

Paper 3

- 1 Aspirin is known to be beneficial in cardiovascular disease. What one other condition has been shown in observational studies to benefit from aspirin?
 - a Alzheimer's disease
 - b Irritable bowel disease
 - c Parkinson's disease
 - d Asthma
 - e Thyroid dysfunction

- 2 What is the normal PR interval shown in an ECG?
 - a 0.5–0.62s
 - b 0.12–0.2s
 - c 0.2–0.32s
 - d 0.05–0.12s
 - e 0.25–0.35s

- 3 A 3-year-old child presents with malaise and recurrent infections. Her mother states that she bruises easily. On examination, she is pale, widespread bruises of different ages are seen and hepatosplenomegaly is palpable. What is the most likely diagnosis?
 - a Scurvy
 - b Acute leukaemia
 - c Henoch Schonlein Purpura
 - d Non-accidental injury
 - e Normal

- 4 Which one of the following is not true about estimated glomerular filtration rate (eGFR)?
- a eGFR is an estimate.
 - b eGFR needs extra calculations for different races.
 - c Creatinine levels must be stable over the time the eGFR is calculated.
 - d eGFR is not valid for those under 18 years of age.
 - e eGFR is the most accurate near the normal value.
- 5 Which one of the following statements is not true about genital herpes?
- a Genital herpes can be acquired from contact with lesions from non-mucosal surfaces.
 - b Typing of the infection is useful in managing recurrent genital herpes.
 - c Typing of the infection is useful in the initial attack.
 - d Antivirals do not eradicate the infection or latent virus.
 - e Aciclovir, valaciclovir and famciclovir all decrease the severity and duration of the clinical episode.
- 6 Which one of the following is not true about economic analysis?
- a It involves the use of analysis to define choices in resource allocation.
 - b It takes into account direct, indirect and intangible costs.
 - c Cost/benefit analysis measures the outcome in monetary units.
 - d Cost-utility analysis measures outcomes in monetary units.
 - e Cost-effectiveness analysis compares expenditure with outcome.

- 7 Which one of the following is not true regarding the risk of developing deep vein thrombosis (DVT)?
- a DVT occurs in over 40% of patients having major orthopaedic surgery.
 - b A body mass index (BMI) over 30 is a risk factor for developing DVT.
 - c Risk factors include immobility associated with continuous travel of more than 1 hour's duration in the month before surgery.
 - d Patients should be advised to stop taking the oral contraceptive pill 4 weeks prior to elective surgery.
 - e If patients have more than one risk factor for developing DVT they require prophylaxis with low molecular weight heparin when undergoing surgery.
- 8 Symbicort® is a combination of which of the following asthma drugs?
- a Budesonide and formoterol
 - b Fluticasone and salmeterol
 - c Budesonide and sodium cromoglicate
 - d Beclomethasone and formoterol
 - e Ipratropium and salmeterol
- 9 A 65-year-old gentleman presents with new onset epigastric pain. He has been a smoker for 50 years. He has also become increasingly breathless on exertion. On examination you note he has cracks on the side of his mouth. What would be your choice for further management?
- a Chest x-ray
 - b Urgently refer for oesophogastroduodenoscopy (OGD)
 - c Treat with ferrous sulphate
 - d Trial of a proton pump inhibitor
 - e *Helicobacter pylori* serology

- 10** A 28-year-old woman presents with tiredness and weight loss over the past 6 months. On examination you notice she has dark pigmentation in her palmar creases. Blood test results are as follows:

Sodium	122mmol/L	(133–147mmol/L)
Potassium	5.8mmol/L	(3.5–5.0mmol/L)
Albumin	58g/L	(35–50g/L)
Urea	9mmol/L	(2.5–7.5mmol/L)

Which one of the following is the most likely diagnosis?

- a Cushing's syndrome
- b Conn's syndrome
- c Addison's disease
- d Pheochromocytoma
- e Diabetes insipidus

Using the list of values given answer the following questions (Questions 11 to 14). Options may be used once, more than once or not at all.

List of values: 2, 3, 30, 9, 15, 20, 20, 20, 61, 72, 47, 99, 99, 103, 105

Options:

- a 103
- b 3
- c 15
- d 20
- e 72
- f 99
- g 105
- h 61
- i 47
- j 2
- k 105
- l 30

- 11** Which number represents the mode in the list of values?

