

Paper 1

1. With regard to premenstrual syndrome, all of the following statements are true except:
 - a. It is a research diagnosis in DSM-IV
 - b. Symptoms occur in the luteal phase
 - c. Symptoms remit for at least 1 week in the follicular phase
 - d. The diagnosis is less stable over 48 months
 - e. To be of clinical significance the symptoms should be of at least moderate intensity and cause severe functional impairment (APT 2007)

2. Which of the following statements about antidepressant discontinuation is true?
 - a. Discontinuation symptoms are dependent on the underlying psychiatric disorder
 - b. Discontinuation symptoms are not associated with mirtazapine
 - c. It was first reported following the discontinuation of amitriptyline
 - d. The mean duration of discontinuation syndrome is 2 weeks
 - e. The onset of symptoms more than 1 week after discontinuation is unusual (APT 2007)

3. Regarding the treatment of mania, the following statements are all true except:
- a. Antipsychotics are the most commonly used drugs for patients hospitalised with mania
 - b. Blockade of α_1 and H_1 receptors is hypothesised to contribute to the antimanic property of antipsychotics
 - c. The NNT for olanzapine in the treatment of mania is 4
 - d. Olanzapine acts faster in patients with non-psychotic mania than does valproate
 - e. Olanzapine treatment predisposes to depression more than treatment with haloperidol during a phase of mania (APT 2008)
4. Which of the following statements about dangerous and severe personality disorder is true?
- a. According to the Department of Health definition, the risk presented should be functionally linked to personality disorder
 - b. An admission to the DSPD unit requires one or more DSM-IV personality-disorder diagnoses
 - c. Antisocial personality disorder is the second most common diagnosis among juvenile prisoners
 - d. The minimum assessment required for admission to the DSPD unit does not require assessment on the International Personality Disorders Questionnaire
 - e. Risk Matrix 2000 focuses on non-sexual offending (APT 2007)

5. Regarding the behavioural activation approach for depression, all of the following statements are true except:
- a. Behavioural activation is not about scheduling satisfying or pleasant events
 - b. Behavioural activation uses the functional analysis of cognitive processes that involve avoidance
 - c. Developmental formulation in behavioural activation shifts the emphasis away from its social context
 - d. There is no significant difference between activity scheduling and activity scheduling with cognitive challenges
 - e. There is no significant difference in 2-year outcomes between activity scheduling and activity scheduling with cognitive challenges to core beliefs and assumptions (APT 2008)
6. Which of the following statements is true regarding behavioural activation for depression?
- a. Goals should always include returning to normal work as soon as possible
 - b. Learning theory is an alternative model to that of behavioural activation
 - c. The number of sessions for treating depression is between 8 and 12
 - d. Secondary coping behaviours are targeted when the individual is aware of precipitating factors
 - e. The Valued Living Questionnaire offers prompts for values for the patient to decide on a Likert scale (APT 2008)

7. All of the following are approaches complementary to behavioural activation except:
 - a. Acceptance and commitment therapy
 - b. Compassionate mind training
 - c. Family therapy
 - d. Exercise and healthy eating
 - e. Existential therapy (APT 2008)

8. Which of these statements about the epidemiology of paranoia is true?
 - a. Delusions of reference are the second most common type of delusions
 - b. Less than 1% of the non-clinical population have delusions of a level of severity comparable to that of clinical psychosis
 - c. Odder, less plausible paranoid thoughts build on commoner, more plausible ones
 - d. Persecutory delusions are found in post-traumatic stress disorder but not in epilepsy
 - e. The rate of delusional beliefs in the general population is greater than that of psychosis (APT 2006)

9. Which of the following statements about the cognitive behaviour analysis system of psychotherapy (CBASP) is true?
 - a. An interpersonal discrimination exercise is a conclusion that a patient draws with the assistance of the therapist about a significant other in the patient's life
 - b. It was developed as a treatment for acute reactive depression
 - c. Its key mechanism of change includes disciplined social involvement
 - d. It uses its main therapy technique of situational analysis to ameliorate psychopathology during treatment sessions
 - e. Its theoretical premise is that arrested maturational development is the aetiological basis of depression (APT 2007)

10. In CBASP, the therapist's personal involvement in the patient's problems to demonstrate for the patient that behaviour has consequences is part of which of the following?
- Contingent personal responsivity
 - Disciplined personal involvement
 - Hot spot
 - Interpersonal discriminatory exercise
 - 'Significant other' history (APT 2007)
11. Which of the following statements about CBASP is true?
- Contingent personal responsivity provides an opportunity to direct the patient's attention to the impact of the therapist's behaviour on the patient
 - The Coping Survey Questionnaire is a type of Likert scale
 - One way of analysing stimulus value is by using the Impact Message Inventory
 - Situational analysis has three stages
 - There is no significant difference between CBASP combined with drug therapy and drug therapy alone (APT 2007)
12. Which of the following statements about conversion disorder is true?
- According to DSM-IV criteria, conversion disorder is characterised by the involvement of psychological factors
 - DSM-IV categorises conversion disorder and somatoform disorders separately
 - Symptoms are common in children aged younger than 8 years
 - Symptoms are most common in young males
 - Around 10% of the patients admitted to general medical services have had conversion symptoms at some time in their life (APT 2009)

