

CARDIOVASCULAR SYSTEM:

Q1. The most common cause of death immediately following the onset of acute myocardial infarction is:

- A) Arrhythmia (robbin mcqs no. 12)**
- B) Left ventricular rupture
- C) Congestive heart failure
- D) Shock
- E) Pulmonary edema

Q2. Which of the two valves listed below is least commonly associated with rheumatic heart disease?

- A) Aortic and pulmonary
- B) Mitral and tricuspid
- C) Aortic and mitral**
- D) Pulmonary and tricuspid
- E) Aortic and tricuspid

Q3. Nonbacterial thrombotic endocarditis is most frequently associated with which of the following conditions?

- A) Terminal neoplastic disease (is a paraneoplastic synd. hypercoaguable)**
- B) Systemic Lupus erythematosus (SLE)
- C) Old rheumatic endocarditis
- D) Sub diaphragmatic abscess
- E) Congenital Heart disease.

Q4. The most frequent cause of cor pulmonale with right-sided heart failure is: i.e. isolated rt heart failure

- A) Constrictive pericarditis
- B) Disease of the lungs or pulmonary vessel**
- C) Left-sided heart failure
- D) Pulmonary infundibular or valvular stenosis
- E) Systemic Hypertension

Q5. Which of the following is not associated with Dissecting aortic aneurysm?

- A) Death from hemopericardium
- B) Degenerative changes of aortic media.
- C) Hypertension.
- D) Severe, tearing chest pain.
- E) Severe atherosclerosis.**

Q6. A 30 year old female has splenomegaly and anemia with spherocytosis. The circulating RBCs demonstrate an increased osmotic fragility on laboratory testing. An inherited abnormality in which of the following RBC components best explains these findings:

- A) Glucose-6-phosphate dehydrogenase.
- B) A membrane cytoskeletal protein. (as hereditary spherocytosis is Diagnosis)**
- C) A-globin chain
- D) Heme
- E) B-globin chain

Q7. A 60 year old man with H/O joint pains and is on NSAIDs, is becoming increasingly tired and listless. He occasionally passes dark stools. A CBC indicates a hemoglobin concentration of 9.7g/dl, hematocrit of 29.9%, MCV of 69.7fL/red cell, RBC count of $4.8 \times 10^6/\mu\text{L}$, and WBC count of 5500/ μL . The most probable explanation of these findings is:

- A) Iron deficiency. (as is microcytic hypochromic type and blood loss)**
- B) Autoimmune hemolytic anemia.
- C) B-thalassemia major.
- D) Chronic alcoholism.
- E) Vitamin B12 deficiency.

Q8. A 9 year-old-boy has less than 1% factor VIII activity measured in plasma. If he is not given transfusions of factor VIII concentrate, which of the following manifestations of this deficiency is most likely to occur?

- A) Hemolysis.
- B) Splenomegaly.
- C) Conjunctival petechiae.
- D) Hemochromatosis.

E) Hemarthroses.

Q9. A 20 year old female present with fever of two weeks duration. A CBC shows a Hb concentration 14g/dL, hematocrit of 42.0%, MCV of 89fL, platelet differential count shows 60 segmented neutrophils, 16 band cells, 6 metamyelocytes, 1 blast, 8 lymphocytes, 2 monocytes, and 2 eosinophils per 100 WBCs. The peripheral blood leukocyte alkaline phosphatase score is increased. The most likely diagnosis is:

- A) Chronic myeloid leukemia (CML).**
- B) Hairy cell leukemia.
- C) Hodgkin disease, lymphocyte depletion type.
- D) Leukemoid reaction.
- E) Acute lymphoblastic leukemia (ALL).

Q10. A new born baby is suspected to be suffering from neonatal sepsis. Which of the following abnormality in peripheral blood picture is most helpful in reaching the diagnosis?

- A) Microcytosis.
- B) Reticulocytoses.
- C) Thrombocytosis.
- D) High percentage of band cells.**
- E) Hypochromia.

RESPIRATORY SYSTEM:

Q11. The most common source of pulmonary thrombo-embolism is:

- A) Femoral vein
- B) Popliteal vein
- C) Deep veins of calf**
- D) Saphenous vein
- E) Anti cubital veins

Q12. Over several decades which of the following inhaled pollutants is most likely to produce extensive pulmonary fibrosis?

