGY**

**9698/31**

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.

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CIE is publishing the mark schemes for the October/November 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

### 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)	<i>Part (b) could require one aspect, in which case marks apply once. Part (b) could require two aspects, in which case marks apply twice.</i>	
	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)	<i>Part (c) could require one aspect, in which case marks apply once. Part (c) could require two aspects, in which case marks apply twice.</i>	
	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
	<b>Maximum mark for Section A</b>	<b>11</b>

Page 3	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

## Section B

Q	Description	Marks
(a)	<b>KNOWLEDGE (1)</b> [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
	<b>KNOWLEDGE (2)</b> [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
	<b>UNDERSTANDING</b> [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)	<b>EVALUATION ISSUES</b> [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
	<b>ANALYSIS</b> [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

<b>Page 4</b>	<b>Mark Scheme: Teachers' version</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>GCE A LEVEL – October/November 2010</b>	<b>9698</b>	<b>31</b>

	<b>CROSS-REFERENCING</b> [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
	<b>ANALYSIS</b> [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>(b)</b>	10
<b>(c)</b>	<b>APPLICATION</b> [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
	<b>KNOWLEDGE (2)</b> [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
	<b>UNDERSTANDING</b> [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 <b>(c)</b>	6
	Maximum mark for <b>Section B</b>	24

Page 5	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

## PSYCHOLOGY AND EDUCATION

### Section A

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

Typically: learned helplessness originally meant a condition where a person has learned to behave helplessly, even when the opportunity is restored for them to help themselves by avoiding an unpleasant or harmful circumstance to which they have been subjected.

More recently, an individual's attributional or explanatory style helps understanding why people respond differently. Although a group of people may experience the same or similar negative events, how each person privately interprets or explains the event will affect the likelihood of acquiring learned helplessness. People with pessimistic explanatory style – will see negative events as permanent ("it will never change"), personal ("it's my fault"), and pervasive ("I can't do anything correctly").

- (b) Describe one example of learned helplessness. [3]

Any appropriate example that is indicative of learned helplessness.

E.g. a student who does not attempt to calculate statistical tests because "I can't do maths".

- (c) Describe two ways in which motivation in a classroom can be improved. [6]

Most likely answers:

- use of positive reinforcement, for example praise for good work
- reward in some form for desired behaviour
- provide students with achievable goals that still require effort
- present information in an interesting and stimulating way
- use a variety of teaching styles and tasks

- 2 (a) Explain, in your own words, what is meant by 'creating better environmental conditions for learning'. [2]

Two aspects required here:

1. 'creating better', so the answer must have some awareness of improvement.
2. 'environmental conditions', which relate to:
  - building design (e.g. open-plan or traditional); number of windows; optimum temperature
  - classroom layout and seating arrangements.

Page 6	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

- (b) Describe one study which showed how the physical features of a learning environment affected the performance of children. [3]

**External:**

- Bronzaft (1975). Reading age of children much lower on side of school next to elevated railway in New York. Put in rubber tracks and soundproofing and 3 years later reading ages had improved. Studies of children near airports also relevant, as are other studies, features as mentioned above.
- Cohen, Glass & Singer (1975) studied children who lived in the following New York apartment block: the children who lived on the lower floors performed worse on an auditory discrimination task than those who lived at the top.
- Haines et al. (2002) looked at schools around Heathrow Airport. Haines et al. were seeking to examine the effects of chronic (i.e. long-term) exposure to aircraft noise on children's school performance (while controlling for social class and school characteristics). They used a cross-sectional study measuring SATs in mathematics, science, and English (11,000 scores from children aged 11 years). The researchers used 123 primary schools in the three boroughs surrounding Heathrow Airport. From the data it was found that chronic exposure to aircraft noise was significantly related to poorer reading and mathematics performance.

**Internal:**

- Classroom design – Rivlin & Rothenberg (1976): open-plan schools versus 'traditional' designs. Conclusion: some children do better with traditional, others better with open-plan.
- Some studies refer to effect of number of windows (e.g. Ahrentzen, 1982) and amount of light.
- Some to effects of temperature (e.g. Pepler, 1972).

- (c) Describe two ways in which environmental conditions for learning can be improved. [6]

Most likely answers will be based on studies in 2 (b).