13. The Zurich criteria for hypomania include all of the following except:
- The absence of a past history of mania
 - At least 3 of the 7 symptoms of hypomania according to DSM-IV
 - Euphoria, irritability or over-activity
 - Experience of negative consequences of hypomanic periods
 - Hypomanic symptoms with a duration of at least 1 day (APT 2006)
14. Indicators of bipolarity in apparently unipolar depression include all of the following except:
- Antidepressant-induced mania or hypomania
 - Early onset of depression
 - Multiple family members with major depression
 - Postpartum illness
 - Psychotic features after the age of 35 years (APT 2006)
15. Regarding the use of IQ tests in the diagnosis of early schizophrenia, all of the following statements are true except:
- The average decline in IQ in samples with first-episode illness is generally less than that in groups with chronic schizophrenia
 - In cases of suspected schizophrenia, a decline of 15 or more points indicates the presence of the disease
 - National Adult Reading Test (NART) underestimates IQ decline in patients with schizophrenia
 - People with schizophrenia on average have a lower IQ than the general population
 - People with schizophrenia on average have a lower IQ than patients with bipolar disorder (APT 2008)

16. The therapeutic aims of long-term supportive psychotherapy in psychosis include all of the following except:
- Establishing a therapeutic alliance
 - Holding and containing
 - Promoting awareness of transference issues
 - Promoting stability
 - Providing rehabilitation pathways (APT 2008)
17. Which of the following is the therapeutic technique of long-term supportive psychotherapy?
- Cognitive reattribution
 - Counselling
 - Dynamic formulation
 - Environmental interventions
 - Relaxation training (APT 2008)
18. Which of the following statements about narcolepsy is true?
- Automatic behaviour is rare in patients with narcolepsy
 - High concentrations of orexin A have been found in the CSF of patients with narcolepsy
 - Overnight polysomnography reveals the presence of sleep-onset REM
 - The prevalence of narcolepsy in the general population is 2.5%
 - Sleep paralysis is seen in 75% of patients with narcolepsy (APT 2006)

19. Which of the following statements about sleep disorders is true?
- All episodes of behavioural disorder are associated with atonia in REM sleep disorder
 - Clonazepam is contraindicated in patients with poor sleep in Guillain–Barré syndrome
 - Episodes of behavioural disorder occur during the first third of sleep
 - Individuals with non-REM sleep disorder act out their dreams
 - Methylphenidate worsens cataleptic attacks (APT 2006)
20. All of the following statements about paranoid personality disorder are true except:
- Comorbidity with other personality disorders reaches up to 50%
 - High levels of delinquency in teenagers have been associated with paranoid features
 - Its prevalence in community samples is 1.3%
 - Its prevalence among psychiatric outpatients is up to 10%
 - Around 10% of people with paranoid personality disorder suffer from panic disorder (APT 2009)
21. With regard to the psychological processes in paranoid personality disorder, all of the following statements are true except:
- Attributional bias is a defence against low self-esteem
 - Low levels of rumination are associated with aggression
 - Paranoid thinking is associated with externalising personal attributional bias
 - Paranoid thinking is associated with deficits in theory of mind
 - Reciprocal determinism is a characteristic feature of the disorder (APT 2009)

22. All of the following are elements of the psychoanalytic theory of depression except:
- a. Ambivalence predisposes people to depression after object loss
 - b. An excessively severe ego influences chronicity of depression
 - c. Early feeding and affective bonding experiences are of particular importance in vulnerability to depression
 - d. Somatic symptoms of depression arise from inhibited feelings of arousal
 - e. The triangle of conflict includes feelings of anxiety and defence (APT 2009)
23. All of the following statements about spirituality are true except:
- a. Mental health professionals' attitudes towards spiritual care tend to be negative
 - b. One of the areas of questioning recommended in the *Spirituality and Mental Health* leaflet from the Royal College of Psychiatrists is in regard to remedies
 - c. Opinion polls indicate that although there has been a decline in religious beliefs, spirituality remains strong
 - d. Psychiatric patients associate outcomes involving improved capacity for problem solving with spiritual care
 - e. Within the literature, 20% of the studies identify spiritual or religious beliefs as being beneficial (APT 2007)

24. Which of the following statements about steroids is true?
- a. Anabolic steroids are prescription-only drugs
 - b. Anabolic steroids are controlled drugs under class D
 - c. Their circulating level of testosterone is typically 5% of that in males
 - d. In a survey of college students in the UK, current steroid use or use during the previous year was 5%
 - e. Around 10% of GPs treat patients who have engaged in steroid misuse (APT 2006)
25. Which of the following statements about the characteristics of steroids is true?
- a. Oxymetholone causes little liver toxicity
 - b. Methenolone acetate causes severe water retention
 - c. Nandrolone causes dose-dependent hypertension
 - d. Stanozolol is injectable
 - e. Testosterone enantate is long acting (APT 2006)
26. Which of the following matches is accurate with regard to drugs taken along with anabolic steroids?
- a. Clenbuterol – worsens asthma
 - b. Cytomel – synthetic T₃
 - c. Human growth hormone – high risk of hypoglycaemia
 - d. Insulin-like growth factor – cardiomegaly
 - e. Tamoxifen – oestrogen agonist (APT 2006)

27. All of the following statements about steroids and mental illness are true except:
- Depression is associated with withdrawing from steroids
 - During steroid use, people score lower on schizoid personality traits
 - The risk of developing psychotic symptoms may be related to high-dose testosterone
 - Self-reported aggression may be the only sign of steroid misuse
 - Steroid users have been shown to have a higher prevalence of cluster B personality traits (APT 2006)
28. Which of the following statements about the NICE guidelines for bipolar disorder is true?
- The annual cost of bipolar disorder in the UK is around £20 million
 - Carbamazepine should not be used for the treatment of acute mania
 - Paroxetine is the drug of choice for treating severe depression in pregnant women with bipolar disorder
 - The incidence of bipolar disorder decreases from mid to late life
 - The use of the Mood Disorder Questionnaire is advisable (www.nice.org.uk)

