MARK SCHEME for the May/June 2009 question paper

for the guidance of teachers

9698 PSYCHOLOGY

9698/03   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.

CIE is publishing the mark schemes for the May/June 2009 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 are 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.	1
	Two instances of general evaluative comment OR one issue + evidence.	2
	Two (or more) issues are identified, explained and some appropriate evidence is used in support.	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/organisation.	1
	Structure/organisation is sound and argument clear and coherent (includes 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 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 question 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 where in the same classroom there may be children from different cultures.

(b) Describe *one* 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 *two* explanations for a 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 'cognitive' approach to education. [2]

Typically: emphasis placed on the individual learners' cognitive structure; how information is processed, organised and recalled. How this is best achieved is the problem. A more formal definition is "the scientific study of mental events" Gagne (1985).

(b) Describe *two* ways in which the cognitive approach has been applied to education. [6]

For the **cognitive approach** typically candidates will include the work of Piaget. His contribution is significant and covers a wide range of aspects such as readiness for teaching mathematics and the type of book a child should read at a particular age in addition to cognitive development. More likely will be the **readiness approach**, a central component of **discovery learning**. If a candidate focuses on Piaget's theory of cognitive development without explicitly linking it to education, this strategy should receive no credit. Piaget is not the only relevant psychologist.

- Gagne (1977) outlines a number of **cognitive strategies**.
- Bruner (1966) has looked at **discovery learning**.
- Ausubel (1977) proposes a **theory of meaningful verbal learning (subsumption)**.
- Vygotsky outlines the **zone of proximal development** and scaffolding.

Discovery learning: learning that takes place when students are not presented with subject matter in its final form but are required to organise it themselves.

(c) Describe *one* weakness of the cognitive approach to education. [3]

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

- Discovery learning is too time consuming. Expository learning better.
- Discovery learning affected by **set** (predisposition to learn in a particular way); **need state** (degree of arousal); **mastery of specifics** (amount and detail of learning); **diversity of training** (variety of conditions under which learning takes place).
- Candidates may also contrast the cognitive approach with an alternative approach.
- Candidates may give a weakness of a theory which they may have outlined. This is acceptable.

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** 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 affecting 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 (read at 3 years of age; enormous energy) and Tempest with nine (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 was 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) You are the parent of a mentally gifted child. Giving reasons for your answer, suggest what strategies you would expect teachers to adopt to educate your child successfully. [6]

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

- **Acceleration**: bright children are promoted to a higher class than normal. Good intellectually but bad socially and emotionally.
- **Segregation**: bright children selected for particular schools. This may result in academic success in a particular ability but it is unfair, divisive and hard to implement.
- **Enrichment**: done within a normal classroom and can involve extra-curricular activity and individualised learning programmes with independent learning possible. Some argue this is best as socially it is good and gives a much wider range of children opportunities to progress. In the USA Renzulli (1977) advocates an **enrichment triad model** (aka revolving door model) where children in top 25% on academic ability or creative potential or high motivation can be enriched – but only if they wish. Stanley's (1976) **radical acceleration** is for gifted mathematicians.

4 (a) Describe what psychologists have discovered 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 learner 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 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.

Perhaps most common will be

- 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.

NB: although the question requires learning and teaching styles, full credit should be given for learning styles only.

(b) Evaluate what psychologists have discovered 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 a teacher may improve the learning effectiveness of students preparing for an examination.** **[6]**

Mark scheme guidelines apply in that any reasonable suggestion is acceptable
Any appropriate answer based on student study skills. Most likely:
- McCarthy's (1990) **4-MAT** system. Includes: motivation, concept development, practice and application. This is teacher-based who matches teaching styles with learning styles.
- **PQRST**: preview, question, read, self-recitation, test. Intended to improve ability to study and remember material in a textbook.
- **SPELT** (Mulcahy, 1986) Strategies for Effective Learning, Thinking. This is concerned with learning how to learn.

Memory techniques are also worth credit.

PSYCHOLOGY AND ENVIRONMENT

Section A

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

Crowding is a psychological state determined by perceptions of restrictiveness when exposed to spatial limitations (Stokols, 1972).
Alternatively Zlutnick & Altman (1972): crowding is an individual's inability to adequately control interactions with others. Definition not needed: question is always 'explain in your own words'.

(b) Briefly describe *one* study showing the effects of crowding on social behaviour. **[3]**

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 study by Calhoun (1962; 1973).

(c) Briefly describe *two* studies showing the effects of crowding on performance. **[6]**

Human studies: 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; 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) suggests 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.