## Section B

- 3 (a) Describe ways in which educational performance is assessed in schools. [8]

This is difficult because assessment may vary between different countries. What is required is any form of assessment that may be used in schools. This could be at a simple level, such as a written piece of work (e.g. an essay) or a project or anything that teachers do as part of their work. It may be that candidates can focus on national examinations such as (in England and Wales) SATs, GCSEs and GCEs, or it may be they focus on tests used by psychologists as a diagnostic aid. Typical IQ tests are Stanford-Binet and WIAS (WISC).

- (b) Evaluate ways in which educational performance is assessed in schools. [10]

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

- the ethics of testing
- reliability and validity
- the implications of testing for teachers
- the implications tests have for young children
- the assumptions tests make about human behaviour

Page 7	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

- (c) Imagine you are the parent of a child with a specific learning difficulty. Giving reasons for your answer, suggest ways in which you expect the educational performance of your child to be assessed. [6]

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

Most likely:

- assessment depends on the nature of the specific learning difficulty
- it could be an intelligence test (e.g. WISC or BAS) or some similar type of test
- it could be a screening test for dyslexia, dyscalculia or related ability
- each suggestion should be marked on its individual merits, as test names may well vary from one country to another

- 4 (a) Describe what has been found out about individual differences in educational performance. [8]

Typically: any difference in the performance of an individual which differs from the norm. Difficult to predict here as there are cultural differences in the performance of boys and girls. UK data shows that, except for level 3 maths, girls outperform boys in everything else. Wide range of answers possible here. Any two factors from a long list including:

**Biological:** are the male brain and female brain different?

**Social:** socio-economic class (attitudes), type of family, position in family, expectation of family, time-orientation, competitiveness and self-fulfilling prophecy.

- (b) Evaluate what has been found out about individual differences in educational performance. [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) Imagine you are a school teacher. Giving reasons for your answer, suggest how you could improve the performance of a group of children who are performing poorly at school. [6]

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

Two main approaches are segregation or integration. If children are segregated, they could be taught on a one-to-one basis or be part of some small group. If they are integrated, the teacher will need to show clear differentiation.

- **segregation:** children selected for particular schools
- **enrichment:** done within a normal classroom and can involve extra-curricular activity and individualised learning programmes, with independent learning possible

Page 8	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

## PSYCHOLOGY AND ENVIRONMENT

### Section A

- 5 (a) Explain, in your own words, what is meant by the term 'crowd behaviour'. [2]

Typically: 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.

- (b) Describe two ways in which crowds can behave in emergency situations. [6]

Most likely:

- **LeBon (1895)** contagion: people panic and behave irrationally, like animals acting on primitive urges to aid their survival. Their aim is survival at all costs and so they must be first to exit. Anyone getting in way is walked over, possibly trampled with no concern for others.
- **Schank & Abelson (1977)** outline *script schemata*: people have a mental programme of how they and others are likely to behave in a particular situation. The script is the logical sequence of events we follow. For example, how do we behave when alighting from an aircraft or leaving an underground train or attending a football match?
- **Smelser (1964)** emphasises features of exits themselves. He found that when exit routes are blocked, e.g. in a mine or submarine, there is no panic.

- 5 (c) Describe one way in which problems may be prevented in emergency situations. [3]

Most likely:

- the use of evacuation messages broadcast over a tannoy system. Work of Loftus relevant
- could also be implementation of evacuation plan, e.g. Sugiman & Mitsumi follow me/follow directions

Any appropriate answer to receive credit.

- 6 (a) Explain, in your own words, what is meant by 'psychological intervention after technological catastrophe'. [2]

Two aspects needed here:

- important to make a distinction between **disasters** (natural causes) and **catastrophes** (human causes). Catastrophes mean there is some human error/fault and blame can be attributed.
- also needs to be awareness of intervention, which must be psychological, and not simply emergency services.

- (b) Describe one technological catastrophe. [3]

Any **one technological** catastrophe can be credited (see above for definition).

- could be a published event, e.g. Three Mile Island; Chernobyl; a plane crash; ship sinking, or anything technological.
- could be an event (in the country of the candidate) written about anecdotally.