- 12 Which number represents the mean in the list of values?
- 13 Which number represents the median in the list of values?
- 14 Which number represents the range in the list of values?
- 15 Which one of the following statements is true regarding osteoporosis?
- a 35% of women aged 75–85 years have severe osteoporosis.
 - b About one-third of Caucasian women will have at least one osteoporotic vertebral fracture by the age of 70 years.
 - c The incidence of osteoporosis is higher in Afro Caribbeans.
 - d About one-third of women aged 90 years will have had a hip fracture.
 - e The incidence of femoral neck fracture increases markedly after the age of 60 years, more so in women than in men, and more so in Caucasians than in other races.
- 16 Concerning environmental and personal hygiene measures in the treatment of threadworm (*Enterobias vermicularis*), which one of the following statements is correct?
- a Environmental and personal hygiene measures are of no proven benefit.
 - b There is no need to use separate towels.
 - c The eggs are not infectious once they are removed from the body.
 - d Fingernails should be kept short.
 - e Advise patients to wear loose-fitting underwear at night.
- 17 Which one of the following statements is true about aortic stenosis (AS)?
- a Can be caused by hyperthyroidism.
 - b Usually causes sudden death.
 - c Is associated with a slow rising pulse.
 - d Causes a displaced apex.
 - e ECG shows large P-waves.

- 18** Side-effects of tetracycline include all of the following except which one?
- a Oesophageal irritation
 - b Impotence
 - c Nausea and vomiting
 - d Photosensitivity rash
 - e Diarrhoea
- 19** Concerning yellow fever vaccination, which one of the following statements is true?
- a All travellers to India should be vaccinated.
 - b Revaxis® is a trade name.
 - c The vaccine is inactivated.
 - d It can be given safely to pregnant women.
 - e Immunity takes 10 days to develop after vaccination.
- 20** At what age would you expect a baby to be able to smile responsively?
- a 4 weeks
 - b 8 weeks
 - c 6 weeks
 - d 2 weeks
 - e 10 weeks
- 21** A 40-year-old smoker complains of a 5-week history of cough with white phlegm. On examination, he is afebrile and the chest is clear. What would be your first course of action?
- a Review in 2 weeks.
 - b Prescribe amoxicillin 500mg tds.
 - c Prescribe a trial of an inhaler.
 - d Organise a walk-in chest x-ray.
 - e Refer to routine respiratory clinic.
- 22** Under the new Department of Health guidelines, who is not offered annual influenza vaccination routinely?
- a Carer to a patient >70 years

- b Patients aged over 65 years
 - c Patients with diabetes
 - d Patients with asthma
 - e Patients with cystic fibrosis
- 23** According to the 2007 British Association for the Study of Headache (BASH) guidelines on treating migraine, which of the following drugs has no place in treating an acute attack?
- a Paracetamol
 - b Metoclopramide
 - c Codeine phosphate
 - d Sumatriptan
 - e Rectal Diclofenac
- 24** What is a recognised treatment for chlamydia from the following options?
- a Erythromycin 500mg bd for 14 days
 - b Ciprofloxacin 500mg stat dose
 - c Cefixime 400mg stat dose
 - d Doxycycline 400mg tds for 7 days
 - e Azithromycin 200mg bd for 3 days

Choose the most likely diagnosis from the list below for each clinical scenario (Questions 25 to 30). Options may be used once, more than once or not at all.

- a Breast carcinoma
- b Breast cyst
- c Fibroadenoma
- d Breast abscess
- e Fat necrosis
- f Lipoma
- g Galactocoele
- h Duct ectasia
- i Fibroadenosis/Cyclical mastalgia
- j Intraductal papilloma

- 25 A 30-year-old woman presents with pre-menstrual breast pain and a small amount of green nipple discharge at times. On examination, thickened breast tissue in the upper, outer quadrants is palpable bilaterally. No lymphadenopathy is present.
- 26 A 20-year-old woman presents with a 4-week history of a single breast lump. On examination, a smooth, firm, mobile lump is palpable in the left breast.
- 27 A 55-year-old woman presents with painful breasts bilaterally. She has noted some thick creamy nipple discharge. On examination, the subareolar regions are erythematous and there is no lymphadenopathy.
- 28 A 30-year-old woman presents with a painful breast lump after being hit in the chest with a tennis ball. On examination an irregular, hard lump tethered to the skin is palpable.
- 29 A breast-feeding mother presents with a painful and swollen right breast. On examination, she is pyrexial and the breast is enlarged, red and tender. No discrete lump is palpable.
- 30 A 54-year-old woman presents with a breast lump found on self-examination. A tender, discrete craggy lump is palpable. A small amount of bloody nipple discharge is seen.
- 31 According to the February 2007 Department of Health White Paper, *Trust, Assurance and Safety: the regulation of health professionals in the 21st century*, which of the following statements is true?
- a All doctors will hold a licence to practise which will enable them to remain on the medical register and which must be renewed every 2 years.
 - b Specialist recertification will apply to all specialists, excluding general practitioners.
 - c The appraisal process will include 'summative' elements that confirm a doctor has objectively met the standards expected, e.g. an applied knowledge test.

