

ROYAL CIVIL SERVICE COMMISSION
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2010
EXAMINATION CATEGORY: TECHNICAL
PAPER III: SUBJECT SPECIALIZATION PAPER FOR MEDICINE

Date : 24th November 2010
Total marks : 100
Examination Time : 2.5 hours
Reading Time : 15 minutes (prior to exam time)

INSTRUCTIONS

1. Write your Roll Number clearly on the answer booklet in the space provided.
2. The first 15 minutes is being provided to check the number of pages, printing errors, clarify doubts and to read the instructions. You are **NOT PERMITTED TO WRITE** during this time.
3. Use either **Blue** or **Black** ink pen or ball point pen for the written part and **H.B. pencils** for the sketches and drawings.
4. All answers should be written on the Answer Booklet provided. Candidates are not allowed to write anything on the question paper.
5. This question booklet consists of **9 pages**. It is divided into two sections – namely SECTION A and SECTION B.
6. **SECTION A** consists of two parts: **Part I** and **Part II**.

Part I consists of 30 multiple choice questions carrying one (1) mark each and is **compulsory**. The answer of your choice should be clearly written on your answer booklet next to the question number.

Part II consists of four (4) short answer questions of five (5) marks each and all questions are **compulsory**.

7. **SECTION B** consists of two **Case Studies**. Choose only **ONE** case study and answer the questions under your choice. Each case study carries fifty (50) marks in total.

SECTION A: Compulsory

(30 marks)

PART I: Multiple Choice Questions

Choose the most correct / appropriate answer and write against the question number (Example: Q1 – a, Q2 – d) in the answer booklet

- 1) When you first see a patient with multiple trauma following a road traffic accident , you must immediately
 - a) Lift the patient and take to the nearest hospital
 - b) Call for an ambulance and wait till it arrives
 - c) Start with ABC
 - d) Look for the culprit

- 2) Death from secondary head injury means
 - a) Following a second accidental head injury
 - b) Following infection after severe head injury
 - c) Following complication due to drugs and other management
 - d) Following cerebral hypoxia

- 3) Glasgow Coma Scale (GCS) is useful for assessing if
 - a) Patient requires admission and treatment in ICU
 - b) Patient is fit to be discharged
 - c) Patient needs psychiatric consultation
 - d) Patient is under alcohol intoxication or not

- 4) Immediate management of cardiogenic shock is
 - a) Dopamine infusion
 - b) Infusion of Normal Saline
 - c) Injection Frusemide
 - d) CPR

- 5) Non-union following fracture of bone is treated by
 - a) Open reduction and internal fixation
 - b) Bone grafting and internal fixation
 - c) Surgical amputation
 - d) External fixation

- 6) Low dose Combined Oral Contraceptives can be given in a woman who
- Has a history of breast cancer
 - Is breast feeding a new born baby
 - Has a 3 cm ovarian cyst
 - Has serious active liver disease
- 7) In severe infection of umbilicus in the newborn all of the following are true **except**
- The umbilicus is red and swollen
 - It may be treated with oral antibiotics
 - There may be a history of unclean birth
 - The umbilicus may be draining pus
- 8) Which of the following is an **unsafe** work practice
- Washing hands
 - Not keeping instruments on the sterile drape over the patient
 - Passing sharp instruments directly into the surgeon's hand
 - Putting all reusable items in 0.5% chlorine solution for 10 minutes after use
- 9) This is **not** a life threatening complication of diabetes mellitus
- Blurred vision (presbiopia)
 - Lactic acidosis
 - Hypoglycaemic coma
 - Diabetic ketoacidosis
- 10) The following is **true** about Genital ulcers and HIV infection
- Genital ulcers facilitate the spread of HIV
 - Treatment of genital ulcers is the same for HIV positive and HIV negative patients
 - The presence of HIV infection may change the presentation of genital ulcers
 - All of the above are true
- 11) The following is **not** a treatment of anogenital warts
- Cryotherapy
 - Surgical excision
 - Antibiotics
 - Podophyllin