Marks allocated according to detail.



Page 9	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

- (c) Describe one way in which psychologists can help *before* a technological catastrophe and one way in which they can help *after*. [6]

**Before:**

Psychologists could look at:

- **preparation for an event** or whether people think it will happen to them (e.g. Stallen, 1988) and study at Dutch chemical plant
- **attitudes** towards potential danger “it won’t happen to me”; fear of flying, etc
- **evacuation messages** and plans for escape to **prevent panic**, e.g. evacuation messages (e.g. Loftus) or the follow me/follow directions dilemma of Sugiman & Misumi (1988)
- **emergency plans** such as those issued by the FEMA for earthquakes
- some candidates may look at pre-traumatic stress

**After:**

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 Post-traumatic Stress Disorder in emergency workers relevant.

### Section B

- 7 (a) Describe what psychologists have learned about the effects of noise. [8]

Candidates may well begin with definitions and types. As with other environment areas, the syllabus states performance, social behaviour and health.

- **Health:** McCarthy et al. (1992) noise affects the immune system; Doring et al. (1980) noise causes ulcers; Cohen et al. (1986) found increased blood pressure in children at school on flight path. Many, many other studies. Is no direct link – noise may be stressful and stress causes health problems. Candidates may also look at mental health.
- **Performance:** 3 categories to consider: (a) effects during exposure; (b) after-effects; (c) effects on children. (a) 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. (b) 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). (c) Hambrick-Dixon (1986); 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.
- **Social behaviour: Aggression:** likely to be popular as many unethical lab studies involving electric shock, e.g. Geen & O’Neal (1969); Donnerstein & Wilson (1976). **Helping:** also popular with both lab and natural studies by Matthews & Canon (1975) and Page (1977).

- (b) Evaluate what psychologists have learned about the effects of noise. [10]

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

- points about defining and categorising noise/air pollution
- cultural and individual differences in perception of problem
- comparing and contrasting laboratory with natural studies
- the methods psychologists use to gain their evidence

Page 10	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

- (c) Noise has a negative effect on health. Giving reasons for your answer, suggest ways in which this negative effect can be reduced. [6]

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

- 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

- 8 (a) Describe what psychologists have learned about architecture and behaviour. [8]

Candidates could look at:

A. Theories and effects of urban living on health and social behaviour:

**Social behaviour – helping:**

- Amato (1983) study in 55 different Australian communities. A man limped down a street then screamed, fell over and clutched his leg, which began bleeding profusely. Small town (under 1,000 inhabitants), 50% stopped to help. In a city of 20,000–30,000 this dropped to 25%. Down to 15% in major cities with over 1 million inhabitants.
- Milgram (1977) city handshake: where undergraduate students approached a stranger and extended their hand in a friendly gesture (as if to initiate a handshake). Only 38.5% of city dwellers reciprocated, compared with 66% in rural areas.

**Social behaviour – crime:**

- Zimbardo (1969) deindividuation. Zimbardo left a car in the Bronx (urban) and in Palo Alto (suburban). He found that in the Bronx, the car was stripped within 24 hours, while the car left in Palo Alto was untouched.

**Health:**

- Soderberg (1977) measured rates of HIV infection, comparing urban, semi-urban and rural blood donors.  
Sample: 3474 males and 1287 females in Tanzania.  
Between March 1988 and April 1991, all blood donors at the Ilemba Lutheran Hospital were tested for HIV infection.  
All were also asked details of age, city/village, occupation and marital status. The highest rate of infection was seen in urban areas. Soderberg suggested that city people exhibit riskier behaviours.

B: Urban renewal and building design:

- Pruitt-Igoe project: this was a public housing project in which 12,000 persons were relocated into 43 buildings, 11 storeys high, containing 2,762 apartments, and covering 57 acres. After 3 years = very high crime rate.  
Accounts exist of gangs forming and that rape, vandalism, and robbery are common.  
Since crime frequently took place in elevators and stairwells, the upper floors were abandoned. By 1970, 27 of the 43 buildings were empty. Whole estate demolished in 1972.

C: Community environmental design: Whyte (1980); Brower (1983). See 8 (c) for details.

