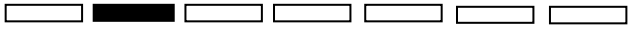
# Interuniversity Progress Test for Medicine

## INSTRUCTIONS FOR ANSWERING QUESTIONS

***The consequences of not obeying these instructions are your own responsibility.***

- Always check whether there are any pages missing from the test booklet.
- **Use only a soft pencil** (HB) on the answer form. Never use other colours or writing materials.
- Answer *every* question by carefully **colouring in** the corresponding box on the answer form (colour in the whole box, do not check it). Do not write outside the box. Example: 
- To correct an **incorrect answer**, erase it and colour in your new choice.
- **Answer *every* question with one answer only.** Never colour in more than one box for one question. If you do not know the answer, choose the **question mark**. Do not make any changes to the answer form or add notes. Any marks, folds or damage to the answer form will make it impossible to process. If you disregard the instructions and answer questions improperly or unclearly, so that there is doubt as to what answer you have given, or if you select an answer that does not exist, the answer will be invalid and the question concerned will be regarded as 'unanswered'. Ask the invigilator for a new answer form if necessary. First fill in your name and colour in your student number carefully.
- Some students opt to note their answers to the test questions in the test booklet first, then copy them to the answer form. You should realize that this could result in your running out of time or making mistakes when copying. Any consequences are your own responsibility.
- Each question comprises a stem followed by one or more items: the stem is intended as a statement of fact and always contains correct information. The aim of the test designers has been to formulate questions as unambiguously as possible. Vague words ('sometimes', 'often') are specified where necessary, which can result in somewhat artificial sentence constructions. It is not the aim to set trick questions.
- Despite extensive evaluation of questions before they are included in a progress test, imperfections cannot be entirely prevented. The progress test evaluation committee wishes to be informed of errors in the content of questions and of questions with ambiguous or multi-interpretable formulations. Students are therefore invited to submit their comments. All comments are reviewed by the Interfaculty Progress Test Evaluation Committee (IVBC). The Committee's findings and conclusions are documented and, if required, discussed with the discipline(s) concerned. This can result in removal of questions from the definitive test (cancelled questions) or in changes in answer keys (key change). When multiple answers are good, the question is not a valid part of the progress test and will be removed.
- You can only submit comments on interuniversity progress test questions through the **website http://ivtg.nl/, no later than 4 p.m. on the Thursday following the Progress Test.** Comments that surrendered elsewhere is irrelevant and / or does not meet the guidelines will not be considered. Follow the instructions on the site.

## PLEASE FIRST READ THE INSTRUCTIONS ON THE PREVIOUS PAGE

- ***You are not allowed to use your own paper to make notes. Instead, you may use the empty pages at the end of this test.***
- ***You can take the test booklet from 10.30 a.m.***

Drug use can cause alarming psychiatric dysregulation in susceptible individuals. Which of the following drugs presents the highest risk of users developing psychosis?

1. A. cannabis
   B. cocaine
   C. heroin

A ruptured spleen needs to be removed from a 10-year-old girl with abdominal trauma. After the surgery, she will be more susceptible to infection. To which group of pathogens will the susceptibility be particularly heightened?

2. A. herpes viruses
   B. influenza viruses
   C. pneumococci
   D. staphylococci

Hearing loss can be transient or permanent. An example of a transient type of hearing loss is:

3. A. noise-induced hearing loss
   B. presbycusis
   C. Eustachian tube dysfunction

Vaccination with BCG (Bacillus Calmette-Guérin) is used to prevent tuberculosis. After successful immunization, the Mantoux test will be:

4. A. negative
   B. positive

The placental membrane refers to the barrier between maternal and foetal blood during pregnancy. What is this barrier made up of?

5. A. foetal endothelium
   B. foetal endothelium and trophoblast
   C. foetal endothelium, maternal endothelium, and trophoblast
   D. maternal endothelium
   E. maternal endothelium and trophoblast

Patient compliance is an acquired behaviour (conditioning) and is encouraged e.g. when a symptom is relieved after taking medication. In this example, good patient compliance is mainly due to:

6. A. classical conditioning
   B. operant conditioning

A psychiatrist at a psychiatric outpatient clinic carries out a mental state examination on a patient with delusions. Delusion is a disorder of one of the mental functions. In which category of mental functions is delusion classified? The:

7. A. affective functions
   B. cognitive functions
   C. conative functions

A woman's egg supply is virtually exhausted when menopause commences. What effect does the prolonged use of ovulation inhibitors have on the onset of menopause? It:

8. A. remains unchanged
   B. is delayed
   C. begins early

A 26-year-old woman asks for advice about contraception. She gave birth to her second child 10 months ago and had deep vein thrombosis during the puerperium. Her mother and sister both had thrombosis too. She has now stopped taking anticoagulants and asks what type of birth control she can use. Which of the following methods of contraception would be most suitable for her?

9. A. condoms
   B. a combined oral contraceptive
   C. a hormone-releasing intrauterine device
   D. a diaphragm with spermicidal cream or gel

Penicillin has a half-life of 30 minutes. When does continuous intravenous penicillin reach steady state concentration? At:

10. A. 30 minutes
    B. 2 hours
    C. 6 hours
    D. 12 hours

A 23-year-old man with a history of ankylosing spondylitis has had a painful red eye for a few days. He is somewhat intolerant to light and his vision is slightly impaired. Inspection reveals a white fluid level as well as perilimbal redness. What is the name of this 'pus' in the anterior chamber?

11. A. hypopyon
    B. hyposphagma
    C. hyphaema

A study of surgery patients investigated whether preoperative chlorhexidine-alcohol antisepsis produces a lower risk of infection at the surgical site than povidone-iodine antisepsis. The relative risk of infection in the chlorhexidine-alcohol group was found to be 0.59. This means that the risk of infection in the chlorhexidine-alcohol group was:

12. A. 0.41 times the risk of infection in the povidone-iodine group
    B. 0.59 times the risk of infection in the povidone-iodine group

A 56-year-old woman with diabetes has a burning pain in the front of her right upper leg. A peripheral nerve disorder is likely, given the site of the pain and the diabetes. This nerve also has a motor function. If this patient also has muscle weakness as a result, what can she probably not do easily?

13. A. flex the knee forcefully
    B. extend the knee forcefully
    C. walk on her heels
    D. walk on her toes

A coassistent (intern) is learning to take blood samples from patients under supervision. She accidentally pricks herself with a contaminated needle. She discusses the possible effects with her supervisor. Which of the following viruses is transmitted haematogenously?

14. A. hepatitis A
    B. hepatitis B

A 42-year-old man has been eating and drinking very little for the past two weeks. In conversation he is lucid and well-oriented in time and place. He looks lacklustre and tired. He says he cannot eat any more, because ‘his bowels are rotten’. ‘It’s all my fault, I’m a physical wreck, I’m bankrupt and it’s destroying my family.’ What is the most likely diagnosis?

15. A. delirium
    B. depression with psychotic features
    C. schizophrenia
    D. schizophreniform disorder
    E. delusional disorder

A 43-year-old man has a painful shoulder. He finds active movement tests painful but not passive movement tests. This finding is most consistent with a disorder of the:

16. A. tendons of the muscles around the shoulder
    B. nerves running from the neck to the arm
    C. shoulder joint

A seriously underweight 20-year-old woman develops secondary amenorrhoea. At what 'level' does the cause of this woman's amenorrhoea most probably lie?

17. A. hypothalamic
    B. pituitary
    C. ovarian
    D. uterine

A 75-year-old man with a clean psychiatric history has become increasingly depressed since his wife died a year ago. He has no enjoyment in life and is not looking after himself properly. For the past few weeks he has been convinced that he was responsible for his wife's death. He thinks he needs to pay the penalty for that and there is no point in going on living. He stopped eating and drinking a few days ago. On examination, the psychiatrist finds a severely depressed man with whom he is hardly able to connect. There are marked catatonic features. Diagnostic tests do not reveal anything unusual apart from severe dehydration. What, in addition to rehydration, is the treatment of choice?

18. A. an antipsychotic
    B. electroconvulsive therapy
    C. a selective serotonin reuptake inhibitor (SSRI)
    D. a tricyclic antidepressant (TCA)

No less than 20-50% of patients with chronic abdominal pain are found to have been sexually or physically abused in the past. How is that abuse classified in terms of psychological factors involved in pain? As a:

19. A. maintaining factor
    B. predisposing factor
    C. precipitating factor

In a Kaplan-Meier plot, the values on the X-axis and Y-axis are, respectively:

20. A. time and level of significance
    B. time and survival percentage
    C. the value of kappa and the size of the sample
    D. the level of significance and the value of kappa

Patients with autoimmune gastritis produce intrinsic factor antibodies, among other things. As a result, this disorder is often accompanied by:

21. A. aplastic anaemia
    B. haemolytic anaemia
    C. pernicious anaemia

A 38-year-old woman says that her heart sometimes misses a beat. A standard electrocardiogram shows two abnormal QRS complexes, each of which succeeds normal QRS complexes of the basic rhythm. The two abnormal complexes are prolonged and of a completely different pattern from the other QRS complexes. What is this most likely to be a case of?