29. All of the following are NICE recommendations for the use of antidepressants in bipolar disorder except:
- a. Anyone under the age of 30 years should be reviewed within 1 week for suicidal ideation
 - b. If the patient does not respond to three adequate trials of antidepressants, you should consider referral to a clinician with special interest
 - c. Lamotrigine can be used routinely to treat depressive episodes in bipolar type 1 disorder
 - d. Venlafaxine is less associated with discontinuation symptoms than are SSRIs
 - e. When the symptoms have been less severe for at least 8 weeks, the discontinuing of antidepressants should be considered (www.nice.org.uk)
30. Which of the following statements about the epidemiology of schizophrenia is true?
- a. Around 80% of people with schizophrenia have persistent problems with social functioning
 - b. Around 60% of patients with schizophrenia are likely to relapse within 5 years of a treated first episode
 - c. The best predictor of a long-term prognosis is poor functioning in the first 2 years post diagnosis
 - d. Mortality among people with schizophrenia is 30% higher than that of the general population
 - e. Young women from diverse ethnic backgrounds are at a higher risk of suicide (KS)

31. Which of the following statements about schizophrenia patients' physical health is true?
- a. GPs are better than psychiatrists at recognising and treating physical health-related problems in people with schizophrenia
 - b. GPs are as likely to screen individuals with schizophrenia for cardiovascular risk as they are to screen those with asthma
 - c. Group intervention for smoking cessation has no significant impact on morbidity
 - d. Patients with schizophrenia are less likely to attend screening for cardiovascular disorders than other people
 - e. People with schizophrenia apparently do not have raised rates of lung cancer (www.nice.org.uk)
32. Which of the following statements about the management of schizophrenia is true?
- a. Around 10% of schizophrenia patients receiving first-generation antipsychotics develop tardive dyskinesia
 - b. Fewer than 10% of service users are managed solely in primary care
 - c. Raised serum prolactin levels from antipsychotics lead to reduced bone density
 - d. Services for schizophrenia account for 40% of NHS spending on mental health
 - e. Up to 25% of schizophrenia patients have a poor response to conventional antipsychotics (www.nice.org.uk)
33. Which of the following cranial nerves leaves the brainstem through the middle cerebellar peduncle?
- a. V
 - b. VI
 - c. VII
 - d. VIII
 - e. IX (TN)

34. The cranial nerve that arises between pyramids and olives is:
- VIII
 - IX
 - X
 - XI
 - XII (TN)
35. The descending tract of the trigeminal nerve forms:
- The fasciculus cuneatus
 - The fasciculus gracilis
 - The tuberculum cinereum
 - The tuberculum gracilis
 - The tuberculum cuneatus (TN)
36. Which of the following does the trigeminal ganglion occupy?
- The diaphragm sella
 - The falx cerebri
 - The falx cerebelli
 - Meckel's cave
 - The tentorium cerebella (TN)
37. All of the following are correct with regard to the composition of cerebrospinal fluid except:
- Calcium concentration is 1.0–1.4 mmol/L
 - Magnesium concentration is 0.8–1.3 mmol/L
 - pH is 7.3
 - Potassium concentration is 2.0–2.8 mmol/L
 - Protein – almost none (TN)

38. All of the following statements about the corticospinal tract are true except:
- Fibres terminating in the ventral motor horn of the spinal cord are involved in muscle contraction
 - Fibres that do not decussate form the anterior corticospinal tract
 - It passes through the posterior limb of the internal capsule near its genu
 - It passes through the posterior half of the posterior limb of the internal capsule
 - It passes through the upper third of the crux cerebri (TN)
39. Which of the following statements about the corticobulbar tract is correct?
- The corticonuclear tract descends posterior to the corticospinal tract
 - The corticonuclear tract projects fibres bilaterally to the lower motor neuron of the facial nucleus that innervates muscles in the lower half of the face
 - Its fibres terminate not only in target cranial nerve motor nuclei but also in the sensory relay nuclei
 - The inferior colliculus relays corticonuclear fibres
 - The lower motor neuron that innervates the genioglossus muscle receives bilateral corticonuclear projections (TN)
40. Mr Bainbridge presents with an inability to coordinate hand movements bilaterally, with no evidence of paralysis. At what level is his lesion?
- Corticospinal tract at the level of corona radiata
 - Corticospinal tract at the level of crus cerebri
 - Premotor cortex
 - Primary motor cortex
 - Supplementary motor area (TN)

41. Neostriatum is made of caudate and which of the following?
- Globus pallidus
 - Nucleus accumbens
 - Subthalamic nucleus
 - Ventral pallidum
 - Ventral tegmental area (TN)
42. Corticostriate fibres that terminate in the putamen use which of the following?
- Aspartate
 - Dopamine
 - Glycine
 - Serotonin
 - Arginine-vasopressin (TN)
43. Which of the following is the only cranial nerve to send central processes of some of its first-order neurons to synapse directly in the cerebellum?
- III
 - V
 - VII
 - VIII
 - XI (TN)
44. The carotid sinus reflex would be lost in a lesion involving which of the following?
- The inferior ganglion of glossopharyngeal nerve
 - The jugular ganglion of vagus nerve
 - The otic ganglion of glossopharyngeal nerve
 - The superior ganglion of glossopharyngeal nerve
 - The superior ganglion of vagus nerve (TN)