Page 11	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

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

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

- comparing social with physical explanations
- the ethics of urban renewal
- comparing theories of gentrification (renovating areas for middle/upper class use)
- how psychologists gained their evidence (e.g. the 'single variable' versus the 'urban/rural' approach)

(c) Using your psychological knowledge suggest what features would contribute to a successful community environmental design. [6]

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

**Whyte (1980)** emphasised design features that promote positive social interaction. Studied urban plazas. Over several years they observed and filmed 18 plazas in New York City. Counted how many people used each plaza on pleasant days and began to relate usage to various features of the plaza. Used more if: number of amenities rise (e.g. places to sit); drinking fountains and pools are present; accessible food outlets; trees; activities to watch (jugglers, etc.); sunny orientation; located on busy streets and not hidden away.

**Sidney Brower (1983)** in yet another project suggested: keep the street front alive; give residents things to do and places to be; reduce the speed and number of cars; residences should open to the street, not from some central courtyard; make parks more attractive to adults.

Page 12	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

## PSYCHOLOGY AND HEALTH

### Section A

- 9 (a) Explain, in your own words, what is meant by the term 'health promotion in communities'. [2]

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

- (b) Outline one school health promotion study and one worksite health promotion study. [6]

Most likely:

- **Walter** (1985): in 22 American elementary schools a special curriculum was designed with the emphasis on nutrition and physical fitness. The schools were randomly assigned so that students would either participate in the programme or act as a control group. After 2 years the two groups were compared.
- **Tapper et al** (2003): The Food Dudes – successful UK campaign.

Most likely:

- **Johnson & Johnson Company**: They began their '*live for life*' programme in 1978 and it is one of the largest, best funded, and most effective worksite programmes yet developed. All employees are now a part of this programme. The goal is to help as many employees as possible live healthier lives by making improvements in their health knowledge, stress management, and efforts to exercise, stop smoking, and control their weight.
- **Gomel et al.** (1983): Australian campaign stopping worksite smoking. Not successful.

- (c) Describe one community campaign to promote health in relation to a specific problem. [3]

Answers could focus on several things: smoking, drinking, food/nutrition, self-examination. Too many options to give detail. Most likely possibilities include (e.g.s from USA):

- the three community study (Farquhar et al., 1977) 14,000 people
- Minnesota Heart Health Program (Blackburn et al., 1984) 350,000 people
- Pawtucket Heart Health Program (Lasater et al., 1984) 170,000 people
- Pennsylvania county health improvement program (Stunkard et al., 1985), 220,000
- Stanford five city project (Farquhar et al., 1984) 359,000 people
- also acceptable is cycle helmet campaign in Maryland or 'bucklebear' campaign
- any appropriate community campaign conducted in the country of the candidate

- 10 (a) Explain, in your own words, what is meant by the term 'health belief model'. [2]

Typically: models which take into account a range of factors that help predict whether people are more or less likely to engage in health protective behaviour to improve their lifestyle.

Page 13	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

(b) Describe two health belief models.

[6]

Several models to choose from:

- **Becker & Rosenstock (1984): the health belief model.** Related studies: Champion (1994) used health belief model (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.** Frequently used for health. Related studies: Montano et al. (1997) low income women questioned regarding attitude, subjective norm and intentions toward 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 health-related behaviour.
- **Prochaska et al. (1992): the transtheoretical model.** Five stages of behaviour change. Precontemplation – 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.

(c) Describe one health enhancing behaviour.

[3]

Most likely:

- basic such as 'eating healthily'; 'not smoking', etc and 'going to doctor'
- those which are a little more psychologically informed and use psychological evidence, e.g. **Harris & Guten (1979)**, American study which found the three most common health protective behaviours were eating sensibly, getting enough sleep and keeping emergency numbers by the phone. Similarly **Turk et al. (1984)** studied American nurses, teachers and college students. Found: 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.

Alternatively, candidates may consider:

- **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.