6 (a) Explain, in your own words, what is meant by 'personal space'. **[2]**

Typically: the invisible boundary that surrounds us.

(b) Briefly describe *one* study on the invasion of personal space. **[3]**

Many studies could be included. Three '**classics**' are:
- Felipe and Sommer (1966). At a 1,500-bed mental institution an experimental confederate approached and sat next to lone patients. Felipe and Sommer (1966) performed a more ethical study in a library.
- Middlemist, Knowles, and Matter (1976) looked at the effects of invasion on physiological arousal, performing a study in a three-urinal men's lavatory.
- Konecni et al. (1975) and in a similar study Smith and Knowles (1979) stood close to pedestrians waiting to cross a road.

(c) Briefly describe *two* ethical issues caused by the invasion of personal space. **[6]**

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
- Participants do not give their informed consent to their space being invaded.
- Participants do not have the right to withdraw – some studies follow participants.
- Participants are deceived as the true nature of the study is not revealed to them.
- Participants may suffer psychological harm – they do not know the invader is 'safe'.
- Participants confidentiality is always maintained.
- Participants are hardly ever debriefed.

Answer needs a description rather then mere identification.

Section B

7 (a) Describe what psychologists have learned about 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. 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). Some candidates may look at **attraction** but evidence here is iffy.

(b) Evaluate what psychologists have learned about 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.

(c) Noise has a negative effect on performance. 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.
Most likely:
- can be physical measures such as inserting soundproofing (and rubber rail tracks re 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.
- coping strategies can also be employed.

8 (a) Describe what psychologists have found out about climate and weather. **[8]**

Candidates may begin with a distinction between **weather**, relatively rapidly changing conditions and **climate**, average weather conditions over a period of time. They may consider **Climatological determinism**, **Probabilism** and **Possibilism**. Inclusion of this would be impressive.

Candidates could consider any aspect such as temperature, wind, storms (hurricanes, tornados) altitude and anything else that pertains. Note that the syllabus refers to **performance**, **health** and **social behaviour** so answers may be based on these factors. Effects of **heat** is likely to be most common.

- **Performance**: lots of lab studies show conflicting results mainly due to variations in design. Also many field studies e.g. Pepler (1972) in classrooms and Adam (1967) with soldiers. Still individual differences. Bell suggests an **arousal response** (inverted U theory); Provins (1966) suggests differing **core temperatures** and that heat affects attention. Wyndham believes in **adaptation levels**.

- **Social behaviour: aggression**: the long hot summer effect: heat causes riots (Goranson & King (1970) and US riot commission (1968) but only in 1967 and only in US. Baron & Bell (1976) propose negative affect-escape model to explain it and lab studies in support. Many other studies on heat and aggression. Heat also may or may not affect **helping** (e.g. Page, 1978) and **attraction** (e.g. Griffit, 1970).

- **Health**: heat may cause heat exhaustion (sweating) or heat stroke (no sweating) or heart attacks.

Cold temperature can also be covered. Causes hypothermia, frostbite, etc. Also affects performance and social behaviour (too cold to help or be aggressive).

Wind: Causes fear due to potential destruction. Increases helping in summer and decreases in winter (Cunningham, 1979). Cohn (1993) wind decreases domestic violence.

Barometric pressure (e.g. pilots, divers) a possibility but not a lot of material available.

Candidates may also, legitimately, consider the effects of the **moon phases** on behaviour; the effects of **sunlight** and **seasonal affective disorder**.

(b) Evaluate what psychologists have found out about climate and weather. **[10]**

NOTE: any evaluative point can receive credit; the hints are for guidance only.
- the methods used by psychologists to study climate and weather;
- issues relating to individual and/or cultural differences;
- the implications the evidence has for society;
- comparing and contrasting theoretical explanations.

(c) Imagine the climate and weather of our planet fifty years from now. Using your psychological knowledge, suggest how the weather may affect our behaviour. **[6]**

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
Any of the above can be used: may be more deterministic (and less free-will); may affect performance more or less; may affect health and social behaviour more or less. Answer is speculative, so suggestion credited, supported with relevant psychological evidence.

PSYCHOLOGY AND HEALTH

Section A

9 (a) Explain, in your own words, what is meant by 'patient-practitioner relationship'. **[2]**

Typically: the relationship between the patient and practitioner; the approach the practitioner adopts during a consultation with a patient 1 mark basic, 2 marks elaboration.