45. Which of the following is the nucleus involved in phonation?
- Ambiguus
 - Dorsal motor nucleus of vagus
 - Hypoglossal
 - Solitarius
 - Spinal nucleus of trigeminal (TN)
46. In which of the following are the cell bodies of rods and cones present?
- Ganglion cell layer
 - Inner nuclear layer
 - Outer nuclear layer
 - Optic nerve fibre layer
 - Rod and cone layer (TN)
47. Which of the following statements about the optic pathway is true?
- The axons of the optic nerve become myelinated once they pierce the lamina cribrosa
 - The optic chiasma sends fibres to the hypothalamus
 - The secondary visual cortex involves the middle temporal area
 - The sublenticular portion of the geniculocalcarine tract goes up to the cuneate gyrus
 - The first-order neurons are pseudounipolar (TN)

48. All of the following statements about the primary somatosensory cortex are true except:
- a. The area within the central sulcus receives input from muscle receptors
 - b. It includes the dorsal part of the paracentral lobule
 - c. The primary auditory cortex includes the transverse temporal gyri of Heschl
 - d. The primary visual cortex receives input from the macula of retina in its rostral portions
 - e. A solitary nucleus transmits taste sensation to the postcentral gyrus through the ventroposteromedial nucleus of the thalamus (TN)
49. All of the following statements about the cortex are true except:
- a. Broca's area consists of supramarginal gyrus
 - b. The dorsolateral prefrontal cortex functions in working memory
 - c. The secondary auditory cortical areas are connected with Wernicke's area
 - d. The somaesthetic association area is located in the superior parietal lobule
 - e. Tertiary visual areas include the middle temporal area of the cortex (TN)
50. Mr Bainbridge presents with cortical blindness. This is due to an infarction involving which of the following?
- a. The anterior cerebral artery
 - b. The anterior communicating artery
 - c. The basilar artery
 - d. The middle cerebral artery
 - e. The posterior communicating artery (TN)

51. Mr Bainbridge presents with a deviation of both his eyes to the right side. This is due to a lesion involving which of the following?
- The left frontal eye field
 - The left primary visual area
 - The right frontal eye field
 - The right primary visual area
 - The right visual association area (TN)
52. Mr Bainbridge presents with difficulty in processing what he hears and formulating a response. However, he can comprehend what he hears, and his language expression is fluent. At which level is the lesion?
- The arcuate fasciculus
 - Broca's area
 - The primary auditory cortex
 - The transcortical global
 - Wernicke's area (TN)
53. Which of the following statements about pain sensation is true?
- The activation of large myelinated mechanoreceptor afferents can reduce some forms of pain
 - The anterior nucleus of the hypothalamus is involved in the pathways for discriminating aspects of somesthesia
 - Burning sensations are thought to be carried by small myelinated A δ fibres
 - The electrical stimulation of the raphe nucleus produces profound hyperaesthesia
 - The spinal-cord neurons that relay pain sensation are located in the deep laminae of the dorsal grey matter (SBN)

54. Which of the following statements is true?
- a. Clasp knife reflex is mediated by interneurons which are connected to 1a fibres
 - b. The GABA-secreting interneurons of basal ganglia are co-localised with somatostatin
 - c. Group 1b afferent axons have excitatory connections with the motor neurons that cause muscle to contract
 - d. The intrinsic neurons of the cerebellum exclude excitatory granule cells
 - e. The motor neurons in the spinal cord form the final common path for all motor activity (SBN)
55. Which of the following statements about visual pathways is true?
- a. Layers 1, 4 and 6 of the lateral geniculate nucleus receive input from the ipsilateral temporal retina
 - b. A small portion of nasal hemiretina that receives monocular vision is called a nasal crescent
 - c. The superior colliculus is responsible for directing each fovea to its target
 - d. A unilateral lesion of the frontal cortex results in the inability to direct a gaze laterally in either direction
 - e. The vestibular nuclei send information to the cranial nuclei of the second nerve (SBN)

56. Which of the following statements about vestibular reflexes is incorrect?
- a. Compensatory eye movement has two phases
 - b. Defects associated with the fast phase are related to reticular formation
 - c. Four vestibular nuclei are located in the medulla
 - d. The inferior vestibular nucleus plays the key role in reflex control of head position
 - e. The lateral vestibular nucleus receives inhibitory input from the cerebellum (SBN)
57. Which of the following statements about reticular formation is true?
- a. Colliculi are involved in orienting the head towards the direction of startle stimuli
 - b. EEG changes are independent of the effects of the thalamic nuclei on the cerebral cortex
 - c. The startle response is independent of reticular formation
 - d. Stimulation of the nucleus raphe magnus produces hyperaesthesia
 - e. Stimulation of the reticular formation leads to the extinction of aversive behaviour (SBN)
58. Which of the following forms of apraxia accompanies Broca's aphasia?
- a. Conceptual
 - b. Dressing
 - c. Ideomotor
 - d. Limb kinetic
 - e. Oral (CA)

59. Mr Bainbridge presents with an inability to carry out motor tasks to command, but performs the same tasks spontaneously. At which of the following is the lesion?
- The basal ganglion
 - The inferior frontal region
 - The left frontotemporal area
 - The left parietal lobe
 - The right posterior parietal area (CA)
60. Mr Bainbridge presents with an inability to name or describe visually presented items. Which of the following does the lesion involve?
- The bilateral posterior occipitoparietal region
 - The bilateral temporoparietal region
 - The left anterior temporal lobe
 - The left medial occipital region
 - The occipitotemporal area (CA)
61. All of the following statements about Balint's syndrome are true except:
- It involves a lesion of angular gyrus
 - There is an inability to reach for visual targets
 - There is an inability to point at visual targets
 - Simultagnosia is a feature
 - Symptoms include an inability to direct voluntary eye movements to visual targets (CA)

