Cambridge International AS & A Level

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PSYCHOLOGY **9990/32**

Paper 3 Specialist Options: Theory **March 2019**

MARK SCHEME

Maximum Mark: 60

Published

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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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Generic levels of response marking grids

Table A
The table should be used to mark the 8 mark part (a) 'Describe' questions (**2**, **4**, **6** and **8**).

Level	Marks	Level descriptor
4	7–8	• Description is accurate, coherent and detailed and use of psychological terminology is accurate and comprehensive. • The answer demonstrates excellent understanding of the material and the answer is competently organised.
3	5–6	• Description is mainly accurate, reasonably coherent and reasonably detailed and use of psychological terminology is accurate but may not be comprehensive. • The answer demonstrates good understanding of the material and the answer has some organisation.
2	3–4	• Description is sometimes accurate and coherent but lacks detail and use of psychological terminology is adequate. • The answer demonstrates reasonable (sufficient) understanding but is lacking in organisation.
1	1–2	• Description is largely inaccurate, lacks both detail and coherence and the use of psychological terminology is limited. • The answer demonstrates limited understanding of the material and there is little, if any, organisation.
0	0	• No response worthy of credit.

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Table B

The table should be used to mark the 10 mark part (b) 'Evaluate' questions (**2**, **4**, **6** and **8**).

Level	Marks	Level descriptor
4	9–10	• Evaluation is comprehensive and the range of issues covered is highly relevant to the question. • The answer demonstrates evidence of careful planning, organisation and selection of material. • There is effective use of appropriate supporting examples which are explicitly related to the question. • Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout. • The answer demonstrates an excellent understanding of the material.
3	7–8	• Evaluation is good. There is a range of evaluative issues. • There is good organisation of evaluative issues (rather than 'study by study'). • There is good use of supporting examples which are related to the question. • Analysis is often evident. • The answer demonstrates a good understanding of the material.
2	4–6	• Evaluation is mostly accurate but limited. Range of issues (which may or may not include the named issue) is limited. • The answer may only hint at issues but there is little organisation or clarity. • Supporting examples may not be entirely relevant to the question. • Analysis is limited. • The answer lacks detail and demonstrates a limited understanding of the material. Note: • If the named issue is not addressed, a maximum of 5 marks can be awarded. • If only the named issue is addressed, a maximum of 4 marks can be awarded.
1	1–3	• Evaluation is basic and the range of issues included is sparse. • There is little organisation and little, if any, use of supporting examples. • Analysis is limited or absent. • The answer demonstrates little understanding of the material.
0	0	• No response worthy of credit.

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Psychology and abnormality

Question	Answer	Marks
1(a)	**Explain what is meant by 'unipolar depression'.** Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: An affective disorder characterised by persistent low mood(1), OR lack of energy(1), OR and hopelessness(1). Low mood is long term(1) OR periods of mania are not experienced(1). Response must mention that low mood is long term or periods of mania are *not* experienced to receive full marks. Other appropriate responses should also be credited.	**2**
1(b)	**Describe <u>two</u> drug treatments for depression.** For each named drug treatment (up to max of two): Award 1 mark for a basic answer with some understanding of the topic area. Award 2 marks for a detailed answer with clear understanding of the topic area. For example: Tricyclics (1) – increasing the brain's supply of norepinephrine (1) and serotonin levels (1). MAOI (1) – slowing the natural breakdown of norepinephrine (1) and serotonin (1) and dopamine (1). SSRI (1) – Act on the levels of the neurotransmitter serotonin at the synapse, preventing its breakdown and reuptake. (1) Other appropriate responses should also be credited.	**4**