(b) Describe *one* practitioner style. **[3]**

- Byrne & Long (1976) distinguish between a **doctor-centred style** and a **patient-centred style**.
- Doctors differ in judgements (Binky's disease) and may make a faulty diagnosis. This could be due to primacy and recency effects, or could be due to doctor approach (use of computers, statistics, heuristics).
- Savage & Armstrong (1990) compared a sharing consulting style (patient-centred) with a directive consulting style (doctor-centred).
- Marteau (1990) found patients prefer 10% chance of survival rather than 90% chance of non-survival.

(c) Describe *two* ways in which the patient-practitioner relationship can be improved. **[6]**

Most likely possibilities include:
Candidates could focus either on improving the patient 'end' or that of the practitioner. Practitioner more logical as they could attend training courses (e.g. Inui) or they could be more patient-centred rather than doctor-centred.
- changing physician behaviour (DiMatteo & DiNicola, 1982); sending Dr's on training courses;
- changing communication style (Inui et al., 1976);
- change information presentation techniques (Ley et al., (1982);
- have the person state they will comply (Kulik & Carlino, 1987);
- provide social support (Jenkins, 1979) and increase supervision (McKenney et al., (1973);
- Behavioural methods: tailor the treatment; give prompts and reminders; encourage self monitoring; provide targets and contracts.
Any appropriate suggestion based on psychological evidence is acceptable.

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

Typically: any behaviour which reduces ill-health and enhances good health. However, the opposite can be chosen because some people eat poorly, smoke and drink and do not exercise. This is also 'health behaviour'.

(b) Describe *one* cultural difference and *one* gender difference in health behaviour. **[6]**

Abnormality does vary from culture to culture. For example, Russia has 51 per 10,000 cases of schizophrenia, Denmark has only 15 per 10,000. Not only are there different abnormalities, but there are very different treatment methods too.

There are gender differences and relationship differences. For example, divorced people are much more likely to be admitted to a US mental hospital (1183 per 100,000) than those who are married (136 per 100,000). The family also has a bearing. One gender difference is lupus (90% women in UK) but also cultural differences in lupus too.

(c) Describe *one* developmental difference in health behaviour. **[3]**

Most likely: FAS – foetal alcohol syndrome is where newborn babies are deformed and have various abnormalities due to the mother drinking alcohol during pregnancy. But, any relevant developmental difference can be included.

Section B

11 (a) Describe what psychologists have found out about stress. [8]

Most likely candidates will focus on causes of stress: life events, hassles, job, noise, etc. Also relevant are measures of stress and ways of controlling stress.
Theories of stress can be considered, such as the GAS model.
There are two main measures: **physiological** and **psychological**:
- physiologically by recording devices e.g. sphygmomanometer;
- physiologically by sample tests e.g. analysis of blood or urine;
- psychologically by questionnaire based on life events; daily hassles or personality;
- psychologically by questionnaire, other causal factors (such as work) e.g. Professional Life Stress Scale.

Managing stress:
- Coping strategies: problem-focused coping and emotion-focused coping.
- **Medical**/pharmacological solutions. (a) benzodiazepines (trade names valium, librium, etc.). (b) beta-blockers (inderal) reduce physiological arousal and feelings of anxiety by blocking neurones stimulated by adrenaline.
- **Psychological** 1: (behavioural/cognitive strategies) can include progressive relaxation (Jacobsen, 1938); systematic desensitisation (Wolpe, 1958); biofeedback; and modelling. Psychological solutions 2: (cognitive/behavioural) can include cognitive restructuring (Lazarus, 1981); rational-emotive therapy (Ellis, 1962) and multi-modal therapy (Lazarus, 1981); imagery (Bridge et al., 1988).
- Alternative strategies involving meditation, hypnosis or yoga.
- Providing social support may also help (e.g. Cohen & Willis, 1985).
- Some candidates may consider ways of reducing post-traumatic stress which is legitimate.

(b) Evaluate what psychologists have found out about stress. [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) You visit a medical practitioner because you are suffering from stress. Giving reasons for your answer suggest ways in which your stress will be measured. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
Various physiological measures can be used, mainly **sphygmomanometer** – recording blood pressure. This indicates bodily state of arousal. Less common but also possible is taking of blood or urine samples – to record levels of hormones, corticosteroids and catecholamines.
The practitioner could ask questions which is a subjective measure (above are objective and may be more scientific). Questions could revolve around life events etc. but could also be about other health problems such as stomach ulcers which could be caused by chronic stress.
Unlikely, but also worth credit is galvanic skin response – recording skin conductivity which is heightened during times of arousal.