22. A. pulsus bigeminus
    B. atrial premature complexes
    C. ventricular premature complexes
    D. pulsus trigeminus

Thiazide diuretics (e.g. chlorothiazide) can reinforce the effect of cardiac glycosides (e.g. digoxin). This interaction is based mainly on one of the following mechanisms, namely the ability of thiazide diuretics to:

23. A. bind to cytochrome P450 isoenzymes
    B. inhibit the tubular secretion of cardiac glycosides
    C. block chloride channels in the heart
    D. produce a kaliuretic effect

According to the standard DSM classification, various factors make for a good or poor prognosis for schizophrenia patients. The prognosis is worse if:

24. A. the patient has symptoms of depression
    B. the patient has formal thought disorders
    C. the symptoms developed at a young age
    D. the symptoms developed later in life

As a result of left-sided cerebral haemorrhage, a patient has difficulty finding words, although he can understand what other people are saying to him. Which part of his brain is involved in this expressive aphasia? The:

25. A. frontal lobe
    B. occipital lobe
    C. parietal lobe
    D. temporal lobe

A middle-aged man is brought to the Emergency Department with severe dyspnoea and cyanosis. Which of the following findings is most indicative of alveolar hypoventilation as the cause of the cyanosis?

26. A. normal alveolar-arterial oxygen gradient
    B. elevated alveolar-arterial oxygen gradient
    C. reduced arterial PCO2
    D. reduced arterial PO2

Rotation of the spine can be produced by the left and right abdominal oblique muscles working together. Which part of the spine performs this rotation?

27. A. thoracic
    B. lumbar
    C. sacral

Promiscuity is a risk factor for certain types of cancer, due to the transmission of human papilloma virus (HPV). This is particularly true of:

28. A. cervical cancer
    B. endometrial cancer
    C. ovarian cancer

A 45-year-old man presents to the Emergency Department with arterial hypoxaemia, which is easily remedied with supplemental oxygen (2L/min.). Which of the following mechanisms is the most likely cause of the hypoxaemia?

29. A. alveolar hypoventilation
    B. left-to-right shunt
    C. right-to-left shunt

Until recently, a 55-year-old woman's asthma attacks were being controlled effectively with salbutamol. During the past few months, however, she has been waking up at night more and more often with dyspnoea and coughing fits, and the salbutamol is proving less and less effective. Which of the following is now the drug of choice?

30. A. budesonide
    B. ipratropium
    C. salmeterol
    D. terbutaline

A three-week-old girl produces a wave of vomit after every feed. She is often agitated. She focuses and tracks with her eyes. Her birth weight was 3,500 grams and she now weighs 4,000 grams. She has six feeds a day of 100 ml standard infant formula. What is the best advice in this case?

31. A. hypoallergenic feed
    B. thicken the feed
    C. start her on an antacid
    D. start her on a prokinetic

A five-year-old boy has had general malaise for a week, and has now developed petechiae and ecchymosis on his lower leg. Physical examination reveals generalized lymphadenopathy in addition to the skin abnormalities. Diagnostic tests show thrombocytes 5 x $10^9$/L (normal range 150-450 x $10^9$/L) and leukocytes 46 x $10^9$/L (normal range 4-14 $10^9$/L), with blastic cells in the differentiation. What is the probable diagnosis?

32. A. acute EBV infection
    B. acute leukaemia (common AML or ALL)
    C. idiopathic thrombocytopaenia
    D. a myelodysplastic disorder (JMML, CML)

A six-week-old girl presents at the Emergency Department with mild shortness of breath. On physical examination, the physician finds an alert infant and hears prolonged wheezy expiration and scattered fine crackles in the lungs on auscultation. The chest X-ray shows hyperinflation of the lungs. The rapid test on a nasopharyngeal swab culture is positive for RSV virus. She has no oxygen requirement and is still feeding well. The parents are advised to admit their daughter to the children's ward. What is the main reason to admit this girl?

33. A. a small risk (1%) of her needing ventilation
    B. a risk of apnoea
    C. a risk of a bacterial superinfection
    D. NaCl aerosol inhalation treatment cannot be given at home

After an atherosclerotic lesion ruptures, coagulation takes place. This process starts with the adhesion of activated platelets. To what do these activated platelets mainly adhere?

34. A. adhesion molecules such as ICAM-1 and VCAM-1
    B. signal transduction receptors such as TLR4 and TNF
    C. thromboactive substrates such as von Willebrand factor and collagen
    D. scavenger receptors on macrophages such as SR-A and SR-B1

A 60-year-old man is admitted to hospital with cardiac asthma. It emerges that he had a major myocardial infarction at home five days ago. Examination reveals a loud heart murmur. The physician thinks it could be a failing heart valve due to a papillary muscle rupture. The valve affected is most likely to be the:

35. A. aortic valve
    B. mitral valve
    C. pulmonary valve
    D. tricuspid valve

Aneuploidy (an abnormal number of chromosomes) is caused by non-disjunction during meiosis. Which type of aneuploidy causes Turner syndrome (45,X)?

36. A. monosomy
    B. polyploidy
    C. triploidy

A 46-year-old man with a history of deep vein thrombosis four years ago underwent surgery for diverticulitis five days ago. He is recovering well and receiving thrombosis prophylaxis with a heparin derivative according to protocol. The preoperative blood panel was normal, but lab tests now show severe thrombocytopenia. What is the most likely reason for the deep thrombocytopenia in this patient?

37. A. the recent surgery
    B. the thrombosis prophylaxis
    C. disseminated intravascular coagulation
    D. postoperative bleeding
    E. a recurrence of deep vein thrombosis

Severe von Willebrand factor deficiency is often accompanied by deficiency of one of the coagulation proteins. Which one?

38. A. factor VII
    B. factor VIII
    C. factor IX
    D. factor X

During birth, a child transitions from intrauterine to extrauterine life. What cardiopulmonary change accompanies this transition?

39. A. increased pulmonary arterial resistance
    B. increased systemic arterial resistance
    C. increased systemic blood flow

If acetylcholine binds to a nicotine receptor on a skeletal muscle, that receptor’s permeability to a particular ion is increased. Which ion?

40. A. Ca2+
    B. H+
    C. Mg2+
    D. Na+

Many changes in the skin are accompanied by redness. Sometimes the red skin patch will not blanch when pressure is applied. This is the case with:

41. A. angioedema
    B. erythema
    C. purpura
    D. telangiectasias

When testing the eye movements of a 70-year-old man, the ophthalmologist notices vertical strabismus when the patient looks to the left. If the man is asked to look to the left, his right eye rotates upwards. These findings are explained by an overactive:

42. A. right inferior oblique muscle
    B. right superior oblique muscle
    C. left inferior oblique muscle
    D. left superior oblique muscle

During its passage through the nephron, the osmotic value of the filtrate changes. In Bowman's capsule this filtrate is:

43. A. hypotonic
    B. isotonic
    C. hypertonic

Atrial fibrillation can occur as a result of cardiac disorders but also other diseases. Which of the following diseases presents the highest risk of atrial fibrillation?

44. A. hypercholesterolaemia
    B. hyperparathyroidism
    C. hyperthyroidism

Patients with the disease osteogenesis imperfecta have brittle bones. The increased fragility is due to a defect in the:

45. A. assembly of collagen
    B. function of osteoclasts
    C. incorporation of calcium in the bone matrix

A 40-year-old woman has had visible blood in her urine three times and has noticed that this occurred during or immediately after a throat infection each time. The sediment contains dysmorphic erythrocytes with erythrocyte cylinders, even when the urine appears macroscopically clear. An internist checks her renal function regularly during a haematuria episode and finds it completely normal. The antistreptolysin titre is negative. What renal disease is at the top of the differential diagnosis list?

46. A. cystic kidneys
    B. IgA nephropathy
    C. thin basement membrane nephropathy
    D. systemic lupus erythematosus

A 28-year-old woman's psoriasis vulgaris flares up. She has previously been treated with oral corticosteroids and phototherapy. The patches are now mainly on the extremities and she wants treatment that does not involve hormones. What is the local treatment of choice now? A cream containing:

47. A. vitamin A derivatives
    B. vitamin D derivatives
    C. vitamin E derivatives

A 40-year-old woman with jaundice and fever is found to have elevated unconjugated bilirubin. What is the most likely explanation for this clinical picture?

48. A. biliary obstruction
    B. haemolysis
    C. hepatitis

Medical ethics has a long history, with roots in various traditions, all of which have contributed to the ethical principles that we honour nowadays in health care. What principle is characteristic of the Enlightenment tradition? That of:

49. A. reverence for life
    B. not causing harm
    C. respect for autonomy

A 58-year-old man has terminal renal failure, for which he is on dialysis. His blood phosphate level is markedly elevated. The physician treats him with calcium acetate. The phosphate-lowering effect of calcium acetate is based on the:

50. A. formation of a phosphate complex in the intestines
    B. inhibition of vitamin D synthesis
    C. stimulation of phosphate absorption by osteoblasts

A 32-year-old woman would like to start a family. She has a regular 28-day menstrual cycle and is not using contraception. Around which transaction between two phases of the menstrual cycle is her fertile period?

51. A. end of menstrual phase and start of proliferation phase
    B. end of proliferation phase and start of secretion phase
    C. end of secretion phase and start of menstrual phase

What is essentially the cause of organ damage in shock?

52. A. haemorrhage
    B. hyperreactivity
    C. hypoxia
    D. infarction

Many enzymes in a cell only become active when modified, with a residual group often being linked to a serine or tyrosine. This type of modification is catalyzed by means of:

53. A. phosphatase
    B. kinase
    C. polymerase
    D. protease

A 25-year-old man has driven his car into a tree at high speed. On inspecting the thorax, the doctor observes that on inspiration the left hemithorax is drawn in instead of expanding. The correct diagnosis is:

54. A. flail chest
    B. haemothorax
    C. pneumothorax
    D. tension pneumothorax

Changes in the plasma levels of tissue-specific enzymes are indicative of changes in the tissue concerned. An increased plasma level of lipase is usually indicative of a disorder of the:

55. A. liver
    B. kidneys
    C. pancreas

Which of the following cranial nerves is responsible for taste sensation in the anterior part of the tongue? The:

56. A. facial nerve
    B. glossopharyngeal nerve
    C. hypoglossal nerve
    D. trigeminal nerve

A 75-year-old man has undergone total gastric resection for cancer. As a result, he does not have a hormone that plays a vital role in the resorption of a particular vitamin. Which one?