- 12) The following is **not true** about cord prolapse
- a) The fetus is at risk of anoxia
 - b) The aim is to minimize pressure on the cord
 - c) Delivery is always by caesarean section
 - d) It is more common in breech presentation
- 13) Pelvic Inflammatory Disease
- a) Is usually caused by a single micro-organism
 - b) Is usually caused by multiple micro-organisms
 - c) Does not occur after delivery or miscarriages
 - d) Has no long term sequelae
- 14) In the following arrhythmia there is **no** palpable pulse in the carotid artery
- a) Atrial fibrillation
 - b) Ventricular fibrillation
 - c) Multiple ventricular ectopics
 - d) Heart block
- 15) Following a dog bite leading to a contaminated wound, the most appropriate surgical treatment is
- a) Clean and suture the wound
 - b) Thorough excision of the whole wound
 - c) Clean and debride and dress the wound
 - d) Clean and leave the wound open
- 16) Which of the following is **not true** about the treatment of chronic osteomyelitis
- a) Multiple and prolonged antibiotic therapy
 - b) Sequestrectomy
 - c) Hyperbaric oxygen
 - d) Anti-TB drugs
- 17) Diarrhoea is best treated with
- a) IV fluids
 - b) Antibiotics
 - c) Anti amoebic agents
 - d) Oral rehydration solution

- 18) The correct management of chronic suppurative otitis media is
- a) Daily cleaning and instillation of ear drops
 - b) Prolonged antibiotic therapy
 - c) Keeping the ear dry
 - d) Immediate tympanoplasty
- 19) Perforating eye injury should be
- a) Operated immediately
 - b) Cleaned and treated conservatively
 - c) Operated after a few days
 - d) Given analgesics and advised rest
- 20) Migraine is a disease diagnosed by
- a) CT scan
 - b) MRI
 - c) Classical history
 - d) EEG
- 21) The Mantoux test
- a) Is read at 24 hours
 - b) Is positive if there is redness and induration at least 10mm in diameter
 - c) If positive indicates active current tuberculous infection
 - d) Is done by injecting tuberculin solution subcutaneously
- 22) The following are true about human cysticercosis **except**
- a) It can be treated using Albendazole
 - b) Cerebral cysticercosis usually presents as epilepsy
 - c) Can be prevented by effective meat inspection
 - d) Develops following inhalation of the eggs in the air
- 23) The following about hydatid cyst are true **except**
- a) Most of the cysts develop in the lungs
 - b) Symptoms may be due to enlargement of the cysts
 - c) Rupture may cause spread to other organs
 - d) May present as an intra-abdominal mass
- 24) The following about the cerebellum is **false**
- a) It controls emotions
 - b) It is responsible for maintain the equilibrium of the body
 - c) It receives information from the eyes, ears, spinal cord and cerebral cortex
 - d) Cerebellar disease may result in dysdiadokokinesis

- 25) In Bell's palsy the following are found **except**
- a) The whole side of the face is smooth and free of wrinkles
 - b) The eye can be closed
 - c) The angle of the mouth sags
 - d) Tears fall over the lower lid
- 26) The following is **not found** in a patient with mitral stenosis
- a) Opening snap
 - b) Accentuation of mitral first sound
 - c) Systolic murmur
 - d) Enlargement of the right ventricle
- 27) The following is **not** a function of the liver
- a) Glucose regulation
 - b) Synthesis of albumin
 - c) Drug metabolism
 - d) Synthesis of bilirubin
- 28) Mean Arterial Pressure is
- a) The average pressure taken three times in a day
 - b) The average of systolic and diastolic pressure
 - c) Diastolic + $\frac{2}{3}$ of the pulse pressure
 - d) Average of the BP in the right arm and the left arm
- 29) The following about Hospital Acquired Infections (HAI) is **false**
- a) They are more responsive to antibiotic therapy than community acquired infections
 - b) They are the result of indiscriminate antibiotic therapy
 - c) They can be reduced by discharging patients early
 - d) They occur more commonly in immuno-compromised individuals
- 30) Scabies
- a) Is infectious
 - b) Is contagious
 - c) Is hereditary
 - d) Is a secondary infection