62. Mr Bainbridge presents with impairment in retrieval of colour information. This is which of the following?
- Achromatopsia
 - Apperceptive visual agnosia
 - Colour agnosia
 - Prosopagnosia
 - Simultagnosia (CA)
63. Which of the following do phakomatoses include?
- Arteriovenous malformations
 - Fragile X syndrome
 - Heterotopia of grey matter
 - Schizencephaly
 - Tuberous sclerosis (SBN)
64. Based on a presentation of hypertelorism, high arched palate, absent patellae, congenital heart disease and agenesis of corpus callosum, which of the following is the correct chromosomal abnormality?
- 5p deletion
 - 8 mosaic
 - 9p trisomy
 - 22 trisomy
 - XXY (SBN)

65. Based on a presentation of infantile hypotonia, learning disability, short stature, small hands and feet, hypoplastic genitalia, hyperphagia and obesity, which of the following is the correct chromosomal abnormality?
- a. 5p deletion
 - b. 15 deletion
 - c. 18p deletion
 - d. 21 trisomy
 - e. XO (SBN)
66. Which of the following is the atresia of foramen of Luschka and Magendie associated with hydrocephalus?
- a. An Arnold–Chiari malformation
 - b. An Aicardi malformation
 - c. A Dandy–Walker malformation
 - d. Bourneville’s disease
 - e. Von Hippel–Lindau disease (SBN)
67. In which of the following are tuber-like astrocytic lesions seen?
- a. Bourneville’s disease
 - b. The De Lange malformation
 - c. Encephalofacial angiomatosis
 - d. Sturge–Weber syndrome
 - e. Von Recklinghausen’s syndrome (SBN)

68. Which of the following is the commonest form of primitive neuroectodermal tumour?
- Astrocytoma
 - Ependymoma
 - Oligodendroglioma
 - Medulloblastoma
 - Microglioma (SBN)
69. All of the following statements about cranial tumours are true except:
- Anterior falx meningiomas may present with the frontal lobe syndrome
 - Limbic encephalitis can be a non-metastatic complication of systemic malignant disease
 - Malignant tumours are more common in the anterior pituitary than in the posterior pituitary
 - Meningiomas commonly originate from the arachnoid cells of leptomeninges
 - Metastases are usually from carcinomas of the lung (SBN)
70. Which of the following elements is associated with cerebellar damage, damage to primary sensory areas, and neurasthenic syndrome?
- Aluminium
 - Copper
 - Chlorine
 - Lead
 - Mercury (SBN)

71. Which of the following is damaged by MPTP?
- Nucleus basalis of Meynert
 - Locus coeruleus
 - Mamillary body
 - Raphe nucleus
 - Substantia nigra (SBN)
72. Deficiency of which of these vitamins causes subacute combined degeneration of the spinal cord?
- Cyanocobalamin
 - Folate
 - Niacin
 - Riboflavin
 - Thiamine (SBN)
73. All of the following statements about neuropeptide Y(NPY) are true except:
- It is not synthesised in the cell bodies of the paraventricular nucleus
 - It controls luteinising hormones, releasing the hormone in the absence of oestrogen priming
 - It controls the thyrotropin-releasing hormone
 - It is co-localised with catecholamines in neurons that originate from the brainstem
 - It is not co-localised with catecholamines in neurons that originate from the arcuate nucleus (SBN)

74. All of the following stimulate feeding except:
- Galanin
 - Growth-hormone-releasing factor
 - Opioids
 - Neuropeptide Y
 - Neurotensin (SBN)
75. Which of the following inhibits feeding?
- Cholecystokinin
 - Galanin
 - Growth-hormone-releasing factor
 - Neuropeptide Y
 - Noradrenaline through α_2 -receptors (SBN)
76. All of the following stimulate the release of arginine vasopressin except:
- Atrial peptides
 - Decreased plasma osmolality
 - Hypovolaemia
 - Nausea
 - Stress (SBN)
77. Which of the following is the hypothalamic nucleus involved in the control of gonadotrophin-releasing hormone?
- The arcuate nucleus
 - The paraventricular nucleus
 - The periventricular nucleus
 - The preoptic area
 - The supraoptic nucleus (SBN)

78. All of the following statements about the genetics of autism are true except:
- a. The candidate gene for autism is the 5HT transporter gene
 - b. The concordance rate among MZ twins has ranged from 36% to 90%
 - c. A LOD score of 2.53 is reported in a region on chromosome 7q
 - d. The relative increased risk to siblings of those with classic autism is between 10 and 20
 - e. Tuberous sclerosis occurs in less than 5% of those with autism (PG)
79. Which of the following is true with regard to the genetics of childhood schizophrenia?
- a. An association with abnormality of D₃ receptor locus has been reported for adult- but not childhood-onset schizophrenia
 - b. The concordance rate among MZ twins is lower than that of adult-onset schizophrenia
 - c. Chromosome 1p22 has been implicated
 - d. The rate of deletion of chromosome 22q11 is lower than that seen in adult schizophrenia
 - e. The rate of non-affective psychosis among relatives of childhood schizophrenics with premorbid speech and language impairment is lower than that in the adult population with schizophrenia (PG)