57. A. vitamin B12
    B. vitamin C
    C. vitamin D
    D. vitamin K

Bronchial and arterial structures lie close together in the mediastinum. What is the location of the tracheal carina in relation to the pulmonary trunk?

58. A. dorsal
    B. ventral
    C. cranial
    D. caudal

A 57-year-old woman presents to her general practitioner (GP) complaining of snoring. History-taking and heteroanamnesis reveal that she sometimes stops breathing during the night and is tired during the daytime. Loud snoring and excessive daytime sleepiness are cardinal symptoms of obstructive sleep apnoea syndrome (OSAS). Which of the following factors has the highest predictive value for OSAS? The:

59. A. body mass index (BMI)
    B. frequency of nightmares
    C. use of sleep medication
    D. sleeping position

Paraphimosis (‘Spanish collar’) occurs when:

60. A. the foreskin cannot be retracted over the glans
    B. the foreskin is retracted over the glans and cannot be pulled back to the normal position
    C. there is meatal stenosis

Obesity is often accompanied by insulin resistance and atherosclerosis. What mechanism in obese patients most likely plays the main role in the development of these disorders?

61. A. glycation
    B. inflammation
    C. oxidation

The action potential of a cardiac muscle cell, unlike that of a skeletal muscle cell, has a plateau phase. What causes this plateau? The inflow of:

62. A. sodium ions
    B. potassium ions
    C. calcium ions

An eight-year old boy is taken to a child psychiatrist by his mother, having been referred by their general practitioner (GP) with suspected ADHD. He is hyperactive and impulsive, both at home and at school. Which of the following behavioural characteristics is most consistent with a diagnosis of ADHD?

63. A. being easily distracted
    B. violence towards people or animals
    C. repetitive patterns
    D. verbal tics

A 32-year-old woman presents at a neurology outpatient clinic with back pain radiating into her right leg. It radiates as far as the big toe, and she has a numb sensation in that same area. She has noticed that she is not able to lift her right foot properly when walking. The neurologist carries out a physical examination. How are this woman's reflexes most likely to prove?

64. A. normal reflexes
    B. ankle jerk reflexes diminished or absent
    C. patellar reflex diminished or absent

A 43-year-old man goes to his general practitioner (GP) complaining of a subcutaneous swelling on his upper arm. On inspection, the GP finds nothing unusual apart from a slight swelling of the skin. On palpation, the GP finds a soft subcutaneous tumour approximately 3 cm in diameter, mobile in relation to the epidermis. There are no indications of malignancy. Which of the following diagnoses is most likely in this man's case?

65. A. epidermoid cyst
    B. haemangioma
    C. lipoma
    D. neurofibromatosis

A sick three-year-old girl presents at the general practioner (GP) office with severe sore throat and fever. Given the fact that she has not been vaccinated, he is concerned that the diagnosis could be acute epiglottitis. Which pathogen usually causes this acute inflammation?

66. A. Bordetella pertussis
    B. Corynebacterium diphtheriae
    C. Haemophilus influenzae type B
    D. Streptococcus pneumoniae

A 37-year-old woman has the general practitioner (GP) remove a mole on her back. The pathologist's report to the GP is as follows: skin excision biopsy (back): superficial spreading malignant melanoma (diameter 0.9 cm), Breslow's depth 1.2 mm, Clark's level III, radical removal. No perineural or angioinvasive growth. Which melanoma parameter in these findings is the deciding factor as regards this patient's life expectancy? The:

67. A. mode of growth
    B. size of the tumour
    C. infiltration depth in terms of Breslow's depth
    D. infiltration depth in terms of Clark's level

A physician auscultates the heart of an asymptomatic four-year-old child. He hears a fixed split second heart sound. What is the most likely explanation for this finding?

68. A. atrial septal defect
    B. physiological splitting of the second heart sound
    C. pulmonary valve stenosis
    D. ventricular septal defect

A 55-year-old woman has undergone colonoscopy with polypectomies in the transverse, descending, and sigmoid colon. As there is a suspicion of perforation, a CT scan is carried out a few hours later, which shows retroperitoneal air. In which part of the intestines is the perforation most likely located? In the:

69. A. descending colon
    B. sigmoid colon
    C. transverse colon

What is the principal function of the capillaries of the hypophyseal portal system? To transport regulatory hormones from the:

70. A. hypothalamus to the pars distalis of the pituitary gland
    B. hypothalamus to the pars nervosa of the pituitary gland
    C. systemic circulation to the pars distalis of the pituitary gland
    D. systemic circulation to the pars nervosa of the pituitary gland

A researcher compares the side effects of two standard diuretics using a cross-over design. Each patient takes one of the diuretics for a month, followed by a three-week wash-out period with no treatment, then takes the other diuretic for the next month. What function does the wash-out period serve in this study?

71. A. to reduce the treatment periods required during the study
    B. to ensure that the effects of the drugs can be assessed independently of each other
    C. to prevent memory bias in the patients

A 78-year-old man is admitted to hospital with acute renal failure due to gastroenteritis. His blood pressure is 106/52 mmHg, with a heart rate of 76 bpm. He takes a beta-blocker, an ACE inhibitor, a calcium antagonist, and a diuretic for hypertension. The physician considers changing the antihypertensive medication temporarily. What drug must not be discontinued? The:

72. A. ACE inhibitor
    B. beta-blocker
    C. calcium antagonist
    D. diuretic

The preferential site of primary melanomas differs between men and women. Where are melanomas most commonly found in men? In the skin of:

73. A. an arm
    B. a leg
    C. the neck
    D. the trunk

A 45-year-old man suffers from recurring, painful, indurated pustular skin patches that clear up of their own accord within a week. When a new patch develops, he goes to the general practitioner (GP), who finds a boil. What is the most likely pathogen?

74. A. Propionibacterium acnes
    B. Pseudomonas aeruginosa
    C. Staphylococcus aureus
    D. Streptococcus pyogenes

A 74-year-old man has terminal bronchial cancer. He is being looked after at home. He has been feeling increasingly short of breath for the past day. On examination, the general practitioner (GP) is unable to find any clear explanation for the dyspnoea and decides to prescribe an opiate in order to reduce the feeling of being short of breath. The patient is not taking any opiates yet. What opiate is the drug of choice?

75. A. fentanyl
    B. hydromorphone
    C. morphine
    D. oxycodone

A 14-year-old boy is markedly shorter than his peers. He finds showering after football embarrassing, as he still has few signs of puberty. Physical examination reveals that he is G2P2A2 on the Tanner scale. His testicular volume is 5 ml on the left and 6 ml on the right. What is the correct strategy?

76. A. endocrine test
    B. watch and wait
    C. induce puberty

A 55-year-old woman has had severe dizziness without nausea for the past few days. The world spins when she moves her head. Her hearing and vision are tested and found to be normal. She has had spells of vertigo before, but never as severe as this. What is the most likely diagnosis?

77. A. benign paroxysmal positional vertigo
    B. vestibular neuritis
    C. Ménière’s disease

A general practitioner (GP) examines the abdomen of a 30-year-old woman with abdominal pain, placing her in a supine position. The GP asks her to take a deep breath while palpating deeply below the right costal arch. This manoeuvre enables the GP to feel in particular for the:

78. A. liver
    B. pancreas
    C. right kidney

A 35-year-old man with a clean medical history has had severe dyspnoea for the past week. His body temperature is 37.8°C. An ECG shows episodes of ventricular tachycardia. His echocardiogram shows dilation of both ventricles. An endomyocardial biopsy shows focal myocyte necrosis and lymphocytic inflammatory infiltrate. Which of the following organisms is most likely to be the pathogen responsible?

79. A. Coxsackie B virus
    B. Staphylococcus aureus
    C. Streptococcus viridans
    D. Toxoplasma gondii

A mother takes her four-year-old son to the general practitioner (GP), as she has doubts about his hearing. When the GP looks into the boy's ears with an otoscope, he finds dull eardrums with no light reflex. In which quadrant of the eardrum should the light reflex normally be sought?

80. A. posterior superior
    B. posterior inferior
    C. anterior superior
    D. anterior inferior

Pneumococcal infections are often treated with benzylpenicillin. Why does the dosage of benzylpenicillin (penicillin G) need to be many times higher when treating pneumococcal meningitis than pneumococcal pneumonia?

81. A. benzylpenicillin does not readily penetrate the CSF space
    B. benzylpenicillin is inactivated by proteins in the cerebrospinal fluid
    C. benzylpenicillin is less effective due to the regular acidity of the cerebrospinal fluid
    D. meningitis is a more serious disease than pneumonia

A 75-year-old man presents with back problems, which are found to be due to vertebral metastases. This patient is most likely to have several osseous metastases. What primary tumour is the most likely source of the metastases in this patient's case?

82. A. colon carcinoma
    B. prostate carcinoma
    C. non-small cell lung carcinoma
    D. malignant lymphoma

A patient goes to his general practitioner (GP) complaining of a pale red, moderately delineated ring-shaped patch with central blanching on his lower leg, which he says is gradually growing. The macule is more than 5 cm in diameter. There are no vesicles or papules. When asked, the patient says he removed a tick behind his knee over a week ago. He does not know how long the tick had been there. What is the most appropriate strategy at present?