- A) Silica**
- B) Tobacco smoke
- C) Wood dust
- D) Carbon monoxide
- E) Ozone

Q13. An 18 year old female student before entry into a medical college had to undergo medical tests. She developed a 10mm area of induration on her forearm 3 days after intracutaneous injection of 0.1 ml of purified protein derivative (PPD). She appeared healthy. A chest radiograph would most likely demonstrate: **15 mm is positive for those who have no known risk factors. 10 mm in those with close contacts and 5 mm in immune compromised. E correct**

- A) Marked hilar lymphadenopathy
- B) Upper lobe calcification
- C) Extensive opacification
- D) Cavitary change
- E) No abnormal findings**

Q14. An 85 years old female had left eye problems including enophthalmos, meiosis, anhidrosis and ptosis. A chest X-Ray showed right upper lobe opacification. Which of the following conditions she is most likely to have?

- A) Bronchopneumonia
- B) bronchiectasis
- C) Bronchogenic carcinoma**
- D) Sarcoidosis
- E) Tuberculosis

Q15. A 35 year old male has flushing and diarrhoeal episodes. Bronchoscopy reveals an obstructing mass filling the bronchus to the right upper lobe. Biopsy showed neuroendocrine nature of the tumor cells on immunostaining. The diagnosis is:

- A) Hamartoma
- B) Adenocarcinoma
- C) Large cell carcinoma
- D) Kaposi sarcoma
- E) Carcinoid tumor**

GASTROINTESTINAL TRACT:

Q16. A 39 year old male presented with on and off epigastric pain, provisional diagnosis of peptic ulcer disease was made. For confirmation of diagnosis on edoscopy, from where one should take the biopsy?

- A) Gastric antrum
- B) Gastric ulcer
- C) Gastroesophageal junction
- D) Duodenal ulcer [or they may say lesser curvature of stomach]**
- E) Greater curvature

Q17. The most frequent esophageal malignancy is:

- A) Adenocarcinoma
- B) Fibrosarcoma
- C) Leiomyosarcoma
- D) Rhabdomyosarcoma
- E) Squamous Cell Carcinoma [in all over world not In usa. In usa both a and e are 50% approx]**

Q18. A 68 year old female has suffered from burning substernal pain for many years. This pain occurs after meal. She now has dysphagia. Endoscopy reveals a lower esophageal mass that nearly occludes the esophageal lumen. Biopsy of the mass is most likely to reveal which of the following neoplasm?

- A) Adenocarcinoma.**
- B) Leiomyosarcoma.
- C) Squamous cell carcinoma.
- D) Non-Hodgkins lymphoma
- E) Carcinoid tumor.

Q19. A 73 year old female has iron deficiency anemia. She has no vaginal bleeding, hematemesis, hemoptysis or melana.. However a stool Guaiac test result is positive. A colonoscopy reveals an obstructive lesion that is most likely to be a:

- A) Malignant Lymphoma.
- B) Adenocarcinoma.**
- C) Leiomyosarcoma.
- D) Tubular adenoma.
- E) Carcinoid tumor.

Q20. A 59-Years old male presents with 2 month history of intermittent burning substernal and retrosternal pain radiating to his neck. The burning is usually relieved quickly with antacids. There is no relationship of these symptoms to exercise or exertion. Which of the following must be considered in the differential diagnosis of this patient's problem?

- A) Acid reflux disease.
- B) Myocardial ischemia.
- C) Peptic ulcer disease.
- D) Panic disorder.
- E) Carcinoma stomach. [radiation to neck. Involvement of nerves??]**

Q21. A 10 year old boy comes to emergency with H/O nausea, vomiting, right iliac fossa pain and mild fever. On physical examination there is tenderness in paraumbilical region and right iliac fossa. The provisional diagnosis is:

- A) Intestinal obstruction.
- B) Acute appendicitis.**
- C) Acute pancreatitis.
- D) Acute peptic ulcer disease.
- E) Ischemia Bowel Disease.

Q22. Which salivary gland is the most frequent site for tumor involvement?

- A) Parotid gland. [overall if benign + malignant]**
- B) Sub maxillary gland
- C) Sublingual gland
- D) Minor salivary gland
- E) Parathyroid gland.