80. Which of the following statements about the genetics of ADHD is true?
- a. The DAT2 gene has been implicated in ADHD
 - b. The DRD4 7 allele confers susceptibility with an estimated odds ratio of between 2.5 and 3.0
 - c. Family studies have shown that ADHD and conduct disorders are co-transmitted among families
 - d. The relative risk of ADHD among first-degree relatives is greater among probands with ADHD that persists into adult life than among probands with ADHD that is comorbid with conduct disorder
 - e. First-degree relatives have a relative risk of between 2 and 3 (PG)
81. All of the following statements about the genetics of personality disorders are true except:
- a. An increased rate of schizophrenia has been found among first-degree relatives of probands with schizotypal disorder
 - b. An increased rate of schizotypal personality disorder has been found among the relatives of patients with schizophrenia
 - c. Studies have generally reported negative results for borderline personality disorder among first-degree relatives of patients with depression
 - d. Studies have reported a higher rate of Briquet syndrome among the female relatives of males with antisocial personality disorder
 - e. Studies have reported that lying has more genetic heritability than truancy, which shows a stronger influence from shared environmental effects (PG)

82. Which of the following statements about the genetics of bipolar disorder is true?
- a. Bipolar disorder type 2 is found with less frequency in the families of bipolar type 1 probands than in the general population
 - b. The MZ concordance for narrowly defined bipolar disorder is 30%
 - c. The number of affected relatives is a marker for familial disorder, but a vulnerability to puerperal triggering of episodes is not
 - d. Pre-pubertal depression has a distinct genetic aetiology
 - e. There is an estimated risk of 7% for bipolar disorder type 1 among first-degree relatives of cases with the same disorder (PG)
83. All of the following statements about adrenergic receptors are true except:
- a. β_2 -receptors are presynaptic inhibitory autoreceptors
 - b. cAMP is reduced by α_2 -receptors
 - c. cAMP-mediated phosphorylation of N-type Ca^{2+} channels reduces noradrenaline release
 - d. GO second messenger, coupled to α_1 -receptor, reduces gK
 - e. Gs is the second messenger system involved in β -receptors (N)
84. Which of the following is true with regard to serotonin?
- a. Choroid plexus lacks serotonergic innervation
 - b. Ecstasy increases the release of serotonin
 - c. The oxidative decarboxylation of serotonin by MAO yields 5-HIAA
 - d. Serotonergic cells are important for learning about aversive situations
 - e. Serotonin synthesis is independent of the firing frequency of neurons (N)

85. At which of the following serotonin receptors is ketanserin an antagonist?
- a. 1a
 - b. 1b
 - c. 2a
 - d. 2b
 - e. 3 (N)
86. Ondansetron increases IP_3 levels by acting at which of the following serotonergic receptor subtypes?
- a. 1a
 - b. 2b
 - c. 3
 - d. 4
 - e. 7^d (N)
87. Sumatriptan is an agonist at which of the following serotonergic receptors?
- a. 1b
 - b. 1d
 - c. 2a
 - d. 2b
 - e. 3 (N)
88. Which of the following enzymes is used in the polymerase chain reaction?
- a. DNA trinucleotidase
 - b. Restriction endonuclease
 - c. Reverse transcriptase
 - d. RNA polymerase
 - e. Taq polymerase (PG)

- 89.** A micro-array is called which of the following?
- a. A DNA chip
 - b. A polymerase chain reaction
 - c. A primer extension
 - d. A restriction fragment length polymorphism
 - e. A short tandem repeat polymorphism (PG)
- 90.** By which of the following methods can mRNA be assayed?
- a. Central blotting
 - b. Eastern blotting
 - c. Northern blotting
 - d. Southern blotting
 - e. Western blotting (PG)
- 91.** By which of the following methods can DNA be assayed?
- a. Central blotting
 - b. Eastern blotting
 - c. Northern blotting
 - d. Southern blotting
 - e. Western blotting (PG)
- 92.** Which of the following is Mendel's law?
- a. Dependent assortment
 - b. Incomplete penetrance
 - c. Integration
 - d. Segregation
 - e. Variable expressivity (PG)

93. Which of the following genes has been implicated in determining precortical volume decline in people with schizophrenia?
- COMT
 - DISC1
 - Dysbindin
 - Neuregulin
 - PRODH (BJP 2006)
94. Which of the following genes has been implicated in learning and memory in the disease model of schizophrenia?
- COMT
 - DISC1
 - Dysbindin
 - Neuregulin
 - PRODH (BJP 2006)
95. Which of the following genes interacts with LIS1 to cause lissencephaly?
- COMT
 - DISC1
 - Dysbindin
 - Neuregulin
 - PRODH (BJP 2006)
96. Which of the following genes is associated with mitochondrial and microtubule function?
- COMT
 - DISC1
 - Dysbindin
 - Neuregulin
 - PRODH (BJP 2006)

97. All of the following statements about cognitive impairment in bipolar disorder are true except:
- a. Cognitive impairment in bipolar disorder remits during phases of euthymia
 - b. Medium-term lithium treatment does not impair explicit memory
 - c. The occurrence of psychotic symptoms is related to poor performance on cognitive tasks
 - d. One predictor of a poor prognosis in bipolar type 2 disorder is poor performance on executive-function tasks
 - e. Working memory is impaired in bipolar disorder (BJP 2006)
98. Which of the following statements about hysteria is true?
- a. Hoover's sign of paralysis has poor reliability for differentiating conversion from organic disorder
 - b. La belle indifference is not a diagnostic criterion
 - c. La belle indifference is an important discriminant between organic and conversion disorders
 - d. La belle indifference is linked to left-hemisphere pathology
 - e. The midline splitting of sensory loss has good reliability for distinguishing conversion disorder from organic disorder (BJP 2006)