83. A. no antibiotics, ask the patient to come back if the skin rash becomes worse
    B. no antibiotics, carry out a serological test
    C. local application of an antibiotic cream, ask the patient to come back if the skin rash does not clear up
    D. prescribe oral antibiotics

A 42-year-old woman goes to her gynaecologist complaining of heavy menstrual bleeding. The ultrasound scan shows a myoma 2 cm in diameter. The ultrasound technician's report states that it is a type 1 intracavitary myoma according to the FIGO classification. What is the treatment option of choice for this type of myoma?

84. A. embolization of the myoma
    B. hysteroscopic myoma resection
    C. laparoscopic myoma nucleation
    D. laparoscopic hysterectomy

The risk of a pregnant woman giving birth to a child with cystic fibrosis:

85. A. decreases markedly with age
    B. increases markedly with age
    C. is virtually independent of age

As cells age, changes take place in the length of DNA sequences. These sequences are found in:

86. A. the telomeres of chromosomes
    B. the centromeres of chromosomes
    C. repeated sequences in the whole chromosome

An occupational health physician focuses on two areas: (1) preventing and limiting work-related damage to health and (2) maintaining fitness for work and recovering from incapacity to fitness for work. Which activities are part of area (1) for an occupational health physician?

87. A. pre-employment medical examination and health and safety open clinic
    B. health and safety surgery and supervision of sick leave
    C. risk survey and evaluation (RS&E) and advice on reintegration policy
    D. RS&E and supervision of sick leave

A cardiology research group has the following research question: ‘Do antibiotics protect against ischaemic coronary disease?’ To determine this, all patients admitted to a hospital with acute myocardial infarction are asked about their use of antibiotics during the past year. Data are also obtained on the use of antibiotics in a group of patients admitted to the same hospital for non-acute reasons. The study described here is an example of a:

88. A. cross-sectional study
    B. case-control study
    C. prospective cohort study
    D. retrospective cohort study

Lung immaturity in premature neonates is due to a shortage of surface tension-reducing substances (surfactants). If there is a risk of premature birth, intrauterine production of surfactant is stimulated by administering a particular medication to the mother. Which one?

89. A. aspirin
    B. a beta sympathomimetic
    C. a corticosteroid
    D. insulin

An asymptomatic 75-year-old woman’s urine is tested. Leukocytes are found but no squamous cells. What is the most likely cause of leukocytes in the urine?

90. A. cystic kidneys
    B. diabetic neuropathy
    C. kidney stones
    D. urinary tract infection

The duty to report infectious diseases can help to combat their spread. This is laid down in the Public Health Act (*Wet Publieke Gezondheid*). Which of the following infectious diseases is notifiable in individual cases?

91. A. hand, foot, and mouth disease
    B. pertussis
    C. rotavirus
    D. chickenpox

It is decided to carry out a gastric pull-up (gastric transposition) on a 45-year-old man with oesophageal cancer. The thoracic duct is cut during the operation. The thoracic duct drains the lymph from most of the body into the venous system, but some of it is drained via a different route. Which part of the body is that? The:

92. A. left superior quadrant
    B. left inferior quadrant
    C. right superior quadrant
    D. right inferior quadrant

A 78-year-old woman with a history of prolapse also suffers from urinary incontinence. Which type of incontinence often accompanies a prolapse first?

93. A. overflow incontinence
    B. reflex incontinence
    C. stress incontinence

The Netherlands has a Voluntary Euthanasia and Assistance with Suicide (Review) Act (*Wet toetsing levensbeëindiging op verzoek en hulp bij zelfdoding*), under which the actions of doctors are scrutinized for due care and quality. An exemption for doctors as a profession has therefore been included in the Criminal Code, which lays down that termination of life is not a criminal offence if it is carried out by a doctor in accordance with the requirements of due care and is reported to the municipal coroner. As a result of this amendment to the Criminal Code, which of the following statements best applies to the actions of doctors in relation to termination of life and assistance with suicide? Such action is:

94. A. decriminalized
    B. tolerated
    C. legalized

A 45-year-old patient has had pain in his lower back and left leg for two weeks. He has no history of trauma. In the Lasegue's test (SLR test), from an angle of about 25º, he reports severe pain radiating from the buttock via the side and rear of the left leg into the foot. What is the provisional diagnosis?

95. A. acute lumbago
    B. osteoarthritis of the hip
    C. fracture of a lumbar vertebra
    D. hernia nuclei pulposi

A 69-year-old woman goes to her general practitioner (GP) complaining of two itchy, brownish-black skin patches that feel rough to the touch. They are both under her left breast. The GP finds two dark brown, papillomatous, circumscribed lesions approximately 1 cm in size. What is the most likely diagnosis?

96. A. lentigo maligna
    B. naevocellular naevus
    C. squamous cell carcinoma
    D. seborrhoeic verruca

A 34-year-old woman goes to her general practitioner (GP) complaining of increased voiding frequency and a sensation of slight irritation when urinating. She is 12 weeks pregnant with her first child and does not want to run any risk. A urine stick test proves negative for nitrite. What is the best strategy?

97. A. additional urine test with a dipslide
    B. treatment with nitrofurantoin
    C. treatment with miconazole for suspected candidal vaginitis
    D. watch and wait, with the advice to drink enough fluids

Thyroidectomy is carried out on a 62-year-old patient with follicular thyroid cancer. In the course of the operation, the surgeon accidentally damages the right recurrent laryngeal nerve. What effect will this have on the patient?

98. A. fluctuating blood pressure
    B. hoarseness
    C. Horner's syndrome
    D. tachycardia

A 65-year-old man presents to his general practitioner (GP) complaining of a painful, swollen left knee that started two days ago. When asked, he says he had a corticosteroid injection in his left knee a week ago for a sports injury. On physical examination, the GP finds a moderately ill man with a temperature of 38ºC. He also finds a painful, red, swollen left knee. The GP thinks it could be infectious arthritis. What is the most likely pathogen in this patient's case?

99. A. Borrelia burgdorferi
    B. Proteus mirabilis
    C. Staphylococcus aureus
    D. Streptococcus haemolyticus

A 24-year-old man is taken to the Emergency Department in a comatose state after taking cocaine, XTC (ecstasy), and GHB (gamma-hydroxybutyric acid). Which drug is most likely responsible for the coma? The:

100. A. cocaine
     B. GHB
     C. XTC

An 80-year-old man's blood test reveals eGFR (MDRD) of 60 ml/min/1.73 m2. He is underweight but euvolemic. His renal function has remained the same as a year ago. How does this eGFR estimate the actual glomerular filtration rate adjusted for body surface area?

101. A. correctly
     B. it is an underestimate
     C. it is an overestimate

A 25-year-old woman born in Morocco complains of fatigue. Blood tests show the following results: Hb 4.2 mmol/L (normal range 7.5-10.0 mmol/L), MCV 123 fl (normal range 82-98 fl), ferritin 120 microgram/L (normal range 20-150 microgram/L). What is the most likely cause of her anaemia?

102. A. sickle cell anaemia
B. thalassaemia
C. vitamin B12 deficiency
D. iron deficiency anaemia

A 30-year-old nurse has had a barking cough for a few days, suspected to be pertussis (whooping cough). A nasopharyngeal swab is performed and blood tests are done. The nasopharyngeal swab PCR test is positive for Bordetella pertussis. The serology test is negative for Bordetella pertussis. What is the correct conclusion as regards this nurse's diagnosis of pertussis?

103. A. previous pertussis, she is not infectious
B. no pertussis, she is not infectious
C. pertussis, she is infectious
D. pertussis, she is not infectious

A one-year-old infant is examined at the Emergency Department for cramping bouts of abdominal pain. For the past two days, he has had anorexia, vomited a few times and had non-specific, non-localized abdominal pain. During bouts, the patient turns pale and tries to adopt the foetal position. In between bouts, he is relatively calm and allows himself to be physically examined. The abdomen is supple, with occasional high-pitched peristalsis. The upper abdomen feels resistant to palpation. The abdominal X-ray shows no air in the caecum. An ultrasound scan shows the 'target sign' in the abdomen. What is the treatment of choice?

104. A. generous infusion of fluid and observation
B. hydrostatic repositioning
C. laparoscopic repositioning
D. laparoscopic resection

A 33-year-old man presents to an internist with fever, arthritis in both ankles, and painful red lumps on his legs consistent with erythema nodosum. Of which of the following disorders are these symptoms most characteristic?

105. A. adult-onset Still's disease
B. rheumatoid arthritis
C. sarcoidosis
D. systemic sclerosis

A 50-year-old man presents to a pulmonary physician complaining of thoracic pain and cough. The chest X-ray shows an abnormality in the anterior mediastinum. Which of the following diagnoses is most consistent with this?

106. A. bronchogenic cyst
B. Schwannoma
C. thoracic aneurysm
D. thymoma

A healthy person weighing 70 kilograms takes a medicine with a volume of distribution of approximately 350 litres. The percentage of the amount of the medicine in the plasma in relation to the amount of the medicine in the whole body in this person's case will be closest to:

107. A. 0.2%
B. 1%
C. 5%
D. 20%

A 59-year-old man has rectal cancer, for which he is receiving neoadjuvant treatment with chemoradiation followed by low anterior resection. The physician points out that there is a risk of bladder dysfunction following the surgery. The most likely postoperative bladder dysfunction in this man's case is:

108. A. urinary incontinence
B. false urge
C. urine retention

A 65-year-old woman has had vaginal itching and dyspareunia, which have persisted for some months. She has no abnormal discharge or other skin problems. On examination of the vagina, a shiny white discolouration is found at the vaginal orifice, with atrophy and some erythema. The lower vaginal wall bleeds readily when touched. What is the most likely diagnosis?