Q23. A 60-year-old man with H/O cigarette smoking and alcohol abuse develops a protruding centrally ulcerated mass in the oral cavity. The lesion is suspected to be carcinoma. Which of the following locations is most commonly the primary site of oral squamous cell carcinoma?

- A) Base of the tongue. [although correct is ventral surface of tongue but big picture on p. 747]**
- B) Buccal mucosa
- C) Floor of mouth
- D) Palate
- E) Tip of the tongue

Q24. A 40 year old man has severe abdominal pain for 03 days. Physical examination reveals board like rigidity of abdominal muscles. His pancreas shows chalky white fat necrosis. What is the most likely predisposing factor in the development of this disorder?

- A) Cytomegalovirus (CMV) infection.
- B) Hyperlipidemia.
- C) Ischemia.
- D) Peptic ulcer disease.
- E) Chronic alcoholism.**

HEPATOBIILIARY SYSTEM:

Q25. Chronic Hepatitis is most likely to occur after acute infection with which of the following virus?

- A) Hepatitis A virus
- B) Hepatitis C virus**
- C) Hepatitis E virus
- D) Hepatitis G virus
- E) Hepatitis D virus

Q26. Three weeks after a meal at road site restaurant a 20 years old male presents with loss of appetite, malaise, fatigue and mild yellowness of sclera. Which of the following laboratory test findings is he most likely to have?

- A) Hepatitis A IgM antibody**
- B) Hepatitis D IgM antibody
- C) Hepatitis C antibody
- D) Hepatitis B core antibody
- E) Hepatitis B surface antigen

Q27. A 45 year female presents with ascites. Liver biopsy reveals diffuse portal tract bridging fibrosis and nodular regeneration of liver cells without hepatocyte necrosis and cholestasis. The findings are characteristic for:

- A) Alcoholic hepatitis
- B) Viral hepatitis
- C) Drug toxicity
- D) Cirrhosis**
- E) Chronic congestion

Q28. At autopsy, the liver of a 40 years old male shows irregular nodular mass. On cut surface the lesion is grey white with extensive fibrotic bands. What is the most likely diagnosis?

- A) Hepatocellular carcinoma
- B) Hepatitis
- C) Cirrhosis**
- D) Primary Sclerosing Cholangitis
- E) Hematochromatosis

Q29. A 25 years old male notices mild degree of scleral yellowness after her examination. Her liver function profile shows total bilirubin 4.9 mg/dl and direct bilirubin 0.8 mg/dl. Her other liver function tests are unremarkable. The condition is most likely to be:

- A) Choledochal cyst
- B) Primary biliary cirrhosis
- C) Gilbert's syndrome [as all other obstructive or mixed jaundice but GC = Unconj. G=gilbert c-crigler nijjar]**
- D) Dubin-Johnson syndrome
- E) Hepatitis C

URINARY SYSTEM:

Q30. Which of the following is most likely cause of the clinical combination of generalized edema, hypoalbuminemia and hypercholesterolemia in an adult whose urinalysis demonstrated marked proteinuria with fatty casts and oval fat bodies?

- A) Nephritic syndrome

B) Nephrotic syndrome

- C) Acute renal failure
- D) Renal tubular acidosis
- E) Urinary tract infection

Q31. After an acute myocardial infarction, a 50 years old male is in stable condition. However 2 days later, his urine output drops and his serum urea nitrogen increases to 33mg/dl. This oliguria persists for a few days and is followed by polyuria for 2 more days. He is then discharged from the hospital. What lesion best explains his renal abnormalities?

A) Acute tubular necrosis [B,D,E wrong as chronic. C should have a h/o thrombosis with hematuria]

- B) Benign nephrosclerosis.
- C) Acute renal infarction.
- D) Hemolytic uremic syndrome.
- E) Rapidly progressive glomerulonephritis.

Q32. A 28 years old female presents with a 2 days history of dysuria with frequency and urgency. A urine culture grows more than 100,000 colonies/ml of E.Coli. She is treated with antibiotic therapy. However, if she continues to suffer recurrences of this problem she is at great risk for development of:

- A) Diffuse glomerulosclerosis.
- B) Chronic glomerulonephritis.
- C) Amyloidosis.
- D) Membranous glomerulonephritis.