Page 14	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

### Section B

**11 (a) Describe what psychologists have learned 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); Minnesota Multiphasic Personality Inventory (MMPI) often used too but is not pain-specific.
- behavioural assessment, e.g. UAB Pain Behaviour Scale
- psycho-physiological measures: use of EMG, ECG & 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 learned 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

Page 15	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

**(c) Giving reasons for your answer, suggest how pain can be measured in children. [6]**

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

Rating scales:

- e.g. visual analogue scale and category scale, but not MPQ (for adults)
- Paediatric Pain Questionnaire (Varni & Thompson, 1986)
- Children's comprehensive pain questionnaire (McGrath, 1987)

behavioural assessment: but not UAB

- **Turk et al. (1985)** have identified four pain behaviours: facial/audible expression of distress; distorted ambulation or posture; negative affect; avoidance of activity.
- pain can be measured in very young children using APocis: whether they are crying; how they breathe; the way they move their arms and fingers; how they move their legs; the posture of the back and body; facial expression. The total scale gives a measure of discomfort, ranging from no pain (0), mild pain (1–2), pain (3–4) or severe pain (5–7).

Unlikely:

- self report/interview as child may be too young to speak/express nature of pain.
- psycho-physiological measures: use of EMG, ECG and EEG as these are not used anyway.

**12 (a) Describe what psychologists have found out about health and safety. [8]**

Two types of answer:

General:

- **Theory A:** the person approach. Accidents caused by the unsafe behaviour of people. Prevention is by changing the ways in which people behave (fitting the person to the job).
- **Theory B:** the systems approach. Accidents caused by unsafe systems at work. Prevention is by redesigning the work system (fitting the job to the person).

Or specific. Lots of possibilities:

- people may think they are accident prone (personality) and so self-fulfilling prophecy may apply, e.g. Robertson (2003)
- people have an illusion of invulnerability – it won't happen to them
- people apply motion stereotypes and so do not consider alternatives
- people make errors (they are human!)
- people on shiftwork have low-point, e.g. 2–5 am

**(b) Evaluate what psychologists have found out about health and safety. [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

Page 16	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

- (c) Giving reasons for your answer, suggest how safety behaviour at work could be improved. [6]

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

Two types of answer:

Under global heading of '**health and safety**' campaigns come many individual approaches which could take place in worksites specifically. These can be based on:

- **appeals to fear**/fear arousal (Janis & Feshbach, 1953 and Leventhal, 1967) is the traditional starting point. This is likely to be included because their *strong fear appeal* could be said to be unethical and they are not the most effective. The Yale model (source of message/message/recipient) underlies so 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 television audience. Study by Lewin (1992) healthy heart manual also relevant. *Any such approach must be adapted for worksites.*

Actual study:

- **Fox** (1987) token economy system introduced and reduced accidents in open cast mine.



Page 17	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

## PSYCHOLOGY AND ABNORMALITY

### Section A

13 (a) Explain, in your own words, what is meant by the term 'anxiety disorder'. [2]

A general feeling of dread or apprehension 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).

(b) Describe two explanations for anxiety disorders. [6]

Explanations:

**Psychoanalytic**: traced to anal stage

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

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

**Chemical**: OCD sufferers have increased activity in frontal lobe of left hemisphere

**PTSD** is a stress response caused by events outside the range of normal human experience

(c) Describe one way in which anxiety disorders may be treated. [3]

Most likely treatment will be behaviourally or cognitive-behavioural, such as systematic desensitisation or cognitive behavioural therapy. Psychotherapy is also a possibility.

14 (a) Explain, in your own words, what is meant by the term 'explanations of abnormal affect'. [2]

Two aspects here:

- a comment is needed on the 'explanations' component
- a comment on abnormal affect, which refers to the experience of feeling or emotion which is more extreme than normal, most typically depression and mania or manic-depression

Page 18	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

(b) Describe two types of abnormal affect. [6]

Most likely:

- **mania**: person displays spontaneity, activity, has outbursts of exuberance, has heightened good humour and 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**: 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.
- **seasonal affective disorder**: summer and winter versions also a legitimate possibility.

(c) Describe one explanation for abnormal affect. [3]

Most likely:

- the biopsychosocial model proposes that biological, psychological and social factors all play a role to varying degrees in causing depression
- the diathesis–stress model posits that depression results when a pre-existing vulnerability, or diathesis, is activated by stressful life events
- monoamine hypothesis: depression arises when low serotonin levels promote low levels of norepinephrine
- depression also runs in families and the closer the genetic relationship, the more likely people are to be diagnosed with the disorder. Oruc et al. (1998): first-degree relatives of people diagnosed with depression are two or three times more likely to be diagnosed with depression than those who are not first-degree relatives.
- psychological: Beck proposed the cognitive model of depression with a triad of negative thoughts comprising cognitive errors about oneself, one's world, and one's future; recurrent patterns of depressive thinking, or *schemas*; and distorted information processing.