109. A. candidiasis
B. lichen sclerosus
C. inverse psoriasis
D. vitiligo

In which stage of life is atopic (constitutional) eczema most common?

110. A. 0-1 years
B. 1-3 years
C. 4-6 years
D. adulthood

An 11-month-old infant has osteomyelitis of the tibia. Why is he at much higher risk of the infection breaking through to the knee than a four-year-old child?

111. A. in an infant (unlike a toddler) the capillaries perforate the epiphyseal plate
B. cellular immunity is better developed in a four-year-old than an infant
C. humoral immunity is better developed in a four-year-old than an infant
D. the complement system is more effective after the age of one year

A 74-year-old woman has been referred to an internist with progressive pitting oedema in her legs and periorbital oedema that started four weeks ago. She has felt fatigued for months. Physical examination shows the following: blood pressure 150/100 mmHg, heart rate 85 bpm, and central venous pressure normal. Examination of the heart, lungs, and abdomen does not reveal any abnormalities. Blood tests show anaemia, severe renal failure, and highly reduced albumin. What is the most likely diagnosis?

112. A. chronic venous insufficiency
B. hypothyroidism
C. nephrotic syndrome
D. right-sided congestive heart failure

A 67-year-old woman's visual acuity suddenly becomes impaired. Neurological tests show right-sided homonymous hemianopia. What is the most likely site of the infarction? The perfusion area of the:

113. A. left anterior cerebral artery
B. right anterior cerebral artery
C. left posterior cerebral artery
D. right posterior cerebral artery

A 65-year-old man goes to the general practitioner (GP) complaining of 'blood in his stools'. He is scared of bowel cancer. He has no additional risk factors for bowel cancer, e.g. a positive family history. Approximately what is the likelihood that this man, given no additional medical problems or risk factors, will be diagnosed with colorectal cancer?

114. A. 7%
B. 15%
C. 25%
D. 33%

Diagnostic arthrocentesis is carried out on a patient with acute arthritis in one knee. Analysis of the synovial fluid under a polarization microscope shows large quantities of leukocytes and calcium pyrophosphate crystals. The Gram stain and synovial fluid culture are negative. Radiological investigation of the knee does not show any abnormalities. What problem is most likely associated with the calcium pyrophosphate dihydrate crystal deposition disease?

115. A. hypomagnesaemia
    B. hyperparathyroidism
    C. hyponatraemia
    D. hypothyroidism

A 56-year-old man has been admitted to an orthopaedics ward. He is recovering from revision hemiarthroplasty. He has had a painful, red, swollen lower leg for the past day. His D-dimer test is elevated. The physician thinks it could be a venous thromboembolism. Which test should now be conducted?

116. A. two-point compression ultrasound scan of the groin and popliteal fossa
    B. CT angiogram of the lower leg
    C. Doppler ultrasound scan of the popliteal fossa and ankle
    D. phlebogram of the lower leg

A surgeon diagnoses a 67-year-old patient with a proximal humeral fracture. The X-ray shows a fracture of the anatomical neck with four bone fragments. The deltoid muscle and axillary nerve are undamaged. What complication of this fracture should the surgeon be most concerned about?

117. A. avascular necrosis of the head
    B. latissimus dorsi muscle injury
    C. brachial plexus injury
    D. fat embolism

A physician can prescribe metoclopramide for a patient who is suffering from nausea and vomiting. Metoclopramide is an antagonist of the dopamine D2 receptor in the vomiting centre of the medulla oblongata. What is a familiar side effect of metoclopramide, given the molecular point of action?

118. A. respiratory depression
    B. extrapyramidal disorders
    C. hypertension
    D. excessive sweating

A 48-year-old man consults an ophthalmologist with eyesight problems. He has bitemporal hemianopia. In which part of the visual system is there most likely a lesion? The:

119. A. optic chiasm
B. left optic nerve
C. right optic nerve
D. left optic tract
E. right optic tract

A four-year-old girl has had abdominal pain, general malaise, and fever for two days. She urinates more often than usual and only small amounts. The general practitioner (GP) diagnoses a urinary tract infection. What is the best treatment for this young patient?

120. A. amoxicillin/clavulanic acid
B. ciprofloxacin
C. trimethoprim/sulfamethoxazole
D. nitrofurantoin

A 78-year-old woman has woken up with diminished strength in her left arm and leg. She has type 2 diabetes, for which she takes metformin and glimepiride. The general practitioner (GP) pays her an emergency house call. The woman is fully conscious, her breathing is quiet, blood pressure 132/86 mmHg, and heart rate 76 bpm (regular). Neurological examination reveals only a drooping left corner of the mouth and diminished strength and sensation in her left arm and leg. What test should definitely be carried out at her home?

121. A. carotid arteries auscultation
B. glucose test
C. peripheral pulses test
D. urine test

A 40-year-old man has been light for his height all his life. He can eat what he wants and does not put on weight. He also frequently has loose stools. He now presents to his general practitioner (GP) with general malaise. Which of the following conditions is most likely in this case?

122. A. bacterial overgrowth
B. coeliac disease
C. gallstones
D. pancreatitis

An 85-year-old woman is able to manage living at home with the aid of a wheelchair, adaptations to the home, home care, and home help. She is home alone a lot, however, and feels lonely. What body is responsible for organizing activities to relieve her loneliness in such cases? The:

123. A. municipal authority
B. GGD (Municipal Health Service)
C. home care organizations

A 52-year-old man has undergone right cervical rib resection for thoracic outlet syndrome. A neural structure was damaged during the operation. During the ward round, it is noticed that his right eyelid is drooping and the right pupil is abnormal. What right eye abnormalities does this patient have?

124. A. complete ptosis with miosis
B. complete ptosis with mydriasis
C. incomplete ptosis with miosis
D. incomplete ptosis with mydriasis

A 78-year-old woman asks her general practitioner (GP) for euthanasia. She suffers from a severe psychiatric disorder. She has been receiving intensive treatment from a psychiatrist for twenty years, but with no improvement. The psychiatrist has stated that there are no more treatment options available. The patient is suffering unbearably, and the GP can well imagine this. The GP has the impression that she is making the request after careful consideration and voluntarily. The GP asks a fellow GP to give a second opinion on whether all the requirements of due care have been met. Have the requirements of due care regarding euthanasia been met?

125. A. yes, all the requirements of due care have been met
B. no, the patient is not in the terminal phase
C. no, the fellow GP is not independent
D. no, the suffering is not due to a physical disorder

A boy just over two weeks old has jaundice. He is the second child of his parents, he is breastfeeding well, his micturition and defecation are normal, and his temperature is stable. He has been growing well so far. What is the most likely explanation for the jaundice?

126. A. breastfeeding
B. galactosaemia
C. biliary atresia
D. rhesus D antagonism

A 28-year-old patient with asthma goes to her general practitioner (GP). She takes salbutamol and budesonide. She is pregnant and wants to know whether she can continue taking these medicines. The GP explains that limited research has been done into the risks of using asthma medication during pregnancy. It has been found in practice that salbutamol and budesonide can be taken without problems. The patient decides to continue taking both medicines during her pregnancy. What doctor-patient model lies at the heart of this case description? The:

127. A. deliberative model
B. informative model
C. interpretative model
D. paternalistic model

An internist at an outpatient clinic sees a 78-year-old woman complaining of abdominal pain in the epigastric region and weight loss over several months. She is a heavy smoker and has both peripheral arterial disease and coronary disease. The abdominal pain occurs after every meal. She has no pain as long as she does not eat. She takes Ascal and a proton pump inhibitor. Which of the following diagnoses is most consistent with this clinical picture?

128. A. aortic aneurysm
B. abdominal angina
C. symptomatic cholelithiasis
D. gastric ulcer

There are two kinds of oxycodone preparations, the difference being that one has controlled and the other uncontrolled release. How do these two preparations differ most pharmacologically? In the:

129. A. biological availability
B. duration of analgesic effect
C. magnitude of analgesic effect
D. degree of elimination

A 55-year-old patient arrives at the Emergency Department with abdominal pain. Murphy’s sign is positive. What kind of inflammation is therefore more likely?

130. A. appendicitis
B. cholecystitis
C. diverticulitis
D. pancreatitis

A researcher wishes to find out what variations in the human genome are associated with autism spectrum disorder (ASD). For this purpose, he compares the genomes of 10,000 patients with ASD and a control group of 10,000 people without ASD. He carries out statistical tests on 1,000,000 single nucleotide polymorphisms (SNPs) in order to assess whether each SNP is associated with ASD. As he is testing a large number of SNPs, he reduces the significance threshold, which is normally set at 0.05. What effect will this have on the likelihood of false negatives and false positives?

131. A. the likelihood of false negatives will be reduced and that of false positives increased
    B. the likelihood of false negatives will be increased and that of false positives reduced
    C. the likelihood of both false negatives and false positives will be reduced
    D. the likelihood of both false negatives and false positives will be increased

A one-year-old girl is brought to the general practitioner (GP) by her parents. She suddenly developed a high fever three days ago, which has meanwhile subsided, but the parents have now discovered a skin rash. Following a physical examination, the GP diagnoses exanthema subitum. What advice should the GP give the parents?

132. A. do not take the child to her day care centre
    B. do not take any additional measures
    C. avoid contact with pregnant women

A general practioner (GP) examines a patient’s knee, which is in 30º flexion. The GP stabilizes the femur with one hand while grasping the proximal tibia and trying to move it in the ventral direction with the other hand. Which anatomical structure is the GP using this technique to test? The:

133. A. posterior cruciate ligament
    B. collateral ligaments
    C. meniscus
    D. anterior cruciate ligament

A general practitioner (GP) examines a patient’s abdomen. Murphy’s sign is positive. What is the most likely diagnosis?