- d Only doctors who work in the NHS will be expected to go through the process of revalidation.
 - e The appraisal process will lose its 'formative' components.
- 32** According to the NICE Hypertension guidelines 2006 what is the most appropriate treatment for a 45-year-old Caucasian male with a sustained blood pressure of >170/100mmHg?
- a Ramipril
 - b Atenolol
 - c Losartan
 - d Amlodipine
 - e Propranolol
- 33** Which of the following conditions does not have approval from the Advisory Committee on Borderline Substances (ACBS) to have food products prescribed on a FP10?
- a Crohn's disease
 - b Phenylketonuria
 - c Lactose intolerance
 - d Vomiting in infancy
 - e Irritable Bowel Syndrome (IBS)
- 34** Regarding the treatment of depression, which one of the following statements is true?
- a Selective serotonin reuptake inhibitors (SSRIs) should be prescribed to all patients with depression.
 - b Self-help books have no place in treatment options and can only lead to patients feeling helpless and worthless.
 - c St John's wart has been proven to be no better than placebo.
 - d Cognitive behavioural therapy (CBT) is of no use.
 - e An assessment of the suicide risk should be carried out on each patient.

- 35** What is the pattern of inheritance of infantile polycystic renal disease?
- a Autosomal dominant
 - b Autosomal recessive
 - c X-linked recessive
 - d X-linked dominant
 - e Multifactorial
- 36** Which one of the following is not a known side-effect of steroids?
- a Peptic ulcer formation
 - b Hypothyroidism
 - c Psychosis
 - d Osteoporosis
 - e Pancreatitis
- 37** A 60-year-old male suddenly loses his vision. On examination, the retina appears white with a cherry-red spot at the macula. What is the diagnosis?
- a Occlusion of the central retinal artery
 - b Occlusion of the central retinal vein
 - c Vitreous haemorrhage
 - d Retinal detachment
 - e Branch occlusion of central retinal vein
- 38** Which of following is defined as a detailed review of similar studies that meet strict criteria?
- a Cohort study
 - b Retrospective study
 - c Meta-analysis
 - d Systematic review
 - e Qualitative analysis

- 39** Which one of the following statements regarding pregnancy and maternity leave is not true?
- a Employees can take maternity leave any time after 29 weeks' gestation.
 - b Two weeks' maternity leave is compulsory after the baby's birth.
 - c A due date after 1 April 2007 entitles an employee to 52 weeks' maternity leave.
 - d Pension contributions continue to be paid by the employer during the period of paid maternity leave.
 - e Full maternity leave entitlement prevails in the event of a stillbirth at 22 weeks' gestation.
- 40** When administering basic life support, what is the optimal depth for chest compressions according to the current UK Resuscitation Council Guidelines?
- a 1–2cm
 - b 2–3cm
 - c 3–4cm
 - d 4–5cm
 - e 5–6cm
- 41** What is the false positive rate for Prostate Specific Antigen to detect prostate cancer?
- a Approximately 40%
 - b Approximately 55%
 - c Approximately 66%
 - d Approximately 26%
 - e Approximately 87%

- 42** Which one of the following statements is not true about tuberculosis (TB)?
- a A Mantoux test may be falsely negative in patients with HIV.
 - b Previous BCG vaccination prevents HIV-positive patients contracting TB.
 - c Colour vision needs to be tested prior to TB treatment.
 - d There is an increased rate of reactivation of latent TB in HIV-positive patients.
 - e Acid-fast bacilli may be found in the sputum.
- 43** A 12-year-old girl presents to the GP with short stature. On examination she has a wide carrying angle and a webbed neck. Which syndrome is most likely?
- a Down's syndrome
 - b Turner's syndrome
 - c Klinefelter's syndrome
 - d Fragile X syndrome
 - e Edward's syndrome

Select the appropriate time interval after which airlines and the World Health Organisation will allow someone to fly with the clinical conditions listed below (in Questions 44 to 51). Each option may be used once, more than once or not at all.

- a 6 months
- b 48 hours
- c 2 weeks
- d 1 year
- e 7 days
- f 3 months
- g 10 days
- h 3 weeks
- i 4 weeks
- j 2 months
- k 24 hours

- 44 Simple fracture with no plaster cast
- 45 Minimum age of child before first flight
- 46 Myocardial infarction
- 47 Haemorrhagic stroke
- 48 Eye surgery
- 49 Grand mal seizure
- 50 Plaster cast applied to fracture
- 51 Pneumothorax
- 52 What is the starting dose of methotrexate in rheumatoid arthritis?
 - a 2.5mg daily
 - b 5mg weekly
 - c 7.5mg weekly
 - d 5mg alternate days
 - e 5mg daily
- 53 A 26-year-old male presents with a verruca on his foot. Which one of the following statements is true of cryotherapy?
 - a Cryotherapy is not painful.
 - b Cryotherapy may result in permanent hypopigmentation of the skin.
 - c Cryotherapy successfully cures warts after two treatments in 70% of cases.
 - d Cryotherapy is the only option for wart removal.
 - e Cryotherapy has been shown to be more effective than salicylic acid paint.