

Name \_\_\_\_\_  
Question number.1

A fifteen year old patient arrives in the emergency department with severe bleeding from both sides of the nasal cavity. On examination, she is pale looking and her pulse is 120/min.

- How will you treat this patient?
- What are the likely investigations you will conduct to manage this patient?

Question number.2

A carpenter comes with history of repeated attacks of sneezing with rhinorrhoea for the last 10 days. He says that this has been going on for some years. On examination he has pale boggy turbinates and has dark circles under the eyes.

- What is your diagnosis?
- How will you manage this patient?

Question number.3

A 20 years old boy while cycling experienced road side accident. He developed swelling and pain over the bridge of nose. On investigation there was fracture seen in the nasal bone.

- What time you will reduce this fracture and after how many days the fracture is not manually reducible?
- What are the complications of receiving trauma on the nose?

Question number.4

A young shy lady come to the OPD and complains of nasal irritation and obstruction. On examination, she has foul smell coming from both nasal cavities which are roomy and filled

Question number.6

A 45 years old lady who is known diabetic comes in emergency with complaint of severe earache. On examination there is a small reddish mass in outer part of external auditory canal. Which is very tender?

- What is your diagnosis?
- Which organism is responsible for it?
- How will you treat it?

Question number.7

A 6 year old child is brought in OPD with complaint of poor performance and lack of attention in school. On Otoscopy both tympanic membranes are dull and opaque and there is loss of cone of light. Mobility of tympanic membrane is reduced.

- What is your diagnosis?
- How will you treat it?

Question number.8

A 25 years old male presented with severe sore throat and odynophagia with dribbling saliva from the angle of mouth. He also has right earache with high grade fever.

- What is the probable diagnosis

- a. What time you will reduce this fracture and after how many days the fracture is not manually reducible?
- b. What are the complications of receiving trauma on the nose?

Question number.4

A young shy lady come to the OPD and complains of nasal irritation and obstruction. On examination, she has foul smell coming from both nasal cavities which are roomy and filled with crusts.

- a. What is your diagnosis?
- b. How will you treat this patient?

Question number.5

A 30 year old patient comes with complaints of left sided ear discharge which is foul smelling for the last 3 years. On examination there is attic perforation and whitish mass in attic area.

- a. What is your diagnosis?
- b. Name the investigations.
- c. Give treatment.

b. How will you treat it?

Question number 8

A 25 years old male presented with severe sore throat and odynophagia with dribbling saliva from the angle of mouth. He also has right earache with high grade fever.

- a. What is the probable diagnosis
- b. How will you manage the case

Question number 9

A child of 6 years presented with history of some foreign body inhalation about a week back. He has repeated bouts of cough and choking with whistling sound with each bout of cough.

- a. How will you manage the case
- b. What are the complications of the procedure?

Question number 10

A 30 years old school teacher presented with hoarseness of voice for the last ten days. Hoarseness is persistent. There are no palpable lymph nodes and no fever.

- a. What is the most probable diagnosis
- b. What are the steps of management?
- c. What advice you will give to the patient post operatively.

Ophthalmology Senior Examination 2009  
Rawalpindi Medical College, Rawalpindi

Format: SEQ

Total marks: 75

Time Allowed: 25 Mins

Q1. A 40 years old farmer presented to EYE OPD with pain, redness and watering from his right eye for the last 3 days. There was history of some unknown foreign body entering the Eye while working in farms, followed by aggressive rubbing of the EYE. Cornea was lazy and vision was drastically reduced.

- i. What is the diagnosis of this case? (2)
- ii. Name the clinical test for confirmation of this diagnosis (3)
- iii. What are complications of this disease (5)
- iv. Write down treatment of this case (5)

Q2. A 06 weeks old baby presents with watering and mucopurulent discharge from his right eye. Medial canthus is swollen & purulent regurgitant was seen on pressing it. There is no other ailment and the ante-natal, natal and postnatal records are insignificant.

- i. What is the diagnosis? (3)
- ii. What is conservative treatment? (3)
- iii. What is surgical treatment & what is the best age for this surgery? (5)
- iv. What is indication for DCR in a child & at what age? (4)

Q3. A known diabetic bus driver 55 years old presented with slowly increasing fogging for the front coming vehicles. Bright sun light aggravates his problem of vision and the night driving was difficult due to glare

- i. What is provisional diagnosis (2)
- ii. Give at least 3 differential diagnoses (6)
- iii. Name 4 clinical methods essential for management of this case (4)
- iv. Name five systemic investigations commonly practiced for major ocular surgeries (3)

Q4. A mother presented her 02 years old child with inability to open one of his eyes completely. She accepted that they noticed it shortly after birth. Baby was otherwise normal as for as antenatal, natal and post natal records were concerned.

- i. Name at least three causes of such droop in a child (3)
- ii. Name at least five clinical tests of importance in this case (10)
- iii. What are risks of operation and no operation in such cases (2)

Q5. A fifty year old man presented with gradual dimness of vision & was diagnosed as a case of primary open angle glaucoma.