E) Chronic pyelonephritis

Q33. A 60 year old male presents with painless haematuria. On physical there is no significant finding. IVP shows a filling defect in the urinary bladder. What is the most likely diagnosis?

- A) Stone in urinary bladder.
- B) Schistosomiasis
- C) Acute hemolysis.
- D) Stone in urethra

E) Bladder carcinoma.

Q34. A 24 year old male is suffering from painless haematuria. What is the most probable diagnosis?

- A) Stone in renal pelvis.**
- B) Stone in ureter.
- C) Renal cell carcinoma
- D) Acute glomerulonephritis.
- E) Chronic pyelonephritis.

MALE GENITAL SYSTEM:

Q35. CA prostate most commonly involves:

- A) Transitional zone of prostate.
- B) Outer (Peripheral) zone of prostate.**
- C) Central zone of prostate.
- D) Periurethral zone of prostate.
- E) Capsule of the prostate.

Q36. The right testis of a 33 years old male is enlarged to twice normal size. The testis is removed, and the epididymis and the upper aspect of the right testis are involved with extensive granulomatous inflammation with epithelioid cells, Langhans giant cells, and caseous necrosis. The most common cause for these findings is:

- A) Mumps
- B) Syphilis
- C) Tuberculosis**
- D) Gonorrhea
- E) Sarcoidosis

Q37. Which of the following tumor marker is routinely performed in patients suspected of having carcinoma prostate?

- A) PAP
- B) AFP
- C) PSA**
- D) CEA

E) CA-19-9

Q38. Which of the following tumor is most radiosensitive?

- A) Breast carcinoma.
- B) Prostate carcinoma.
- C) Astrocytoma.
- D) Colorectal adenocarcinoma.

E) Seminoma

Q39. Histology of a testicular tumor in a 24 year old man revealed syncytial sheet of polymorphic cells with vesicular nuclei, prominent nucleoli and prominent lymphocytic infiltrate in the stroma. The most likely diagnosis is:

- A) Yolk sac tumor.
- B) Seminoma
- C) Teratoma.
- D) Choriocarcinoma.

E) Embryonal carcinoma. [no schiller duval(A), no uniform cells(b) no other germ cell layers (c), no 2 cell types (d)]

FEMALE GENITAL SYSTEM:

Q40. 54 year old woman with an abdominal mass undergoes exploration laparoscopy. Both ovaries are enlarged and hence resected. Pathology report is Krukenberg tumor, indicating which of the following:

- A) Ectopic pregnancy.
- B) Endometriosis.
- C) Hyperestrogenic state.
- D) Immunosuppression.

E) Metastatic carcinoma

Q41. You obtain a routine Pap smear while performing a physical examination on a 28-year old female. Gross inspection of the vulva, vagina, and cervix reveals no apparent lesions. The results of the Pap smear are consistent with cervical intraepithelial neoplasia (CIN) II. What is the major significance of this finding?

- A) A cervicitis needs to be treated.
- B) She has an increased risk for cervical carcinoma**
- C) Condyloma acuminata are probably present.
- D) An endocervical polyp needs to be excised.
- E) She needs to discontinue oral contraceptives.

Q42. A 58-year old female has had dull pain in the lower abdomen for the past 6 months, along with some minimal vaginal bleeding on three occasions. An abdominal ultrasound reveals a solid, 8-cm right adnexal mass. A total abdominal hysterectomy is performed, and the mass is diagnosed as an ovarian granulosa-theca cell tumour. Which of the following additional lesions is most likely to be seen in the surgical specimen?

- A) Condyloma acuminata of the cervix
- B) Endometrial hyperplasia**
- C) Metastases to the uterine serosa
- D) Bilateral chronic salpingitis
- E) Partial mole of the uterus

Q43. A 20-year old female has had a bloody, brownish vaginal discharge for the past day. She now presents with shortness of breath. A chest radiograph demonstrates numerous 2- to 5- cm. nodules in both lungs. A red brown 3 cm mass is seen on the lateral wall of the vagina, and a biopsy of this mass reveals malignant cells resembling syncytiotrophoblasts. Serum level of which the following proteins, is likely to be elevated in this patient?