99. Which of the following statements about insight and cognition is true?
- a. The analysis of different insight scales reveals a differential association with cognitive performance
 - b. Impaired insight is not associated with the severity of the pathology
 - c. Impaired insight is not associated with prefrontal dysfunction
 - d. Impaired insight is significantly correlated with neurocognitive performance
 - e. The relationship between IQ and insight is stronger than the relationship between insight and WCST scores (BJP 2006)
100. Which of the following statements about memory impairment in schizophrenia is true?
- a. A minority of community-based patients have memory deficits
 - b. The Rivermead Behavioural Memory Test has 8 items
 - c. A significant inverse correlation exists between age and memory scores
 - d. A significant correlation exists between a positive scale of PANSS and memory scores
 - e. A significant correlation exists between type of antipsychotic and memory scores (BJP 2006)

101. Which of the following statements about clozapine is true?
- a. Carbamazepine is safe, as it does not increase the possibility of neutropenia
 - b. Clozapine must be stopped immediately if the white cell count falls below 5×10^9
 - c. Clozapine must be stopped immediately if the neutrophil count falls below 3×10^9
 - d. Infection can be a precipitant of neutropenia in patients who are challenged with clozapine
 - e. Patients who develop neutropenia should not be rechallenged with clozapine (BJP 2006)
102. All of the following statements about panic disorder are true except:
- a. In acute-phase treatment, combined treatment is superior to antidepressant treatment
 - b. Beyond its acute phase, combined treatment is superior to antidepressant treatment
 - c. Beyond its acute phase, combined treatment is superior to psychotherapy
 - d. The evidence for cognitive-behavioural therapy is most conclusive
 - e. Pharmacotherapy is associated with significant relapse rates even when patients are maintained on adequate doses of antidepressants (BJP 2006)
103. An MRS study of patients with Alzheimer's disease found their inositol levels to be increased. In which of the following is this change seen?
- a. Frontal
 - b. Insular
 - c. Occipital
 - d. Parietal
 - e. Temporal (KS)

- 104.** All of the following statements about fMRI are true except:
- a. fMRI shows that the neural circuit for lexical categories involves the left anterior temporal lobe
 - b. fMRI shows that the area activated upon listening to speech is also activated during auditory hallucinations in people with schizophrenia
 - c. fMRI shows that patients with dyslexia show a failure to activate Wernicke's area
 - d. It gives specific information about neuronal metabolism
 - e. It works on the principle of detecting the levels of oxygenation in blood (KS)
- 105.** All of the following statements about adult ADHD are true except:
- a. About 65% of those with ADHD fulfil the criteria for partial remission at the age of 25 years
 - b. ADHD symptoms are continuously distributed throughout the population
 - c. ADHD symptoms show an age-dependent decline
 - d. Adults with ADHD respond to stimulants
 - e. Longitudinal studies show that ADHD and antisocial behaviour start simultaneously (BJP 2007)
- 106.** All of the following statements about the treatment and outcomes of eating disorders among adolescents are true except:
- a. High expressed emotion is associated with poor outcomes
 - b. Inpatient treatment predicts poor outcomes
 - c. Only about 50% of adolescents adhere to inpatient treatment
 - d. There is RCT evidence for family treatment for anorexia in adolescents
 - e. Those receiving lengthy inpatient treatment that results in their regaining normal weight continue to maintain their weight at 1-year follow-up (BJP 2007)

107. All of the following statements about depression and MI are true except:
- a. An ENRICHD study showed that the improvement in depression observed at 6 months following CBT was sustained at 30 months
 - b. Post-MI depression is associated with a 2- to 2.5-fold increase in mortality
 - c. Sertraline is a safe drug to use in post-MI patients
 - d. The somatic symptoms of depression are associated with a poor prognosis in post-MI patients
 - e. CBT has no effect on the risk of all-cause mortality in MI patients with depression (BJP 2007)
108. Which of the following is an agent that binds to the same receptor as an agonist for that receptor, but produces the opposite pharmacological effect?
- a. Antagonist
 - b. Full agonist
 - c. Inverse agonist
 - d. Mixed agonist
 - e. Partial agonist (KS)
109. Which of the following drugs is associated with weight loss?
- a. Bupropion
 - b. Buspirone
 - c. Lithium
 - d. Sodium valproate
 - e. Topiramate (KS)

110. Serious exfoliative dermatitis is seen with:
- Clonazepam
 - Lamotrigine
 - Phenytoin
 - Sodium valproate
 - Vigabatrin (KS)
111. Which of the following is an antipsychotic associated with high muscarinic blockade?
- Aripiprazole
 - Olanzapine
 - Risperidone
 - Quetiapine
 - Ziprasidone (KS)
112. Rabbit syndrome can be treated using:
- Bupirone
 - Clonazepam
 - Diphenhydramine
 - Orphenadrine
 - Propranolol (KS)

- 113.** Which of the following statements about untreated psychosis is true?
- a. Its acute onset is associated with a substantially longer duration of untreated psychosis
 - b. The duration of untreated psychosis lacks correlation with mid-term outcomes
 - c. Family help-seeking is associated with a shorter duration of the untreated illness
 - d. Unemployment is not related to the duration of untreated psychosis
 - e. Unlike psychosis, the duration of untreated illness has no effect on the prognosis for anxiety disorders (BJP 2006)
- 114.** All of the following statements about vagus stimulation are true except:
- a. The acute response to vagus stimulation in resistant depression is notably low
 - b. It has been found to be effective in the treatment of resistant epilepsy
 - c. The leads from the device are connected to the thoracic vagus
 - d. The procedure involves the subcutaneous implantation of a pacemaker-like device
 - e. Vocal cord palsy has been reported to be an adverse effect of the procedure (BJP 2006)