- i. What are the parameters for this diagnosis? (3)
- ii. What is medical treatment of such a case? (8)
- iii. What are other treatment options? (4)

If you have a question, raise your hand and I'll get with you. Please do not phonate.

TOTAL MARKS: 70

TIME ALLOWED: 70 minutes.

Attempt all questions. All questions carry equal Marks.

#### CARDIOVASCULAR SYSTEM.

Q1. A 14 years old male presents in the OPD with shortness of breath for one month and swelling of right knee joint for two weeks. He suffers from sore throat off and on. His ASO Titre is 800 IU/ml. The doctor suspects that he is suffering from some sort of heart problem. (2+2+1)

- What is the most likely diagnosis? What is the type of joint involvement in this condition?
- What is the pathogenesis of his disease?
- Name two complications which can occur in this boy.

#### HAEMATOPOIETIC SYSTEM

Q2. Illustrate the pathogenesis of anemia, skeletal deformities and hemochromatosis in beta thalassemia major with the help of a flow chart. (2+2+1)

#### RESPIRATORY SYSTEM

Q3. A 25-year-old female went to a pulmonologist at the peak of spring season having severe dyspnea and wheeze. Her pulmonary function tests showed decreased FEV1, serum IgE levels were elevated and blood revealed absolute eosinophilia. (1+2+2)

- What is the most likely diagnosis?
- Give four histologic findings of this disorder.
- Name four chronic restrictive airway diseases.

#### ORAL CAVITY AND GASTROINTESTINAL TRACT.

Q4. A 30-year-old villager presents in the gastroenterology ward with a three weeks H/O nausea, vomiting, abdominal pain and bloody stools. On sigmoidoscopy multiple polyps are distributed throughout the colon and a 2x2.5 cm mass is found in the descending colon. His liver is enlarged and nodular. X-ray chest reveals bilateral opacities. (1+2+2)

- What is the likely diagnosis?
- Classify neoplasia of large intestine(TNM classification).
- Give four dietary factors predisposing to a higher incidence of this cancer.

Q5. A 26 year old male has recurrent attacks of bloody mucoid diarrhea with abdominal cramps, which are relieved on defecation. Each episode lasts for 5-6 days followed by symptom free periods of 4-

nodular. X-ray chest reveals bilateral opacities.

(1+2+2)

- What is the likely diagnosis?
- Classify neoplasia of large intestine (TNM classification).
- Give four dietary factors predisposing to a higher incidence of this cancer.

Q5. A 26 year old male has recurrent attacks of bloody mucoid diarrhea with abdominal cramps, which are relieved on defecation. Each episode lasts for 5-6 days followed by symptom free periods of 4-5 months. Colonoscopy shows pancolitis extending from rectum to the splenic flexure. (1+3+1)

- What is the diagnosis?
- What features will a colonoscopic biopsy show?
- What is the role of intestinal flora in the pathogenesis?

#### HEPATOBIILIARY SYSTEM.

Q6. A 1-month old infant presenting with jaundice is diagnosed with extrahepatic biliary atresia. (3+2)

- What are the major histological features on the liver biopsy?
- Which two enzymes are likely to be raised in this condition?

#### URINARY SYSTEM.

Q7. Clinical pyelonephritis is most commonly caused by 'ascending infection'. Give the five major steps in its pathogenesis. (5)

#### MALE GENITAL SYSTEM

Q8. A male presented in OPD with a right testicular mass. (2+3)

- What three serum markers would you order in a patient with a testicular mass?
- What is the value of serum markers in the context of testicular tumors?

#### FEMALE GENITAL SYSTEM:

Q9. A 45-year-old female patient develops a peanut sized nodule in an old midline laparotomy scar, which becomes painful during menstrual period. The excised nodule consists of normal-looking endometrial tissue with glands and stroma. (1+3+1)

- What is the diagnosis?
- Give three theories of pathogenesis of such lesions.
- List two important sites for this process other than the abdominal wall.

#### DISEASES OF BREAST:

Q10. A 68 year old lady has presented with a painless mass in upper outer quadrant of left breast. A pathologist is grading a breast tumor according to the Scarff-Bloom-Richardson system. (3+2)

- Which three morphological features will he assess in this system?
- What is the significance of ER/PR and Her 2-neu status in a breast CA?

#### ENDOCRINOLOGY.

Q11. The patient presented with mass in front of neck, thyroidectomy was done and specimen was sent for histopathology. While examining H & E sections from the thyroidectomy specimen, a pathologist notices a lesion having a follicular pattern of growth. (3+2)

- What is the differential diagnosis for such lesions?
- List two nuclear features diagnostic for papillary carcinoma of thyroid.

#### MUSCULOSKELETAL SYSTEM AND BONES & JOINTS.

Q12. A 19 year old male presented in OPD with swelling in left knee for last 6 months which is associated with pain. He complains of shortness of breath for the last one month. X-Ray of the knee shows ill-defined lesion in metaphyseal region of distal femur with elevated periosteum. X-Ray chest shows multiple coin-shaped opacities. (1+2+2)

- What is the diagnosis?
- Explain the classic radiologic finding associated with this condition.
- Give its microscopic features.

