



The sample questions aim to illustrate the various types of format of multiple-choice questions used in Part I Examination which may be used in questions of different specialties.

Basic Sciences

1. A 50-year-old woman complains of a tendency to fall when walking. When moving her upper limbs, her hands start to shake and holding a glass of water becomes a problem. When talking, she cannot produce fluent sentences. Her cognitive functions and memory are clear and unaffected. Upon examination, she is found to have hypotonia, pendular knee jerk, mild nystagmus and dysarthria.

Which of the following areas is **MOST** likely to be affected?

- A. Cerebellum
- B. Cerebral cortex
- C. Diencephalon
- D. Limbic system
- E. Substantia nigra

(Format: Scenario-based with positive response)

2. Glucagon plays a critical role in regulating blood glucose levels in part by modulating glycogen metabolism in the liver. The major action of this hormone is mediated through the production of which of the following intracellular second messenger molecules?

- A. AMP
- B. cAMP
- C. cGMP
- D. GMP
- E. UMP

(Format: Non-scenario-based with positive response)

3. Toxic doses of atropine typically cause all of the following effects **EXCEPT**

- A. Blurred vision
- B. Bronchospasms
- C. Hallucinations
- D. Hyperthermia
- E. Urinary retention

(Format: Non-scenario-based with negative response)

Medicine

1. A 28-year-old intravenous drug abuser is admitted with a history of low-grade fever for 1 month, cough with occasional haemoptysis and left-sided abdominal pain. On examination he looks unwell with mild pyrexia, raised jugular venous pressure and a systolic murmur at the left sternal edge. There are scattered crepitations in the lungs and in the abdomen there is tenderness in the left hypochondrium.

Which of the following diagnoses would you consider to be the **MOST** likely?

- A. AIDS
- B. A ruptured amoebic abscess
- C. Staphylococcal septicaemia
- D. Staphylococcal right-sided endocarditis
- E. Typhoid

(Format: Scenario-based with positive response)

2. A 54-year-old man presents with progressive weakness for 6 months. Blood pressure is 118/60 mm Hg supine, and 84/56 mm Hg standing. He is also noted to have increased skin pigmentation. Blood test: Na 130 mmol/l, K 7.0 mmol/l, Cl 100 mmol/l, HCO₃ 18 mmol/l, creatinine 99 µmol/l, glucose 3.5 mmol/l.

What is the **MOST** likely diagnosis?

- A. Adrenal insufficiency
- B. Cushing's disease
- C. Haemolysis
- D. Hyporeninaemic hypoadosteronism
- E. Lung cancer with ectopic ACTH secretion

(Format: Scenario-based with positive response)

3. A patient is admitted with acute pancreatitis. Which of the following is **NOT** an indicator of poor prognosis?

- A. PaO₂ 7.3 kPa (normal >9.5)
- B. Patient is 60 years old
- C. Serum amylase 25000 U/L (normal <110)
- D. Serum calcium 1.9 mmol/L (normal 2.11-2.55)
- E. Temperature of 40 degrees Celsius

(Format: Non-scenario-based with negative response)



Paediatrics

1. A 2½-year-old boy was born at 26 weeks gestation with a birth weight of 900 gram. After birth, he was found to have a grade III intraventricular haemorrhage and had developed hydrocephalus requiring a ventriculo-peritoneal shunt at 3 months. He was discharged 5 months later. The mother notices that he cannot lift up his head, roll over or even sit. He cannot reach out for toys. Physical examination shows that muscle tone has increased in all limbs. He does not have any visual fixation.

Which of the following is the **MOST** likely diagnosis?

- A. Ataxic cerebral diplegia
- B. Athetoid cerebral palsy
- C. Global developmental delay
- D. Spastic diplegia
- E. Spastic tetraplegia

(Format: Scenario-based with positive response)

2. Which of the following is more commonly seen in Wilms' tumour rather than neuroblastoma?

- A. Abdominal distension
- B. Bone pain
- C. Bruises
- D. Red urine
- E. Weight loss

(Format: Non-scenario-based with positive response)

3. The following clinical features are associated with congenital rubella syndrome **EXCEPT**:

- A. Cardiac defects
- B. Cerebral palsy
- C. Deafness
- D. Microphthalmia
- E. Saddle nose

(Format: Non-scenario-based with negative response)



Psychiatry

1. A 40-year-old accountant, who has been drinking for 20 years, has gradually increased his intake over the past year to a bottle of wine a day due to stress from work. His recent blood test suggests a deranged liver function. His family physician has advised him to cut down or quit alcohol, but he is not convinced. He thinks that drinking a bottle of wine a day is a rather common practice, and he is not bothered about the minor abnormality of liver function either.

Which stage is he at, according to Prochaska & DiClemente's "stages of change" model?

- A. Action
- B. Contemplation
- C. Maintenance
- D. Pre-contemplation
- E. Preparation

(Format: Scenario-based with positive response)

2. Which of the following brain areas is the **MOST** likely to be involved in the "alien hand syndrome"?

- A. Dorsolateral prefrontal cortex
- B. Fusiform gyrus
- C. Insula
- D. Precuneus
- E. Supplementary motor area

(Format: Non-scenario-based with positive response)

3. Evaluation of which of the following would be the **LEAST HELPFUL** in estimating the prognosis for schizophrenia:

- A. Financial status of the patient
- B. History of hospitalisations
- C. Occupational history
- D. Premorbid level of social functioning
- E. Presence of negative symptoms

(Format: Non-scenario-based with negative response)



Surgery

1. A 32-year-old lady presents to surgical clinic concerned about an isolated dark-brown coloured lesion on her leg, which has recently become itchy and begun to bleed. She does not have any family history of skin cancers. On examination, there is a dark-brown coloured, irregular-shaped lesion of 7 mm on the medial aspect of her leg. There is no associated regional lymphadenopathy.