12 (a) Describe what psychologists have discovered about substance use and abuse. [8]

Candidates could offer definitions, distinguishing between use and abuse (e.g. Rosenhan & Seligman, 1984); dependence (physical and/or psychological) tolerance, addiction and withdrawal. They could also consider who uses/abuses and why they use/ abuse. Possible causes:

- Smoking: 1. **genetic** (e.g. Eysenck, 1980) 2. **nicotine addiction/regulation model** (e.g. Schachter, 1980) 3. **Biobehavioural model** (e.g. Pomerleau, 1989) 4. **opponent process model** (e.g. Solomon, 1980) cough=nasty so smoke=nice. 5. **social learning**/modelling. 6. Tomkins (1966): positive affect; negative affect; habitual; addictive. 7. Leventhal & Cleary (1980): why start: tension control; rebelliousness; social pressure. Lots of evidence to support; some good some iffy.
- Drinking: 1. **tension reduction hypothesis** (e.g. Conger, 1956) 2. **disease model** (a) Jellineks (1960) gamma and delta; (b) **alcohol dependency syndrome** (e.g. Edwards et al., 1977) = 7 elements of dependency. 3. **social learning/modelling**. Whereas 2 = genetic, 3 = learning so good for section (b).
- Drugs: similar reasons to above. Note that types of drugs and their effects are not relevant and should receive no credit.
- Food (obesity) 1. **age and metabolism** 2. '**gland problems**' 3. **heredity**: lots of twin studies and correlations with parents. 4. The **set-point theory**. Set-point determined by fat consumed as a child determining need for fat later. 5. restrained versus unrestrained eaters.
- Food (anorexia/bulimia) biological, cultural and psychological revolving around body image in females. Lots of explanations to choose from and relate.

(b) Evaluate what psychologists have discovered about substance use and abuse. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.
- the methods psychologists use to gain their evidence;
- comparing and contrasting theories;
- ethical issues involved in the research;
- generalisation of the results from the use of research participants.

(c) Using your psychological knowledge, suggest ways in which people can be discouraged from beginning to abuse a substance. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
Several possibilities here:
- Health promotion campaigns such as 'providing information' (e.g. Lewin) or community wide campaigns (e.g. three community study).
- Government strategies such as increasing cost, taxation, increasing age limit, restricting sales (if smoking).
- Individual strategies such as Flay's school programme or Botvin's life skills training (also smoking).
- Any other appropriate strategy depending on the chosen substance.

PSYCHOLOGY AND ABNORMALITY

Section A

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

Typically: from Greek schzein (split) and phren (mind).
It is characterized by abnormalities in the perception or expression of reality. Involves distortions in perception most commonly manifest as auditory hallucinations, paranoid or bizarre delusions, or disorganized speech and thinking with significant social or occupational dysfunction.

(b) Outline *two* explanations of schizophrenia. [6]

There are a number of explanations:
- **Behavioural**: due to conditioning and observational learning.
- **Psychodynamic**: regression to oral stage
- **Families** also blamed for schizophrenia; as are twins.
- **Cognitive**: breakdown in ability to selectively attend to stimuli in language, etc.
- **Genetics** also play a role.

(c) Describe *one* way in which schizophrenia may be treated. [3]

Most likely:
- Sensky (2000) has used cognitive-behavioral therapy in the treatment of schizophrenia.
- Paul & Lentz (1977) found that the use of tokens were successful in reducing bizarre motor behaviours and in improving social interactions with staff and other patients.
- The first generation of **antipsychotics** (or neuroleptics) began in the 1950s e.g. chlorpromazine. Then came **atypical anti-psychotics** which acted mainly by blocking dopamine receptors. The third generation of drugs, such as Aripiprazole, are thought to reduce susceptibility to metabolic symptoms present in the second generation atypical antipsychotics.

14 (a) Explain, in your own words, what is meant by the term 'fugue'. **[2]**

Most likely: from latin 'wild' or 'confused flight'. DSM: a sudden fleeing from one's immediate and customary locale and work with amnesia for the past identity and the assumption of a new identity. Involves both psychological flight **and** physical flight.
- **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.
- **PTSD** is a stress response caused by events outside the range of normal human experience.

(b) Describe *one* cause of fugue. **[3]**

What *causes* fugue is unclear. Usually an extremely stressful situation. Candidates may refer to a case study to illustrate.

(c) Describe *two* treatments for the effects of trauma. **[6]**

For amnesia/fugue:
- Hypnosis is one possibility. Sometimes this is helped with sodium amytal and sodium pentothal.
- Psychoanalysis – uses dream analysis, interpretation and other psychoanalytic methods to retrieve memories; may also involve placing patients in threatening situations where they are overwhelmed with intense emotion.
- Medication – benzodiazepines and other hypnotic medications, the patient is urged to relax and attempt to recall memories.