NB, also acceptable is abnormal affect due to trauma. It is a different topic area of the specification, but the question is a general one. This would include PTSD.

Page 19	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

### Section B

15 (a) Describe what psychologists have discovered about classifying and diagnosing abnormality. [8]

Many aspects could be included:

- could be historical, moving from 'witchcraft' to the founders of modern classification.
- in 1896 Kraepelin created the first comprehensive system of classification of psychological disorders, the International Classification of Diseases and Related Health Problems. The ICD, now at version 10, listed *all* diseases, so a classification system just for psychological problems was devised in 1952 in the United States and is the Diagnostic and Statistical Manual of Mental Disorders or DSM, which is now in version IV revised.
- another aspect is classification. This could be general, from neuroses and psychoses to a much more specific breakdown.
- there could be a focus on approaches: medical, psychological, etc. Within these there could be a consideration of behavioural, psychoanalytic, humanistic, etc.
- another aspect could be diagnosing. The Rosenhan key study may feature here, with a look at type one and type two errors.
- definitions of abnormal behaviour: **Deviation from statistical norms:** this is simply deviating from the norm or average as in a normal distribution curve. Anyone at either end of the curve is 'abnormal' or atypical. **Deviation from social norms:** the norms of a society have expectations of how people should think and how they should behave. **Deviation from ideal mental health:** if the characteristics of ideal mental health could be determined, then anyone not possessing those characteristics, or deviating from them, by definition would be abnormal. **Failure to function adequately:** suggests that people who experience personal distress or discomfort will seek the help of a health care professional.

(b) Evaluate what psychologists have discovered about classifying and diagnosing abnormality. [10]

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

- points about defining and categorising abnormality
- cultural and individual differences in abnormality
- comparing and contrasting explanations of cause
- deterministic explanations
- nature versus nurture
- reliability of diagnosis

(c) Giving reasons for your answer, suggest problems in defining and diagnosing abnormality. [6]

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

Most likely: answers will be based on what was included in part (a).

Page 20	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

**16 (a) Describe what psychologists have found out about abnormal avoidance and need. [8]**

Candidates can focus on either avoidance or need or both.

**Need:** will include problems such as compulsive gambling, pyromania and kleptomania but any other need is legitimate.

**Avoidance:** any phobia appropriate here as would be elective withdrawal.

Candidates may focus on suggested explanations or on typical behaviour/symptoms.

- **kleptomania** is the condition of not being able to resist the urge to collect or hoard things. People with this disorder are compelled to steal things, generally things of little or no value.
- **pyromania** is an impulse to start fires deliberately to relieve tension and typically includes feelings of gratification or relief afterwards. Pyromaniacs start fires to induce euphoria, and often tend to fixate on institutions of fire control like fire stations and firefighters.
- **problem gambling** is an urge to gamble despite harmful negative consequences or a desire to stop. Severe problem gambling may be diagnosed as clinical **pathological gambling** if the gambler meets certain criteria.

Kleptomania is frequently thought of as being a part of obsessive-compulsive disorder, since the irresistible and uncontrollable actions are similar to the frequently excessive, unnecessary and unwanted rituals of OCD. *Compulsive* gambling also.

**(b) Evaluate what psychologists have found out about abnormal avoidance and need. [10]**

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

- points about defining and categorising abnormal behaviours
- cultural and individual differences in need/avoidance
- comparing and contrasting explanations
- implications for person with abnormal need/avoidance

**(c) Giving reasons for your answer, suggest how abnormal avoidance may be treated. [6]**

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

NB, question focuses on abnormal avoidance, not need.