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Question	Answer	Marks
1(c)	**Explain <u>one</u> similarity and <u>one</u> difference between drug treatments for depression and cognitive restructuring treatment for depression (Beck, 1979).** Similarities could include – • Both require professional (doctor to prescribe and psychologist to 'teach' CBT) • Both have research support for their success. • Both take some time to be effective (usually 4 weeks for SSRI) Differences could include – • Individual needs to be motivated (and of certain personality type/insight) for cognitive treatment, whereas individual needs relatively little motivation to take drug. • Drugs have side effects including dizziness, nausea, insomnia, constipation. No side effects with cognitive treatment. • Patient more actively involved in cognitive restructuring but passive in drug therapy. Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will include one similarity and one difference. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will include one appropriate similarity in detail or one appropriate difference in detail. OR one similarity and one difference in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a similarity and/or difference. This could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited	**6**

Question	Answer	Marks
2(a)	**Describe the causes of impulse control disorders and non-substance addictive disorder.** Could include the following – Biochemical: dopamine Behavioural: positive reinforcement Cognitive: feeling-state theory (Miller, 2010). **Biochemical – dopamine.** The neurotransmitter dopamine has been linked to impulse control and addictive disorders. Dopamine's release is triggered by rewarding stimuli, such as engaging in pleasurable behaviours. So a pyromaniac will feel the reward of this 'happy chemical' when they start a fire. Deficiency in dopamine can lead to compulsions and addictions. **Behavioural – positive reinforcement** Operant conditioning states that the frequency of a behaviour is increased by the use of a reward. For the gambler this can be money (for the kleptomaniac and pyromaniac the thrill associated with their behaviours). Positive reinforcement explains gambling well by the use of schedules of reinforcement. Gambler is compelled to continue because they 'might' win the next time. **Cognitive – feeling-state theory (Miller, 2010)** Intense positive feelings link with specific behaviours such as gambling. Impulse control disorders are caused because these links form a 'state-dependent memory' (feeling state). The intense feeling-state experienced is all the emotions, thoughts and physiological arousal, and this leads to impulse-control problems and cause obsessions. The individual with negative thoughts about themselves can experience an intense feeling of euphoria and power when they indulge in their impulsive behaviour, overcoming that negative thought to a great extent. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	**8**

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Question	Answer	Marks
2(b)	**Evaluate the causes of impulse control disorder and non-substance addictive disorder, including a discussion of reductionism.** A range of issues could be used for evaluation here. These include: • **Named issue** – **reductionism** Reductionist nature of the causes. They do not take into account the background of the sufferer or the potential contribution of other factors e.g. genetics or indeed how these factors may be interacting within the individual. • Deterministic nature of the causes • Nature versus Nurture debate with reference to the different causes • Practical applications • Evaluation of evidence of causes • Some theories of causes explain one addiction better than another – behavioural is effective for gambling but less so for pyromania. Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	**10**

Psychology and consumer behaviour

Question	Answer	Marks
3(a)	**Explain what is meant by 'personal space'.** Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: Personal space is a portable, invisible boundary surrounding us, into which others may not trespass.(1) It regulates how closely we interact with others, moves with us, and expands and contracts according to the situation in which we find ourselves.(1) Other appropriate responses should also be credited	**2**
3(b)	**Describe <u>two</u> findings of the study by Milgram et al. (1986) on defending a place in a queue.** Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. **For example: 2 marks each** • Defensive reactions of queuers were noted in 129 naturally occurring waiting lines. • Queuers following the point of intrusion were more likely to object than those who preceded it; • Two intruders provoked more reaction than a single intruder; • Buffers (passive confederates standing in line) dampened the queue's response to intruders. • Physical actions such as putting hands on shoulders occurred in 10% of queues; • Verbal objections such as "No way! The line's back there. We've all been waiting and have trains to catch" occurred in 22% of queues; • Non-verbal objections such as stares and hostile gestures occurred in 15% of queues. Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
3(c)	**Explain <u>one</u> strength and <u>one</u> weaknesses of the study by Milgram et al. (1986).** Strengths may include: Standardised procedure Multiple factors considered (where intrusion occurs in line, number of intruders, use of buffers, different types of queue) Large sample size and types of queues – 129 queues (high generalisability) Field study so high in ecological validity Both male and female intruders used (lack of gender bias) Both qualitative and quantitative data collected Weaknesses may include Cultural bias – only USA considered, not carried out in collectivist cultures. Field study so potential problems with control of extraneous variables Independent measures design so participant variables could have been an issue Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will discuss one appropriate strength and one appropriate weaknesses. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will discuss one appropriate strength or weakness in detail or both a strength and a weakness in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a discussion of one strength or one weakness. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	**6**