With the help of psychotherapy and learning their autobiographies from family members, most patients recover their memories completely.

Section B

15 (a) Describe what psychologists have found out about somatoform disorders. [8]

Typically: disorders in which physical symptoms are prominent but no cause can be found. Similarly: physical symptoms that mimic disease or injury for which there is no identifiable physical cause. E.g. hypochondriasis, pain where there is no physical cause, complaints about headaches, etc.
Most likely:

- **Hypochondriasis**: preoccupation 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) Evaluate what psychologists have found out about somatoform disorders. [10]

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

(c) Giving reasons for your answer, suggest a treatment for somatoform disorders. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
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, behaviors and cognitions through a goal-oriented, systematic procedure. Phillips found that patients with BDD who were randomly assigned to Cognitive Behavior 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.

16 (a) Describe what psychologists have found out 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 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. O-C 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: OCDs have increased activity in frontal lobe of left hemisphere.

(b) Evaluate what psychologists have found out 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) Giving reasons for your answer, suggest how obsessive-compulsive disorder may be treated. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
- Behavioral 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 'temporal conditions of work environments'. **[2]**

Typically: temporal conditions are the time structure of the work period e.g. shiftwork. Candidates may write about the more general 'organisational work conditions' of which the temporal conditions are an aspect. To gain any credit there must be reference to time.

(b) Describe *two* types of shiftwork. **[6]**

Most likely: short rotation or rapid rotation or 'continental' or 'metropolitan' approaches. Can have also have compressed work weeks or flexitime or 'on-call' system. Answers must be psychological for full marks.

(c) Describe *one* way in which temporal conditions of work environments may be improved. **[3]**

Temporal conditions = time. All agree shiftwork is bad. How to counteract? 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, 3 rest. etc. *Slow rotation theory* – should change as infrequently as possible to minimise effects but not popular (night shift for 1 month?)

18 (a) Explain, in your own words, what is meant by the term 'errors in operator-machine systems'. **[2]**

Typically: Chapanis (1976) outlines the **operator-machine system**: human systems: senses, information processing/decision-making and controlling; machine system: controls, operation and display (feeding back to senses).

(b) Describe *two* types of error in operator-machine systems. **[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);
- timing errors – too quickly or too slowly.

(c) Suggest *one* way in which errors in operator-machine systems can be reduced. **[3]**

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 the selection of people for work.** **[8]**

Main requirement is a consideration of the procedures involved in (a) *personnel recruitment* (the means by which companies attract job applicants), (b) *personnel screening* (the process of reviewing information about job applicants to select workers) and (c) *personnel selection* (via interviewing).
The process could include:
- Production of **job analysis** and **job description**.
- Advertising job via appropriate source(s).
- Production of an **application form**. This could be: (a) standard, (b) weighted, or (c) a Biographical Information Blank.
- **Screening tests**. These could test: (a) cognitive ability, (b) mechanical ability, (c) motor/sensory ability, (d) job skills/knowledge, (e) personality, (f) test specific to job/organisation.
- Many methods exist for analysis of screening tests and/or applications. Any method should be (a) reliable: via test re-test or internal consistency (how items correlate) and (b) valid: via content validity or criterion-related validity.
- **Interviews**: many studies and many aspects: (a) Use structured interviews; (b) Make sure that interview questions are job related; (c) Provide for some rating or scoring of applicant responses; (d) Use trained interviewers; (e) Consider using panel interviews; (f) Use the interview time efficiently.
- Follow up methods: references and letters of recommendation.
- Consideration throughout of equal opportunities.

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).

(b) **Evaluate what psychologists have discovered about the selection of people for work.** **[10]**

NOTE: any evaluative point can receive credit; the hints are for guidance only.
- issues concerning reliability and validity;
- assumptions made by psychometric testing and appraisal techniques;
- individual differences in test performance;
- the usefulness of tests to select people.

(c) **Giving reasons for your answer, suggest what personnel selection decisions need to be made when appointing a manager.** **[6]**

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
Any suggestion based on psychological theory acceptable. Most likely is use of one or more of the above aspects.

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.

(c) Suggest an appropriate decision-making strategy for a small team of workers. Give reasons for your answer. **[6]**

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.
Most likely: encourage evaluation; promoting open enquiry; use sub-groups; admit shortcomings; hold second-chance meetings; don't rush to a quick solution. Any logical suggestion will suffice.