The **MOST** appropriate next step of management is:

- A. Chest X-ray
- B. Excisional biopsy
- C. Fine-needle aspiration biopsy
- D. Observation
- E. Sentinel lymph node biopsy

(Format: Scenario-based with positive response)

2. An 80-year-old lady of 30 kg presents with features of small bowel obstruction. She does not have a past history of surgery. Physical examination does not show any scar or mass over the abdomen or the groin. She complains of pain on moving her right hip. Erect abdominal X-ray shows small bowel dilatation with fluid levels and no large bowel shadow is seen. There is no other abnormal gas shadow in the abdominal X-ray.

What is the **MOST** likely diagnosis?

- A. Adhesive small bowel obstruction
- B. Caecal volvulus
- C. Carcinoma of the sigmoid colon
- D. Gallstone ileus
- E. Obturator hernia

(Format: Scenario-based with positive response)



3. A 70-year-old man who was previously healthy has a transurethral resection of the prostate under spinal anaesthesia. In the recovery room he is noted to be disorientated with deteriorating mental alertness and hypotension. Drainage from the urinary bladder is free flowing and pinkish in colour.

What is the **MOST** likely cause of his condition?

- A. Hypoglycaemia
- B. Hyponatraemia
- C. Inadequate analgesia
- D. Normal anaesthetic recovery
- E. Post-operative haemorrhage

(Format: Scenario-based with positive response)

Orthopaedic Surgery

1. A 65-year-old retired housewife slips and falls in the bathroom. A radiograph of the wrist is shown.



Which of the following is the appropriate means of management?

- A. A cuff and collar and elevation
- B. A long arm cast
- C. A short-arm cast
- D. A wrist brace
- E. Tubinet Compression Bandage

(Format: Scenario-based with positive response)

2. Which of the following statements regarding gouty arthritis is **TRUE**?

- A. An elevated serum uric acid level is needed for making the diagnosis.
- B. Elbow joint is the most commonly affected joint.
- C. It is due to calcium pyrophosphate crystal deposition in the joints.
- D. The crystals can be easily seen under a simple light microscope.
- E. Tophi may be found in the pinna of the ear.

(Format: Non-scenario-based with positive response)



3. A 50-year-old female suffers from bilateral steroid-induced avascular necrosis of the femoral heads. She complains of a recent increase in left hip pain over the past 6 months.

Which of the following X-ray features is **NOT** compatible with the history?

- A. Collapse of femoral head
- B. Fracture neck of femur
- C. Narrowing of joint space
- D. Osteopenia
- E. Osteophyte formation

(Format: Scenario-based with negative response)



Obstetrics & Gynaecology

1. External cephalic version is performed for breech presentation on a 28-year-old primigravida at 37 weeks' gestation. She is rhesus D negative without rhesus antibody. Her husband's rhesus status is unknown.

What is the **MOST** appropriate management?

- A. Anti-D immunoglobulin is not indicated.
- B. Check maternal blood for rhesus antibody and give anti-D immunoglobulin if the antibody is present.
- C. Give prophylactic anti-D immunoglobulin after delivery.
- D. Give prophylactic anti-D immunoglobulin after the version.
- E. Perform Kleihauer test on maternal blood and give anti-D immunoglobulin if large amount of fetal red blood cells are identified.

(Format: Scenario-based with positive response)

2. A mother, who has dichorionic diamniotic twin pregnancy, is diagnosed absence of fetal heart pulsation of one twin on ultrasound scan examination at 30 weeks gestation. She is asymptomatic and her vital signs are normal.

Which of the following management options is **CORRECT**?

- A. Emergency Caesarean section after a course of antenatal corticosteroids
- B. Daily CTG and Doppler velocimetry
- C. Hysterotomy to remove the dead twin
- D. Induction of labour at 34 weeks of gestation
- E. Monitor the fetal growth by ultrasound and plan for delivery at term

(Format: Scenario-based with positive response)

3. Which of the following parameters is useful for assessing the gestational age at 18 weeks?

- A. Amniotic fluid index
- B. Biparietal diameter
- C. Crown-rump length
- D. Fetal heart rate
- E. Gestational sac volume

(Format: Non-scenario-based with positive response)



Medical Ethics/ Community Medicine

1. Stereoscopic digital mammography is used to screen women for breast cancer. The test has a sensitivity of 90% and a specificity of 80%, and the prevalence of disease at screening in the population of interest is 5 %.

If 100 women are screened, how many would be false positive?

- A. 1
- B. 5
- C. 9
- D. 19
- E. 20

(Format: Scenario-based with positive response)

2. In a randomised controlled trial for a new treatment versus placebo with analysis by intention to treat, which of the following statements is **TRUE**?

- A. The intention is to analyse the treatment data statistically.
- B. The intention is to exclude the subjects with side effects.
- C. The subjects are randomised before they have confirmed their intention to be treated.
- D. The subjects who have defaulted follow up are excluded from analysis.
- E. This will produce a conservative estimate of the efficacy of the treatment.

(Format: Non-scenario based with positive response)

3. Which of the following statements about occupational health in Hong Kong is **TRUE**?

- A. A doctor who diagnoses a notifiable occupational disease is required by law to report to the Government.
- B. Pre-employment medical examination is required by law for all occupations.
- C. The Government's role in occupational health is confined to legislation and enforcement.
- D. The laws in occupational safety and health cover only workers in factories.
- E. The wearing of protective equipment is the best approach to prevent occupational diseases.

(Format: Non-scenario-based with positive response)