134. A. acute appendicitis
    B. acute cholecystitis
    C. diverticulitis
    D. pyelonephritis

A 13-year-old boy goes to the general practitioner (GP) with a lump on his left knee. It is painful mainly at night and has gradually grown over the past two months. On physical examination, the GP feels a hard swelling 3 cm in diameter on the left proximal tibia. Which of the following diagnoses is most consistent with these findings?

135. A. bone tumour
B. prepatellar bursitis
C. haematoma
D. osteochondritis dissecans

A 23-year-old patient takes the non-selective beta-blocker propranolol for tachycardia when she is stressed. What effect does this drug have on the airways?

136. A. bronchodilation
B. bronchoconstriction

A 48-year-old man has inflammation of the skin and subcutis of his left lower leg with fever. There is irregular circumscribed skin redness at the site. What is the most likely diagnosis in this man’s case?

137. A. cellulitis
B. erysipelas
C. necrotizing fasciitis

A four-year-old boy is urgently referred to a paediatrician with high fever and general malaise. Examination reveals a stiff neck. It is decided to carry out a lumbar puncture, as it could be meningitis. Which of the following CSF results would be most consistent with the boy having bacterial meningitis?

138. A. increased leukocyte count and increased glucose level
B. increased leukocyte count and reduced glucose level
C. reduced leukocyte count and increased glucose level
D. reduced leukocyte count and reduced glucose level

A child is born to a mother with gestational diabetes, for which she needs insulin. The mother’s diabetes is not under control and she often has high blood glucose levels. What is the most likely scenario at birth?

139. A. a relatively large child at birth with an increased risk of postpartum hyperglycaemia
B. a relatively large child at birth with an increased risk of postpartum hypoglycaemia
C. a relatively small child at birth with an increased risk of postpartum hyperglycaemia
D. a relatively small child at birth with an increased risk of postpartum hypoglycaemia

A 63-year-old man probably has iron deficiency anaemia. Diagnostic tests are carried out to ascertain the size of the patient's iron reserve. The plasma level of which of the following proteins should be tested?

140. A. ferritin
     B. haem
     C. haemoglobin
     D. transferrin

Creatinine is a waste product that is excreted via the urine through the kidneys. Where in the human body is creatinine mainly produced? In the:

141. A. liver
     B. kidneys
     C. skeletal muscles
     D. adipose tissue

A married couple attend the general practitioner (GP) office. The husband and wife, both 27 years old, would like to start a family, but have failed to conceive after one year of unprotected sex. Based on the epidemiology, what is the most likely cause?

142. A. idiopathic
     B. ovulation disorders
     C. severely reduced sperm quality
     D. disturbances of the interaction between spermatozoa and cervical mucus
     E. tubal pathology

A 40-year-old woman is referred to an internal medicine outpatient clinic with treatment-resistant hypertension. She takes Hydrochlorothiazide, Lisinopril, and Metoprolol as prescribed. She suffers from muscle weakness, but there is otherwise nothing unusual in the case history. Physical examination reveals the following: blood pressure 170/100 mmHg, heart rate 70 bpm, and BMI 24 kg/m2 with normal female fat distribution. The blood plasma creatinine is 60 micromol/L (<80), sodium 145 mmol/L (135-145), and potassium 2.5 mmol/L (3.5-5.0). A urine dipstick test does not reveal anything abnormal. Which of the following diagnoses is the most likely explanation for this secondary hypertension?

143. A. phaeochromocytoma
     B. hyperthyroidism
     C. renal arterial stenosis
     D. primary hyperaldosteronism
     E. Cushing's syndrome

A 35-year-old man is referred to an internal medicine outpatient clinic because a hereditary metabolic disorder has been found in his family, namely familial hypercholesterolaemia (FH). Which of the following findings from physical examination is most consistent with FH?

144. A. necrobiosis lipoidica on the lower legs
B. pigmentations on the buccal mucosa
C. splinter haemorrhages under the fingernails
D. xanthomata on the Achilles tendons

A 59-year-old man has epilepsy and hypertension, both of which are under control with medication. He consults his general practitioner (GP) for an acute-onset, rapidly progressive, symmetrical, patchy red skin rash on his trunk and extremities. What is the most likely cause of the skin eruption?

145. A. erythema multiforme
B. drug-induced exanthema
C. urticaria
D. viral rash

A 28-year-old woman goes to her general practitioner (GP) complaining of fever. She drinks three units of alcohol a day and uses intravenous heroin. On physical examination, the GP finds a moderately ill, unkempt woman with poor teeth. Her temperature is 38.8ºC and heart rate 110 bpm (normal range 80-100 bpm). A new, holosystolic heart sound is audible, grade II/VI at the cardiac apex. Painless, red, maculopapular lesions are visible on the palms of the hands and soles of the feet. Which of the following diagnoses is most likely?

146. A. bacterial endocarditis
B. disseminated gonorrhoea
C. meningococcal infection

A 52-year-old man undergoes sigmoid resection for a poorly differentiated adenocarcinoma. The pathologist’s report indicates that the tumour is growing into but not beyond the muscular layer. What T stage of the tumour-node-metastasis (TNM) classification is this tumour categorized as?

147. A. T1
B. T2
C. T3
D. T4

Patients with postprimary pulmonary tuberculosis are often more infectious than patients with primary tuberculosis. What abnormality on a chest X-ray is most consistent with postprimary pulmonary tuberculosis?

148. A. flattening of the diaphragm
B. cavitation
C. increased pulmonary vascular markings

Bladder biopsies are taken from a 70-year-old woman with strong urge to void, frequent urination, and microscopic haematuria. At the outpatient clinic, some flat red fields are seen in the bladder and a urine cytology test suggests a malignancy. A CT urogram does not show anything unusual. What is the most likely pathological-anatomical diagnosis from the bladder biopsies?

149. A. carcinoma in situ
    B. chronic cystitis
    C. interstitial cystitis
    D. muscle-invasive bladder cancer

Axial spondyloarthritis (ankylosing spondylitis) causes inflammations in various joints. In what joints do these inflammations usually manifest first? The:

150. A. atlanto-axial joint
    B. facet joints
    C. hip joints
    D. sacroiliac joints

A 65-year-old man goes to his general practitioner (GP) for his six-monthly check-up. He has a history of type 2 diabetes, hypertension, and obesity. Physical examination reveals a BMI of 32 kg/m2 and blood pressure of 150/90 mmHg. Lab tests show eGFR 55 ml/min/1.73 m2 (normal range >90 ml/min/1.73 m2), HbA1c 58 mmol/ml (normal range <53 mmol/ml) and albumin:creatinine ratio 33 mg/mmol (normal range <3 mg/mmol). In this patient’s case, what is the most important factor in the GP’s decision to refer this kidney function impairment to a specialist? The:

151. A. albumin:creatinine ratio
    B. blood pressure
    C. weight
    D. HbA1c

A 59-year-old woman is admitted to a surgical ward with distended abdomen, vomiting, and cramping abdominal pain. The resident suspects an obstruction in the small intestine. It is unclear from the history-taking, physical examination, and lab tests what has caused the obstruction. What is the next step in diagnostic testing to ascertain the cause?

152. A. abdominal X-ray
    B. CT scan
    C. small bowel follow-through
    D. abdominal ultrasound scan

An 82-year-old woman presents to the general practitioner (GP) with stable angina pectoris. She is already taking acetylsalicylic acid and nitroglycerin to treat the attacks. She has approximately four bouts of chest pain a week. Based on the exercise ECG that she has had done elsewhere, the GP concludes that there is a substantial likelihood of stenotic coronary arteries. Her blood pressure is 131/84 mmHg and heart rate 55 bpm. What is the drug of choice as maintenance treatment for angina pectoris?

153. A. diltiazem
B. isosorbide mononitrate
C. metoprolol
D. nifedipine

A general practitioner (GP) pays a visit to a 65-year-old woman who has increasingly been suffering from involuntary eye closure and diplopia for several weeks. She says that the symptoms become worse over the day or as she becomes more tired. Physical examination reveals varying asymmetrical ptosis and double images in both eyes, which are aggravated by exertion. Further neurological tests do not reveal any abnormalities. Based on this information, what is the most likely diagnosis?

154. A. botulism
B. myasthenia gravis
C. Horner’s syndrome
D. Lambert-Eaton syndrome

A resident performs a physical examination on a patient with a proven Clostridium difficile infection. What precautions does the resident need to take to avoid spreading the infection?

155. A. contact isolation and disinfecting the hands with alcohol
B. contact isolation and washing the hands with soap and water
C. droplet isolation and disinfecting the hands with alcohol
D. droplet isolation and washing the hands with soap and water

A general practitioner (GP) diagnoses a 74-year-old man with incipient dementia. The patient has a driving licence and still drives every week. The GP should now definitely:

156. A. confiscate the driving licence
B. report to the CBR
C. refer the patient to a neurologist or geriatrician for a CBR test
D. tell the patient that he should report the diagnosis of dementia to the CBR himself

A general practitioner (GP) carries out a physical examination on a 51-year-old woman who has come to his surgery complaining of a cough. The GP does not find anything unusual from inspection and percussion. Auscultation reveals bilateral vesicular breath sounds with expiratory wheezing. Based on the physical examination, which of the following diagnoses is most likely?

157. A. asthma
B. lung cancer
C. pneumonia
D. pneumothorax

The effect of the ‘Koebner phenomenon’ is that a skin disease can be brought on by skin damage (e.g. scratching) – a familiar phenomenon in various dermatological disorders. Of which of the following skin diseases is this phenomenon particularly characteristic?