Question	Answer	Marks
4(a)	**Describe what psychologists have discovered about lighting, colour and smell in the physical environment.** Could include the following: • Models of the effects of ambience: pleasure-arousal and cognition-emotion • Lighting and colour in retail stores (Kutlu et al, 2013) • Effects of colour on shopper arousal and emotion (Chebat & Michon, 2003) **Models of the effects of ambience: pleasure-arousal and cognition-emotion.** Pleasure arousal model – Mood is a mediating factor between environmental cues and behaviour. We react to environment with approach or avoidance. A positive response to music, smell, etc. increase length of time a consumer spends in a shop, increasing the amount of money spent. Cognition-emotion model – Zajonc & Markus (1984) propose emotion can be generated by biological, sensory, and cognitive events. So cognition may produce emotion but does not necessarily cause emotion. Lazarus (1966) suggests that cognitions are necessary but not sufficient precursor to emotions. **Lighting and colour in retail stores (Kutlu et al, 2013)** 121 participants in a questionnaire on the influence of colour and light on perception of retail design. They answered questions which evaluated the store's image. 75% thought lighting had an effect on brand image, 31% found the lighting relaxing. Concluded perceive image and identity of the store/brand influenced by both lighting and colour scheme with light coloured and highly reflective colour scheme contributed to the 'exclusive' brand image. **Effects of colour on shopper arousal and emotion (Chebat & Michon, 2003)** Field experient in a shopping mall in Cananda over two weeks. In the second week a pleasing scent(citrus) was put into the mall's main corridor. 145 participants during the scent week (447 in the control week). Found a more favourable perception of the product quality and shopping environment was reported. Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	**8**

Question	Answer	Marks
4(b)	**Evaluate what psychologists have discovered about lighting, colour, and smell in the physical environment, including a discussion of ecological validity.** A range of issues could be used for evaluation here. These include: • **Named issue – Ecological validity**. Chebat & Michon (2003) and Kutlu et al. (2013) both carried out in real stores; Chebat & Michon in Canada and Kutlu et al. in Istanbul, so high ecological validity. Kutlu et al. did not manipulate variables, though Chebat & Michon did (field experiment). However, both measures were customer surveys. • Research support – Chebat & Michon tested models of cognition and emotion systematically. • Problems with control of variables in research. • Problems with self-reports (of customer satisfaction). • Models could be said to be reductionist. Need to test lighting, colour and smell all together to come to more holistic conclusion. • Ethics – customers given consent though do not always know exactly what is happening (Chebat & Michon). Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	**10**

Psychology and health

Question	Answer	Marks
5(a)	**Explain what is meant by a 'Type II error' in relation to practitioner diagnosis.** Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: A Type II error is when a practitioner declares that a patient is well when they are ill.(2) Only one mark to be awarded for 'false negative'. Examples can achieve up to one mark on their own. Other appropriate responses should also be credited.	**2**
5(b)	**Describe the procedure used in the study by McKinstry and Wang (1991) on the style of doctors' clothing.** Award 1–2 marks for a basic answer with some understanding of the topic area. Award 3–4 marks for a detailed answer with clear understanding of the topic area. For example: Patients asked to look at 8 photographs(1) – a man in five different styles and a woman in three different styles. White shirt over formal suite, formal suit white shirt and tie, denim jeans open neck and short sleeved shirt, etc. Woman – white coat over skirt and jumper, pink trousers jumper and gold earrings, etc.(2 marks maximum for examples of photographs) Asked 'Which doctor would you be happiest about seeing the first time?' Rated on 0-5 scale. (1) Also asked about confidence of ability of the doctor in pictures(1), whether they would be unhappy about consulting any of them(1) and which one looked most like their own doctor.(1) Finally, closed questions about doctors' dress in general and attitudes about specific items of clothing.(1) Other appropriate responses should also be credited.	**4**