- 115.** Which of the following statements about violence and psychiatric comorbidity is true?
- a. An increased risk of violence in youth is dependent on psychiatric comorbidity
 - b. A large reduction in exposure to the risk factor of hazardous drinking at the individual level is associated with a large overall impact on a population's behaviour with regard to drinking
 - c. People with psychotic illness pose a greater threat to random members of the public than to people they know
 - d. The public health impact of violence from schizophrenia is lower than that from substance use
 - e. Low self-esteem is associated with the risk of violence by men against their partners, but somatic complaints are not (BJP 2006)
- 116.** All of the following statements about velocardio-facial syndrome (VCF) and facial-expression processing are true except:
- a. Facial processing networks involve occipital gyri providing input to the superior temporal region
 - b. VCF is associated with chromosome 22q11 deletion
 - c. People with VCF perform less well on space-perception tasks than on object-perception tasks
 - d. People with VCF show less activation of their right insula in facial processing
 - e. People with VCF show more activation of their bilateral occipital lobes in early facial processing (BJP 2006)

- 117.** Which of the following statements about psychotherapy is true?
- a. Antidepressant therapy is as effective as combined therapy in the treatment of panic disorder without agoraphobia
 - b. Brief, dynamic psychotherapy is more effective than CBT for avoidant personality disorder
 - c. Music therapy significantly improves the general symptoms of schizophrenia
 - d. Younger patients with first- and second-episode psychosis respond better to counselling than to CBT
 - e. Younger patients with first- and second-episode psychosis show greater insight after counselling than after CBT (BJP 2006)
- 118.** All of the following are good prognostic factors for brief psychotic disorder except:
- a. Affective symptoms
 - b. Confusion during onset
 - c. Insidious onset
 - d. Little affective blunting
 - e. Severe precipitating stressor (KS)
- 119.** Which of the following statements about brief psychotic disorders is true?
- a. DSM-IV-TR describes four subtypes
 - b. Less than half of the patients with these disorders display schizophrenia or mood disorder at long-term follow-up
 - c. A longer duration of symptoms is associated with a good prognosis
 - d. They are more common in older patients
 - e. Psychodynamic formulations suggest that such psychotic symptoms develop as defences against prohibited fantasies (KS)

120. Which of the following is an anger syndrome associated with insomnia, fatigue, fear of impending death, dysphoric affect, indigestion, and the feeling of a mass in the epigastrium?
- Brain fag
 - Dhat
 - Hwa-byung
 - Koro
 - Locura (KS)
121. Which of the following statements about psychodynamic factors in depression is true?
- According to Melanie Klein, depression is an expression of anger towards hated people
 - According to self-psychological theory, when the developing needs of the self are unmet, a massive loss of self-esteem results
 - Damaged early attachment predisposes people to childhood depression
 - Disturbances in the genital phase predispose people to subsequent vulnerability to depression
 - The projection of departed objects is a defence mechanism for dealing with distress resulting from object loss (KS)
122. Beliefs about oneself, the world and the future are referred to as:
- Cognitive distortion
 - The cognitive triad
 - Learned helplessness
 - Schema
 - Psychodynamic hierarchies (KS)

- 123.** The forming of conclusions based on too little and too narrow experience is referred to as:
- a. Arbitrary inference
 - b. Magnification and minimisation
 - c. Oversimplification
 - d. Personalisation
 - e. Specific abstraction (KS)
- 124.** The tendency to put experiences into all-or-nothing categories is referred to as:
- a. Absolutist thinking
 - b. Arbitrary inference
 - c. Oversimplification
 - d. Personalisation
 - e. Specific abstraction (KS)
- 125.** All of the following statements about the course of major depressive disorder are true except:
- a. Around 5–10% of patients with an initial diagnosis of depression develop a manic episode 6 to 10 years after initial diagnosis
 - b. Late onset is associated with antisocial personality disorder
 - c. A major depressive disorder is usually preceded by a premorbid personality disorder
 - d. Over a 20-year period the mean number of episodes is between five and six
 - e. Untreated episodes last for about 6 to 13 months (KS)

126. Which of the following is a selection criterion for time-limited psychotherapy?
- a. The ability to engage and disengage
 - b. Low ego strength
 - c. Being unsuitable for borderline personality disorder
 - d. Being unsuitable for major depressive disorder
 - e. The therapist being quickly able to identify a central issue (KS)
127. For which of the following is the use of projection and splitting as defence mechanisms specifically unsuitable?
- a. Brief focal psychotherapy
 - b. Psychoanalytic psychotherapy
 - c. Short-term anxiety-provoking psychotherapy
 - d. Short-term dynamic psychotherapy
 - e. Time-limited psychotherapy (KS)
128. Abreaction is used as a major group process in:
- a. Analytically oriented group therapy
 - b. Behavioural group therapy
 - c. Psychoanalysis of groups
 - d. Supportive group therapy
 - e. Transactional group therapy (KS)
129. In which of the following is socialisation outside the group always encouraged?
- a. Analytically oriented group therapy
 - b. Behavioural group therapy
 - c. Psychoanalysis of groups
 - d. Supportive group therapy
 - e. Transactional group therapy (KS)

- 130.** Improving adaptation to the environment is a goal of:
- a. Analytically oriented group therapy
 - b. Behavioural group therapy
 - c. Psychoanalysis of groups
 - d. Supportive group therapy
 - e. Transactional group therapy (KS)