- cognitive behavioral therapy is most common
- medications commonly prescribed include benzodiazepines, such as alprazolam and diazepam; antidepressants, including Selective Serotonin reuptake inhibitor (SSRI); and possibly atypical antipsychotics such as quetiapine

Page 21	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

## PSYCHOLOGY AND ORGANISATIONS

### Section A

- 17 (a) Explain, in your own words, what is meant by 'psychological conditions of work environments'. [2]

Typically: any logical comment referring to the **psychological** conditions of the working environment (see below).

- (b) Briefly describe one physical condition and one psychological condition of a work environment. [6]

**Physical** can include:

illumination, temperature, noise, motion (vibration), pollution, aesthetic factors (e.g. music and/or colour). Can also include workspace/office layout.

**Psychological** can include:

feelings of privacy or crowding, excess or absence of social interaction, sense of status or importance/anonymity or unimportance, feelings of job satisfaction or alienation.

Any other appropriate physical or psychological work condition acceptable.

- (c) Describe one way in which the psychological conditions of work environments could be improved. [3]

Answer will most likely be based on one aspect included in part (b).

- 18 (a) Explain, in your own words, what is meant by the term 'workspace design'. [2]

Typically: the design and arrangement of equipment, space, and machinery in a work environment.

- (b) Give one example of an operator-machine system where workspace design is important. [3]

Any appropriate example to receive credit, but answer must show some psychological knowledge. For example:

three categories of work stations: seated, standing and a combination.

Principles of workspace design:

- importance: important items should be most accessible
- frequency of use: the most frequently used items should be most accessible
- function: items with closely related functions should be grouped together
- sequence of use: items which are often used in sequence should be grouped together

Page 22	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

(c) Suggest two ways in which errors in operator-machine systems can be reduced. [6]

Most likely:

**errors in operator-machine** are important. There can be errors of:

- omission (failing to do something)
- commission (performing an act incorrectly)
- sequence errors (doing a step out of order) and
- timing errors – too quickly or too slowly

Errors such as these can be rectified either by:

- **changing the design** (fitting the job to the person) or
- **selecting people** who can operate the systems (fitting the person to the job).  
Appropriate persons can be selected for the task (e.g. Robertson's accident-prone personality questionnaire) or on-the-job training.

### Section B

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

A number of theories are most likely:

[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.
- Alderfer's **ERG theory** (1972). Three levels: existence, relatedness and growth.
- 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).

[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 is 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.

Page 23	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2010	9698	31

(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 a company could increase performance through motivation. [6]

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

This question requires more than mere replication of the above theories and it requires more than common sense answers such as “increase pay”. What is required is the combination of suggestions with an appropriate theory, e.g. an increase in pay is one of Herzberg’s hygiene factors. This, of course, is only one approach. Possible motivators include:

- responsibility for decisions such as negotiating prices, planning journeys and times, etc.
- material reward: salary, commission, bonuses, promotions and competitions/incentive schemes could be used against sales objectives such as volume, profitability, new account development.
- material reward: merchandise incentives, company car etc.

20 (a) Describe what psychologists have found out about group behaviour in organisations. [8]

Wide question in that candidates can legitimately focus on one or more of:

- **Group processes** such as cohesiveness, co-operation, competition, e.g. SWOT Analysis – evaluation by the decision-making individual or organization of Strengths, Weaknesses, Opportunities and Threats with respect to desired end state or objective.
- **Group decision-making**: deciding what action a group should take. Could be more precise and involve types such as democratic or autocratic decisions.
- **Group error** such as groupthink and group polarisation.
  1. **Groupthink**: syndrome characterised by a concurrence-seeking tendency that overrides the ability of a cohesive group to make critical decisions (Janis, 1965).
  2. **Group polarisation**: groups who make decisions that are more extreme than those made by individuals.

(b) Evaluate what psychologists have found out about group behaviour in organisations. [10]

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

- issues concerning generalisability
- the measures used to gain data
- individual differences in types of groups
- the usefulness of studying group processes

<b>Page 24</b>	<b>Mark Scheme: Teachers' version</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>GCE A LEVEL – October/November 2010</b>	<b>9698</b>	<b>31</b>

(c) Using your psychological knowledge, suggest ways in which group conflict can be managed. [6]

Most likely:

- encourage education and training
- promote open enquiry
- use sub-groups
- admit short-comings
- hold second chance meetings
- not rushing to a quick solution