Question	Answer	Marks
5(c)	**Explain <u>two</u> strengths of the study by McKinstry and Wang (1991).** Strengths could include: Large sample size considered over 30 doctors and 5 practices Good control as same doctor (and posed) used for male and female in both cases Ease of scoring items Variety of measures (reliability/validity) High proportion of patients interviewed (70%). Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will discuss two strengths. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will discuss one appropriate strength in detail. OR will discuss both two strengths in less detail. • Candidates will provide a good explanation. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a discussion of one or two strengths. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited	**6**

Question	Answer	Marks
6(a)	**Describe what psychologists have discovered about causes of stress.** Could include – Causes of stress: work (Chandola et al., 2008), life events (Holmes and Rahe, 1967), personality (Friedman and Roseman, 1974). **Causes of stress –** **Work –** Chandola et al (2008) 10 308 London male and female civil servants. Questionnaire and clinical data collected. Questions asked about work stress and behavioural risk factors. Clinical data included metabolic syndrome, morning rise in cortisol and incident CHD. Chronic work stress was associated with CHD and stronger amongst participants aged under 50. Similar associations between work stress and low physical activity, poor diet, metabolic syndrome and lower heart rate vulnerability. Work stress associated with a higher morning rise in cortisol. 32% of the effect of work stress on CHD attributed to its effect on health behaviour and the metabolic syndrome. **Life events** – Holmes & Rahe (1967) using Social Readjustment Rating Scale SRRS. Derived initially from a questionnaire with 394 participants asked to rate 43 life events given the arbitrary rating of 50 for marriage. Death of a spouse received a mean rating of 100, with divorce scoring 73. Pregnancy was rated 40, business re-adjustment 39, and change in sleeping habits 16. Those who score over 300 on the SRRS in any one year are found to have suffered more illness due to stress. **Personality** – Friedman & Rosenman (1974) Link between Type A personality and heart conditions, due to physiological stress on body. Coronary patients are often impatient, tense, and competitive. These individuals who have Type A personality, are more likely to be ill with coronary conditions compared to those who are Type B (laid back). Other sources can be described including **Daily Hassles** and **Lack of Control.** Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	**8**

Question	Answer	Marks
6(b)	**Evaluate what psychologists have discovered about causes of stress, including a discussion on reliability.** A range of issues could be used for evaluation here. These include: • **Named issue – Reliability** Reliability in research includes use of control group (Johansson) or lack of one, gathering data over extended time (Holmes & Rahe), other measures of stress being used Johansson/Chandola), or link with daily hassles. Reference to lack of support from other studies. Reliability of measure of stress. • Individual differences • Practical applications • Ethnocentrism • Comparison of the sources. • Validity Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	**10**

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Psychology and organisations

Question	Answer	Marks
7(a)	**Explain what is meant by 'slow rotation' in shiftwork.** Award 1 mark for a basic explanation of the term/concept. Award 2 marks for a detailed explanation of the term/concept. For example: Shiftwork refers to a working pattern that does not involve working the same hours all the time. Slow rotation shift changes are infrequent changes e.g. working the same day shift for a number of weeks and then night shifts for a similar number of weeks. Examples (as above) can achieve up to one mark on their own. Other appropriate responses should also be credited.	**2**
7(b)	**Describe the study by Gold et al. (1992) on shiftwork and accidents.** Award 1–2 marks for a basic answer with some understanding of the research. Award 3–4 marks for a detailed answer with clear understanding of the research. Abstract: A hospital-based survey on shiftwork, sleep, and accidents was carried out among 878 Massachusetts nurses (all female) 687 questionnaires were returned. In comparison to nurses who worked only day/evening shifts, rotators had more sleep/wake cycle disruption and nodded off more at work. Rotators had twice the odds of nodding off while driving to or from work and twice the odds of a reported accident or error related to sleepiness. Application of circadian principles to the design of hospital work schedules may result in improved health and safety for nurses and patients. A detailed answer should include reference to the aim, participants, method and result(s) of the study. Other appropriate responses should also be credited. (e.g. details of the study, such as results which are not listed above).	**4**