#### CENTRAL NERVOUS SYSTEM.

Q13. A 60-year-old man presented to his primary care physician with complaints of headache over the past several weeks. The day before his appointment, he experi

Shows multiple coin-shaped opacities.

- What is the diagnosis?
- Explain the classic radiologic finding associated with this condition.
- Give its microscopic features.

#### CENTRAL NERVOUS SYSTEM.

Q13. A 60-year-old man presented to his primary care physician with complaints of headache and weakness in his left arm over the past several weeks. The day before his appointment, he experienced two episodes of uncontrollable shaking in his left arm and leg, accompanied by development of weakness in his left leg. On physical examination, he was found to have mild papilledema, decreased strength in his left arm and leg, and brisk deep tendon reflexes on the left side of his body compared to the right. A CT scan of his head revealed a ring-enhancing mass in the right frontal region.  
(2+2+1)

- What is the most likely diagnosis?
- Give any TWO histological patterns of the lesion.
- What is the most common site of the lesion?

#### CLINICAL CHEMISTRY.

Q14. List 2 laboratory tests each for the evaluation of hepatocyte integrity, biliary excretory function and hepatocyte function.  
(2+1½+1½)

This exam is not intended to be especially difficult. Be prepared for somewhat more challenging exams in the future.

Paper setters: Prof. Dr. Asim Nayal, Dr. Humera Iqbal and Dr. Ali Pughata.

\* GOOD LUCK! ☺

## RMC sendup pprCOMMUNITY MEDICINE PAPER

Q.1

- a) Name epidemiological studies which can be employed to testify an association
- b) Write down 2 merits & 2 demerits of cohort studies
- c) What is the difference between case and control

Q.2

- a) Define "secondary attack rate"
- b) What is the difference between "specific mortality rate" & "proportionate mortality rate"
- c) During current pandemic of swine flu, 300 cases were reported in a small town of USA. 3 children and 7 adults could not survive of this illness. Population of state was estimated to be 300,000. Find out case fatality rate in this particular case.

Q.3

- a) Define Screening
- b) What should be criteria for good screening test to find out prevalence of HEP-B in medical professionals? What is the significance of this medical intervention?
- c) Write down three differentiating points between a screening test and a diagnostic test

Q.4

In a big city problem of substance abuse is increasing day by day. As a social worker you have been assigned to launch a campaign of educating community to decrease the intensity of this issue. What principles do you have to follow to achieve this target?

Q.5

Family planning is still misinterpreted by the general public, and even by medical professionals. To clarify its theme, enlist objectives of family planning.

Q.6

- a) Define Mental Health
- b) About 500M people are believed to be suffering from neurotic, stress & psychosomatic form of problems which present themselves as physical complaints. Enumerate the strategic primary level preventive steps to decrease the incidence of mental illness in the community.

Q.7

Capital of Pakistan is said to be located on earthquake belt. As director public health of the area you are asked to take anticipatory measures to deal with such a disaster if however it occurs.

- a) Write down important steps/elements of your plan
- b) What are the main duties of health team during a disaster

Q.8

A forty year old man was brought to the emergency department of the hospital. He had lacerated wounds over his legs inflicted by dog bite.

- a) Write down important components of management of the patient
- b) What measures will you recommend for prevention and control of the problem of dog bite in the community

Q.9

Miss. Naseema a nutritionist at institute of public health at Lahore is asked by the district govt. for evaluation of status of the residents of Lahore.

- a) Enlist methods she would employ to serve this purpose
- b) Enlist signs & symptoms of vitamin A deficiency that would be seen in the community

suffering from vit.A deficiency

Q.10

a) Immune system is vital for protection against certain diseases through vaccination. Explain how primary & booster responses play role for effective immunity status through vaccination.

b) In spite of high chances of developing diseases, immunologist recommend live vaccines in most cases. Explain why?

Q.11

During monsoon season there were heavy rains and flood in certain rural areas of Punjab. Many cases of gastroenteritis were reported. Main source of drinking water of the population were dug wells in the area.

a) As public health officer what specific measures would you recommend for restoration of the safe water supply to the ppl? Give detail of method.

b) Briefly describe measures used to purify drinking water at domestic level

Q.12

A farmer used to work in fields for 6-8 hrs daily. During this July, one day he collapsed during work. He was brought to RGH. His auxiliary temp was 105F.

a) What is most probable diagnosis? Give at least 3 salient features favoring your diagnosis in this particular case

b) What preventive measures would you advise to the ppl of the area for prevention of this health problem?

Q.13

Population of big cities in Pakistan is continuously under change with respect to their size, composition and distribution.

a) Name 5 demographic processes which effect population changes.

b) Write down formula for population equation

Q.14a) Define "Ergonomics" b) Enumerate health problems/diseases that can occur to the workers due to physical agents in occupation Report