158. A. constitutional eczema
B. erythema nodosum
C. actinic keratosis
D. psoriasis vulgaris

A lumbar puncture is performed to obtain cerebrospinal fluid (CSF). Bacterial meningitis can cause an increase in the CSF granulocyte count. What is the most likely origin of these mature granulocytes?

159. A. the blood circulation
B. the grey matter of the spinal cord
C. the white matter of the spinal cord
D. a cell population always present in the CSF

An 83-year-old woman has been diagnosed with sarcopenia. In order to reduce the sarcopenia, a geriatrician initiates multidisciplinary treatment to work on the woman’s fitness, muscle strength, and nutritional status. What are the most important nutrients that this patient needs in order to treat the sarcopenia?

160. A. proteins
B. carbohydrates
C. fats
D. vitamins and minerals

A 25-year-old woman has been diagnosed with irritable bowel syndrome (IBS). Her general practitioner (GP) explains to her how the FODMAP diet can help to reduce her IBS symptoms. FODMAP stands for a collection of fermentable oligosaccharides, disaccharides, monosaccharides, and polyols. A reduction in which of the following nutrients is compatible with the FODMAP diet?

161. A. gluten
B. lactose
C. polyunsaturated fatty acids
D. fibre

Patients with idiopathic Parkinson's disease experience a sleep disorder prior to the first motor symptoms in approximately 30% of cases. Which sleep disorder?

162. A. nocturnal hallucinations
B. narcolepsy
C. REM sleep behaviour disorder
D. sleep apnoea syndrome

A Western diet contains approximately 1 gram of calcium per day (25 mmol), of which approximately 5 mmol is absorbed through active and passive calcium reabsorption and approximately 20 mmol is excreted in the faeces. What substance is mainly responsible for active calcium reabsorption in the duodenum?

163. A. calcitonin
B. fibroblast growth factor 23 (FGF23)
C. parathyroid hormone (PTH)
D. 1,25(OH)2 vitamin D

A 27-year-old man goes to a hepatogastroenterologist complaining of persistent lower abdominal pain. He now has bloody diarrhoea as well. He has lost five kilograms over the past few months. There is tenderness in the lower left abdominal region in particular. The gastroenterohepatologist thinks it could be chronic intestinal inflammation. What test should be carried out to confirm the diagnosis?

164. A. colonoscopy
B. abdominal CT scan
C. abdominal MRI scan
D. video capsule endoscopy of the small intestine

A 60-year-old man with a non-functioning pituitary tumour undergoes neurological examination. The growth is now so large that the patient suffers from loss of visual field. What fields of vision will most likely be affected in this patient's case?

165. A. both nasal fields of vision
B. both temporal fields of vision
C. the nasal field of vision of the left eye and the temporal field of vision of the right eye
D. the nasal field of vision of the right eye and the temporal field of vision of the left eye

A physician auscultates the lungs of a 36-year-old woman who is short of breath and finds a bronchial obstruction. What is the best description of the length of the audible inspiratory and expiratory breath sounds?

166. A. the audible inspiration lasts two to three times as long as the audible expiration
B. the audible inspiration lasts as long as the audible expiration
C. the audible expiration is longer than the inspiration

The autonomic nervous system contains presynaptic and postsynaptic neurons. Where are the cell bodies of the presynaptic sympathetic neurons located? In the:

167. A. medulla oblongata
B. mesencephalon
C. pons
D. spinal cord

The shoulder muscles are supplied with blood via the subclavian artery. From which of the following structures does the left subclavian artery usually arise? The:

168. A. axillary artery
B. common carotid artery
C. aortic arch
D. brachiocephalic trunk

An American psychologist developed EMDR (eye movement desensitization and reprocessing) therapy more than 25 years ago. For which of the following 28-year-old patients is EMDR particularly indicated?

169. A. a blogger who does not want to appear in public, as she is incapacitated by the perception that her nose is too big
B. a computer technician with mysophobia who washes his hands a hundred times a day
C. a teacher with anxiety and sleep disorders that began after a house fire
D. a restaurant owner with multiple addiction to tobacco, alcohol, and cannabis

A gynaecologist carries out a transvaginal ultrasound scan on a pregnant woman at six weeks of amenorrhoea, but does not find any intrauterine pregnancy (IUP). To rule out an ectopic pregnancy (EP) he decides to test the beta-hCG twice with a 48-hour interval. What will the rise in this hormone level be in an IUP, compared with an EP? In the case of an EP the rise:

170. A. will be smaller than in the case of an IUP
B. will be larger than in the case of an IUP

A 35-year-old man was hit by a car yesterday. The bumper caught his lower leg, causing a lower leg fracture. He now has unbearable pain in the leg and foot, with diminished sensation and a cold foot. Which of the following explanations for his clinical picture is most likely?

171. A. compartment syndrome
B. pressure necrosis
C. dystrophy
D. deep vein thrombosis

A 75-year-old woman goes to her general practitioner (GP) complaining of general malaise and poor appetite. Her shoulders are painful and stiff, making it impossible for her to raise her arms. She has been taking simvastatin every day for primary hypercholesterolaemia since she was 63. Physical examination reveals that abduction of both shoulders is restricted and she uses her arms for support when standing up from a seated position. Lab tests show a sedimentation rate (BSE) of 90 mm/hour (normal range in women >50 years <30 mm/hour) and creatine phosphokinase (CPK) of 65 U/L (normal range <145 U/L). What is the most likely diagnosis?

172. A. bilateral adhesive capsulitis (frozen shoulder)
B. polyarthritis
C. polymyalgia rheumatica
D. statin-induced myopathy

A 57-year-old man has had treatment-resistant hypertension for many years. A diagnosis of hypertension due to primary hyperaldosteronism caused by an adrenal adenoma is considered. At what point can this diagnosis be ruled out, based on the aldosterone:renin ratio? If the aldosterone:renin ratio is:

173. A. elevated
B. normal
C. reduced

A 32-year-old man has a lateral dermatofibrosarcoma protuberans on the thorax. The greatest threat to his health is caused by the likelihood of:

174. A. local progression
B. lung metastases
C. axillary lymph node metastases

Which kidney is most cranial? The:

175. A. left kidney
B. right kidney

A 36-year-old man has been suffering from a painful, red, fluctuating swelling high on his back for several days. He goes to his general practitioner (GP). What is the most appropriate next step?

176. A. diagnostic needle aspiration
B. ultrasound scan
C. lab tests
D. generous incision

A 53-year-old woman undergoes total thyroidectomy for papillary thyroid cancer that has been confirmed cytologically. A few hours after the operation she develops muscle cramps in her legs and tingling in her fingertips and around the mouth. What is the most likely cause of these symptoms?

177. A. hypoperfusion of the parathyroid glands
B. inferior recurrent nerve injury
C. superior recurrent nerve injury
D. postoperative bleeding at the surgical site

A 50-year-old man goes to his general practitioner (GP) complaining of bright red anal bleeding with no other symptoms. A physical examination is carried out. What should it definitely include, in addition to abdominal palpation?

178. A. auscultation of the abdomen and percussion of the liver and spleen
B. auscultation of the abdomen and inspection of the anus
C. inspection and percussion of the abdomen and inspection of the anus
D. inspection of the anus and a digital rectal examination

A 43-year-old man presents at the general practitioner (GP) office. He says he has been feeling depressed for quite some time. He increasingly feels indifferent, even towards his hobby, which used to be his main interest in life until recently. What conclusion from the mental state examination as regards mood state is most consistent with this case description?

179. A. anxiety
B. anhedonia
C. apathy
D. dysphoria

The structure of the body varies, depending on physique. Where is the largest energy reserve (expressed in kJ) in a healthy, normally proportioned adolescent? In the:

180. A. liver cells
B. muscle cells
C. fat cells

A 43-year-old woman was recently admitted to a psychiatric hospital with manic psychosis under a crisis management measure. On her discharge, a care authorization was obtained and she signed a declaration of prior consent (*zelfbindingsverklaring*), stating that she will take her medication as prescribed and attend the outpatient clinic for a check-up every two weeks. During a visit to the clinic, the psychiatrist notices a patch on her right arm that looks suspiciously like a melanoma and advises her to report to her general practitioner (GP) immediately. The patient refuses to do so, saying that she's had enough of doctors. How should the psychiatrist resolve this situation?

181. A. the psychiatrist should apply to a court to extend the conditions of the care authorization and the declaration of prior consent
    B. the psychiatrist should check the patient's legal capacity/ incapacity regarding the problem with the skin patch
    C. the psychiatrist should issue a new crisis management measure

Blood is collected in a heparin gel tube. After centrifuging, a yellow fluid appears above the gel barrier. What is the name of this fluid?

182. A. plasma
    B. serum

A 78-year-old woman has pain in her left leg when walking. It clears up when she sits down. The differential diagnosis includes a vascular problem. Physical examination reveals trophic disorders of the skin of the left lower leg. The skin colour is normal. No murmurs are audible in the iliac fossa or groin. Palpation of the posterior tibial artery and the dorsalis pedis artery reveals weakened pulses. The physician concludes that the cause is vascular. What is the most likely diagnosis?

183. A. acute arterial ischaemia
    B. intermittent arterial claudication
    C. chronic intermittent venous claudication
    D. deep-vein thrombosis

A 78-year-old man had shingles six months ago. He now presents to the general practitioner (GP) complaining of chest pain consistent with postherpetic neuralgia. The shingles was on the thorax: the man was in severe pain at the time, and the rash was extensive. He was treated with analgesics. In addition to the severe acute pain and extensive rash, what was a risk factor for postherpetic neuralgia in this patient's case?