- A) Human chorionic gonadotrophin**
- B) Alpha-fetoprotein
- C) Estrogen
- D) Androgen
- E) Thyroxin

Q44. The malignant surface epithelial tumours of ovary include:

- A) Mucinous cysadenoma**
- B) Stromal tumour
- C) Sarcomatoid tumour of Ovary
- D) Squamous cell carcinoma

- E) Leiomyoma

DISEASE OF BREAST:

Q45. A 52 year old female presented with a lump in her breast . Biopsy of the lump showed invasive ductal carcinoma. The connective tissue adjacent to the tumour was densely collagenous. This is an example of:

- A) Anaplasia
- B) Dysplasia
- C) Desmoplasia**
- D) Carcinoma
- E) Metaplasia

Q46. A 20 years old female presents with lump in her right breast which is freely mobile and nontender. What is the most likely diagnosis?

- A) Invasive ductal carcinoma
- B) Fibroadenoma**
- C) Intraductal papilloma
- D) Fibrocystic disease
- E) Abscess

Q47. Which of the following risk factors play the most important role in the development of male breast carcinoma?

- A) Obesity
- B) Age older than 70 years [according to rmc key. They corrected this on their test]**
- C) Long term digoxin therapy
- D) Klinefelter syndrome [but this is most imp after family history acc to big robbin page 1093]**
- E) Chronic alcoholism

Q48. A microbiology laboratory reports growth of staphylococcus aureus from pus drained from a breast abscess. What is the most likely predisposing condition for the development of a breast abscess?

- A) Breast feeding**
- B) Endocarditis.
- C) Inflammatory breast carcinoma.
- D) Menopause.
- E) Paget's disease of breast.

Q49. Of the histological subtypes of breast carcinoma, which metastasizes most frequently to peritoneum, retroperitoneum and leptomeninges?

- A) Invasive ductal carcinoma
- B) Lobular carcinoma**
- C) Mucinous carcinoma
- D) Medullary carcinoma
- E) Metaplastic carcinoma

ENDOCRINOLOGY:

Q50. A 2-year old child has had failure to thrive. The child is short, with coarse facial features, a protruding tongue, and an umbilical hernia. Profound mental retardation is apparent as the child matures. These findings are best explained by a lack of:

- A) Cortisol
- B) Norepinephrine
- C) Somatostatin
- D) Thyroxine (T4)**
- E) Insulin

Q51. A 0.7-cm microadenoma of the adenohypophysis is seen by head MRI in a 25-year- old female. Which of the following complications is she most likely to have?

- A) Amenorrhea with galactorrhea**
- B) Hyperthyroidism
- C) Acromegaly
- D) Cushing disease
- E) Syndrome of inappropriate antidiuretic hormone (SIADH)

Q52. A 60-year-old woman has been feeling tired and sluggish for more than a year. Thyroid gland is not palpable. Serum T4 level is decreased but TSH is markedly increased. Which of the following factors is important in the pathogenesis of this condition?

- A) Irradiation to neck during childhood.
- B) Prolonged iodine deficiency
- C) Anti-microsomal and anti-thyroglobulin antibodies**
- D) Mutations in the RET protooncogene
- E) Recent viral upper respiratory tract infection.

Q53. A 59 year old woman with advanced metastatic lung cancer develops profound fatigue, weakness and alternating diarrhea and constipation. Physical examination demonstrates hyperpigmentation of skin even in areas protected from the sun. Tumor involvement of which endocrine organ is most strongly suggested by this patient's presentation?

- A) Adrenal gland.
- B) Endocrine pancreas.
- C) Ovaries.
- D) Pituitary glands.**
- E) Thyroid gland.

Q54. During physical examination a 45 years old man is noted to have a 3 cm palpable nodule in one lobe of an otherwise normal size thyroid gland. Needle aspiration of the nodule demonstrates polygonal tumor cells and amyloid, but only very scanty colloid and normal follicular cells. Which of the following is the most likely diagnosis?

- A) Follicular thyroid carcinoma.
- B) Hashimoto's disease.
- C) Medullary thyroid carcinoma.**
- D) Papillary thyroid carcinoma.
- E) Thyroid adenoma.