SECTION A:

PART II: SHORT ANSWER QUESTIONS

ANSWER ALL THE QUESTIONS

(5 marks each)

1. How you will estimate the extent of a burn in adults using the “RULE OF NINE”?
2. Write a short note on Infection control practices/Universal precautions.
3. Write a short note on Gas gangrene.
4. Write down the principles of management of an unconscious patient.

SECTION B: CASE STUDIES

(50 marks)

Given below are 2 case studies. Read the cases carefully and answer the questions given after each case. You are to attempt only one case study.

Case 1

You are posted to a District Hospital and you are the only Medical Officer in your hospital.

You are faced with the following situations. How will you assess, investigate and manage them.

1. Dema is 24 years old and has recently got married. She gives a history of 3 months amenorrhoea followed by bleeding per vaginum. She reports feeling nauseated, having anorexia and vomiting. She has been passing grape like vesicles per vaginum since the morning associated with pain in the lower abdomen.
 - a) What will you include in your assessment of Dema?
 - b) What is the probable diagnosis?
 - c) What investigations would you do?
 - d) How will you manage this patient?
 - e) What would you include in your follow up of this patient?

2. Dorji is 35 years old and has been having fever for more than a month.
 - a) What more would you like to know from him?
 - b) What will you include in your assessment of Dorji?
 - c) What are the differential diagnoses?
 - d) What investigations would you do to help you establish the diagnosis?

3. A mother has just delivered and the nurse rushes in to call you saying that the baby is having breathing difficulty.
 - a) How will you manage this baby?
 - b) Describe the procedures performed.
 - c) List the equipment required.
 - d) What further care will you provide the baby?

4. Sonam, a 26 year old man is brought in with a history of having been beaten by a group of drunken men when he was returning home after the night show. He was allegedly kicked on the abdomen several times. He is in great pain. His pulse is thready, BP is low and he is very pale.
 - a) List the possible injuries that can occur in such a case.
 - b) How will you investigate this case?
 - c) What will be the immediate management of such a case?

Case 2

You are posted to a District Hospital and you are the only Medical Officer in your hospital.

You are faced with the following situations. How will you assess, investigate and manage them.

1. Yangdon is 26 years old and has recently got married. She gives a history of 3 months amenorrhoea followed by bleeding per vaginum. She reports having fever, feeling nauseated, having anorexia and vomiting. She says she has pain in the lower abdomen and has passed some fleshy pieces.
 - a) What will you include in your assessment of Yangdon?
 - b) What is the probable diagnosis?
 - c) What investigations would you do?
 - d) How will you manage this patient?
 - e) What would you include in your follow up of this patient?

2. Wangdi is 35 years old and presents with cough and copious greenish sputum of 2 months duration. He does not have fever and occasionally coughs up blood. On auscultation coarse crackles are audible and the patient is noticed to have clubbing and halitosis.
 - a) What is the probable diagnosis?
 - b) How will you investigate this patient?
 - c) How will you manage this patient?

3. A baby who was delivered at home is brought to the hospital. It is dead of winter and the baby is very cold and refusing to feed.
 - a) Define Hypothermia in the newborn.
 - b) How can you prevent hypothermia in the newborn?
 - c) List the methods of warming a newborn and maintaining body temperature.

4. Wangmo, a 48 year old lady presents with severe pain in the upper abdomen, sudden in onset, continuous with radiation to the back. She has been retching continuously and on examination is found to be pale, sweating, with an elevated pulse rate and lowered BP.
 - a) What are the differential diagnoses?
 - b) How will you investigate this case?
 - c) How will you manage this case?