184. A. the site on the thorax
    B. his sex (male)
    C. his age

Patients with osteoporosis are often prescribed bisphosphonates. What is the mechanism of action of bisphosphonates? They:

185. A. inhibit the osteoblasts
B. inhibit the osteoclasts
C. stimulate the osteoblasts
D. stimulate the osteoclasts

A 75-year-old man with bladder cancer is admitted to hospital during the daytime for intravenous antibiotic treatment for urosepsis. That night, the nurse telephones to say that he is dressed in his room, wants to go to work, and has pulled out his intravenous line. He refuses to accept that his actions are wrong and responds angrily. The nurse would like the patient to calm down so that she can reinsert the intravenous line and the patient can sleep. She asks for medication to be prescribed. What is the drug treatment of choice?

186. A. haloperidol
B. midazolam
C. rivastigmine
D. temazepam

A general practitioner (GP) carries out a digital vaginal examination on a 43-year-old woman with vaginal bleeding, with the aim of ascertaining the position of the uterus. The posterior fornix is the deepest. The whole uterus can readily be assessed from bimanual examination. What is the most likely position of the uterus?

187. A. anteversion flexion
B. retroversion flexion
C. retroversion extension

A 40-year-old man is committed to a mental health care institution with a manic episode. He has a history of bipolar disorder. The psychiatrist asks the patient, ‘How are you?’. The patient answers: ‘I’m okay and you’re talking. That’s a good deed. Deeds, not words. Feyenoord. Do you like football?’ What term is used in psychiatric examination to describe this observation?

188. A. hypervigilance
B. incoherence
C. tachyphrenia
D. heightened association

A 26-year-old woman wishing to conceive is scared of severe nausea. In which trimester is the incidence of hyperemesis gravidarum highest?

189. A. the first trimester
B. the second trimester
C. the third trimester
D. it is equally high in all trimesters

A 30-year-old woman is pregnant with her first child. She is told that group B streptococcus (GBS) has been found in her urine culture. Antibiotic prophylaxis reduces neonatal morbidity and mortality, if it is administered during the correct period. What is the best period in which to administer the antibiotics?

190. A. during the third trimester of the pregnancy (to the mother)
B. during labour (to the mother)
C. immediately after birth (to the child)

A 68-year-old woman goes to the general practitioner (GP) with her husband because of behavioural problems at home. The woman is found to have flattened emotions. She also has severe behaviour disorders, with loss of decorum that, on inquiry, turns out to have started two years ago. The GP notices that the woman does not talk much spontaneously. Some memory tests show that the memory is intact. With which type of dementia are this patient's symptoms most consistent?

191. A. Alzheimer's disease
B. frontotemporal dementia
C. Lewy body dementia
D. vascular dementia

A study has been carried out into the reliability of the Lachman test compared with arthroscopy (the gold standard) for diagnosing anterior cruciate ligament rupture. The results were as follows:
43 people had positive arthroscopy and a positive Lachman test
2 people had negative arthroscopy and a positive Lachman test
7 people had positive arthroscopy and a negative Lachman test
198 people had negative arthroscopy and a negative Lachman test
What is the negative predictive value of the Lachman test?

192. A. 2/45
B. 7/50
C. 7/205
D. 198/200
E. 198/205

A 30-year-old woman presents at the general practitioner (GP) office. She has had a transient loss of consciousness. Which of the following options will probably provide the most information to ascertain the cause of TLoC?

193. A. history-taking
B. blood tests
C. ECG
D. physical examination

A 72-year-old woman with a history of longstanding, severe COPD presents at the general practitioner (GP) office complaining of back pain. The pain started a week ago and is worst when getting out of bed or standing up from a chair. The PMI is medial at the level of the thoracolumbar junction and radiates upwards and downwards. She says that she previously had an episode of this kind but it was less severe. Which of the following diagnoses is most likely?

194. A. lumbago
B. lumbosacral radicular syndrome
C. urolithiasis
D. vertebral fracture

A 40-year-old man is committed to a mental health care institution. This is his third committal to a clinic. Between committals his functioning was good. For the past ten days the patient has been chaotic and more irritable than normal, and he has inflated self-esteem. He sleeps no more than three hours a night. During the past few days, he has called several official bodies in an attempt to restore world peace, a subject that has been on his mind for several days. Working is out of the question at present. During the history-taking, he is continually distracted by things around him. What is the most likely diagnosis according to the DSM-5?

195. A. manic episode of bipolar disorder
B. schizoaffective disorder
C. schizophrenia
D. delusional disorder

A 66-year-old woman presents at the general practitioner (GP) office. The GP suspects an anxiety disorder and has blood tests carried out. The patient has no history of anxiety disorder. Which of the following tests would be most useful to confirm or rule out a physical cause or partial cause of her anxiety disorder?

196. A. glucose
B. Hb
C. TSH
D. vitamin B12
E. vitamin D

Anxiety symptoms and disorders are common. What anxiety disorder is most common among the adult population of the Netherlands?

197. A. generalized anxiety disorder
B. panic disorder
C. specific phobia
D. social anxiety disorder

Hyaline membrane disease or infant respiratory distress syndrome (IRDS) is a condition in which the lungs do not inflate sufficiently due to lack of surfactant. Which type of cells in the lungs produce surfactant?

198. A. alveolar macrophages
B. alveolar endothelial cells
C. type I pneumocytes
D. type II pneumocytes

A peptic ulcer is characterized by damage to the gastric mucosa, which can be either acute or chronic. Which of the following histological characteristics is indicative of a chronic peptic ulcer?

199. A. necrotic tissue
B. inflammatory infiltrate
C. granulation tissue
D. fibrosis

A neurologist makes a working diagnosis of psychogenic, non-epileptic seizures in a 41-year-old man. He wants to carry out diagnostic tests to be on the safe side. Pending the results, the patient asks the neurologist what the diagnosis could be. The neurologist decides not to share the information with the patient yet, as he might react negatively and walk away. What does the Medical Treatment Contracts Act (*WGBO, Wet op de Geneeskundige Behandelovereenkomst*) have to say about this decision?

200. A. this is a therapeutic exception, as the information could be stressful and harmful for this patient
B. the practitioner should give the patient the information on his state of health and prospects
C. the practitioner should check his intention not to supply the information with a fellow practitioner

----------END----------

# RULES AND REGULATIONS FOR PROGRESS TESTS

- In the event of contravention of these Rules and Regulations the Test Coordinator may decide on behalf of the Board of Examiners to exclude the student from further participation in the test. A student who is denied access to the examination room will not be awarded a result for the test in question.
- Students shall obey the instructions of invigilators at all times.
- A place is reserved for each student. The test begins at 9 a.m.; students who fail to report at that time will not be admitted. Students may not leave the examination room until 30 minutes after the official commencement time of the test. Students who have left the examination room will not be permitted to re-enter it. Students are recommended to take possible delays into account when planning their journeys.
- Students are permitted to take a test if they can produce a valid student card, which should be placed on the desk so as to be clearly visible. Students who are unable to produce a valid student card may be admitted conditionally on the basis of another valid identity document; they must then produce a valid student card at the Medical Student Service Desk. *(Valid identity documents are solely the following: student card, passport, European identity card, driving license, residence permit or student travel pass. An identity document without a photograph will not be accepted.)*
- In the event of fraud the Board of Examiners may rule the result of the test invalid.‘Fraud’ means any action or omission on the part of a student that makes it wholly or partly impossible to form an accurate judgment of that student’s or a fellow student’s knowledge, understanding or skill.
- The answer form should be handed in to the invigilator at the official time or when indicated by the invigilator. Having handed in the answer form, students should leave the examination room as quickly and quietly as possible.

## Results

The grades that can be awarded for a progress test are fail, pass and good. Answers are marked as right or wrong. A correct answer scores +1 point. The deduction for an incorrect answer is 1 divided by the number of possible incorrect answers, i.e.:
-1 for a two-choice answer
-1/2 for a three-choice answer
-1/3 for a four-choice answer
-1/4 for a five-choice answer
You can of course answer with a question mark, in which case you will score 0 points for that question.

The final score for the test is a percentage, which will be calculated as follows for a test comprising 200 questions:

*Score = (right-wrong)/200 x 100*

The answer key and the literature references will be posted on Nestor as soon as possible after 4 p.m. on the day of the test.

# GENERAL INFORMATION

## Progress tests

The purpose of the Faculty of Medicine's Inter-University Progress Test is to check the students' knowledge development during their studies. All students of Medicine therefore take a progress test four times a year. A progress test comprises a maximum of 200 questions geared to the requirements for the final physician's assessment. The questions are divided up among a number of curriculum-based categories and disciplines in line with a fixed distribution formula (the test blueprint). The blueprint is a guideline; the number of questions in each category and/or discipline in a particular test may vary from the blueprint. No rights may be derived from such departures from the guideline.

## The questions

The questions are set by question-setting teams from the Faculties of Medicine at the universities of Maastricht, Nijmegen, Amsterdam, Groningen and Leiden. The questions are provided with literature references for study purposes.The references are mainly to books on the reading list of all participating partners. When it concerns vignette questions we can not always be given a literature reference, in this case, these provide feedback.
The order of the questions in the test booklet is random. In the answer key you can read which discipline and category belongs to each question.

## View the development of your medical knowledge on the internet

By using the programme ProF you can view the development of your medical knowledge, as measured by the iPTM, on the internet. You can find out how it works on the website **http://ivtg.nl/**. Students can log in with their student account (Snumber and password) to obtain access to several charts in which they can view their own knowledge development, compared to the development of their peer students. By viewing your knowledge development per category you can establish the strengths and weaknesses of your development for each cognitive domain. By doing so you can find out if you need to pay extra attention to certain subjects.
*Note : The official results of the Progress Test are published in the usual way and never with the program ProF.*