MUSCULOSKELETAL SYSTEM AND BONES AND JOINTS:

Q55. Most common pathogen responsible for acute osteomyelitis in a two year old child is:

- A) Streptococcus pneumoniae.
- B) Escherichia Coli
- C) Candida albicans
- D) Haemophilus influenzae [and group B in neonatal period. It is 2 yrs old. No staph aureus here..]**
- E) Salmonella typhi.

Q56. Most common malignant tumor seen in bone is:

- A) Osteosarcoma**
- B) Chondrosarcoma
- C) Secondaries(mets)
- D) Lymphoma
- E) Enchondromas

Q57. Histopathological features of Duchenne type muscular dystrophy include all of the following EXCEPT:

- A) degeneration of muscle fibers
- B) Infiltration of macrophages
- C) Fibrosis
- D) Granulation tissue**
- E) Regeneration of unaffected muscle fibers.

Q58. Reiter's syndrome is not associated with:

- A) Arthritis.
- B) Urethritis.
- C) Positivity for HLA-DRB1**
- D) History of some enteric infection
- E) Positivity for HLA-B27

Q59. Main causes of peripheral neuropathies are:

- A) Excessive physical work.
- B) Deficiency of Vitamin D
- C) Chondroplasia.
- D) Hypertension
- E) Diabetes mellitus**

CENTRAL NERVOUS SYSTEM:

Q60. Which of the following is not a tumor of central nervous system?

- A) Astrocytoma.
- B) Oligodendroglioma.
- C) Meningioma.
- D) Ependymoma.
- E) Retinoblastoma.**

Q61. Which of the following CNS tumor has the best prognosis?

- A) Anaplastic astrocytoma (WHO grade III)
- B) Glioblastoma multiforme.
- C) Pilocytic astrocytoma (WHO grade I)**
- D) Medulloblastoma.
- E) Oligodendroglioma (WHO grade II)

CLINICAL CHEMISTRY:

Q62. A 60 year old male presents with acute retrosternal chest pain to emergency department. Lab investigations show total CK 360U/L (NV: upto 195U/L), CK MB 32 U/L (NV: upto 25U/L), SGOT 54U/L (NV: 5-40U/L), LDH 418U/L (NV: 230-460U/L). ECG was consistent with Acute Myocardial Infarction. What is the possible duration of his present attack?

- A) 30 minutes
- B) 2 hours [as the CK MB has just started rising and it starts to rise within 2-4 hrs, big page 555 chart. At 12 hrs it must be 10 times the normal]**
- C) 12 hours
- D) 36 hours
- E) 5 days

Q63. A 15-year-old boy is brought to the emergency in coma. The doctor on duty notes that the patient's breath smells like acetone. This would be most consistent with which of the following?

- A) Alcohol intoxication.
- B) Diabetic hyperosmolar coma.
- C) Diabetic ketoacidosis**
- D) Heroin overdose.
- E) Profound hypoglycemia.

Q64. A 10-year-old boy sustains 25% burns over his body. Next day his serum urea nitrogen (BUN) is 30mg/dl and serum Creatinine is 0.8 mg/dl. I/V fluids are given continuously and there is no drop in blood pressure or urinary output. Which of the following most likely accounts for the BUN and Creatinine values:

- A) Decreased renal perfusion.
- B) Distal urinary tract obstruction.
- C) Increased synthesis of urea [as just urea is increased, creatinine normal. Normal urea/creat ratio = 15]**
- D) Renal glomerular disease.
- E) Renal tubule interstitial disease.

SKIN:

Q65. A 2cm pigmented lesion is excised from the back of a 45 year old woman as it became more nodular and darker recently. Microscopic examination confirmed the diagnosis of malignant melanoma composed of epithelioid cells. The lesion extended 2 mm below the reticular dermis. Lymphocytes were present below the melanoma. Which of the following statements will be suitable for this patient?

- A) The immune response will prevent metastasis.
- B) The prognosis is poor [rather very poor]**
- C) Family is at risk of developing this condition
- D) The primary site of this lesion is eye.
- E) Nevi on outer parts of the body may become malignant.

You may keep this exam and make your own key. You are on your honor not to share it with anyone who has not taken it yet.

When you have finished, hand in your response form and get the second part.