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Question	Answer	Marks
7(c)	**Explain <u>one</u> strength and <u>one</u> weakness of the research by Gold et al. (1992).** Likely strengths include – • Strengths of quantitative data and self-reports • Kept confidential – this could increase honesty in the responses • Useful to the hospital and similar companies to be aware of problems of shiftwork (especially for those who change shifts frequently) and accidents • Large sample size, lots of other variables taken into account (use of medication, age etc.). Likely weaknesses include – • Lack of generalisability due to the study just using one hospital (in one area of USA) • Only nurses considered (may be different for other shiftworkers) • Only female nurses used • Small period of time considered (4 weeks) • Problems of self-report (exaggeration (many people do not like shiftwork so may change the amount of time they say they have nodded off in an attempt to change their shift in the future/keep their dayshift) • Social desirability bias Mark according to the levels of response criteria below: Level 3 (5–6 marks) • Candidates will show a clear understanding of the question and will discuss one strength and one weakness. • Candidates will provide a good explanation with clear detail. Level 2 (3–4 marks) • Candidates will show an understanding of the question and will discuss one appropriate weakness in detail or one appropriate strength in detail. OR one weakness and one strength in less detail. Level 1 (1–2 marks) • Candidates will show a basic understanding of the question and will attempt a discussion of either a strength or a weakness. They could include both but just as an attempt. • Candidates will provide a limited explanation. Level 0 (0 marks) No response worthy of credit. Other appropriate responses should also be credited.	**6**

Question	Answer	Marks
8(a)	**Describe measures of job satisfaction used by psychologists.** Could include the following: • Rating scales and questionnaires: job descriptive index (Smith et al., 1969) • Minnesota satisfaction questionnaire (Weiss et al., 1967) • Quality of working life (QWL) questionnaire (Walton, 1974) **Rating scales and questionnaires: job descriptive index (Smith et al., 1969)** Questionnaire measures job satisfaction in experience of work, salary, promotion prospects, experience of supervision, experience of co-workers. Simply scale of yes, no, or can't decide to each item. Is compared with standardised norms based on data from a large sample of people and updated regularly. **Minnesota satisfaction questionnaire (Weiss et al., 1967)** Long version contains 100 items and short version 20. Measures satisfaction with a range of aspects including company policies, scope for advancement, security, independence, recognition, responsibility, variety and working conditions. Uses a Likert scale. Original scale was very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied and changed because of skewed results to not satisfied, somewhat satisfied, satisfied, very satisfied, extremely satisfied. **Quality of working life (QWL) questionnaire (Walton, 1974)** Used to assess feelings employees have towards jobs, colleagues, and companies informing how these feelings affect organisational growth and profitability. Could also be seen to allow organisation to respond to employees' needs. A range of factors assessed including job security, reward systems, pay levels, and opportunity for growth. Uses a Likert scale. Quite complex language used (e.g. remuneration, salubrity, polyvalence). 8 key components – Mark according to the levels of response descriptors in Table A. Other appropriate responses should also be credited.	**8**

Question	Answer	Marks
8(b)	**Evaluate measures of job satisfaction used by psychologists, including a discussion of self-reports.** A range of issues could be used for evaluation here. These include: • **Named issue – self-reports** All give quantitative data, so easy to complete. Problems of social desirability bias. Language issue in QWL (as detailed above) so inaccessible to some employees. Problems of acquiescence bias with Likert scale. Concern about job future if participants answer 'wrongly'. • Qualitative/quantitative data • Reductionist or holistic measure • Reliability • Usefulness/application to everyday life. Mark according to the levels of response descriptors in Table B. Other appropriate responses should also be credited.	**10**

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