SEQS SPECIAL PATHOLOGY MBBC- September-2019

BY.

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Q-1.

A man of 52 years felt sever substernal chest pain with breathing difficulty and he died. On autopsy there were thickened walls of many arteries including the coronary arteries with narrowing because the lesions consisted of raised plaques having soft centers.

a) What is this disease process forming plaques in the vessels? 01

b) Name five of its major risk factors. 2.5

c) Draw and label the microscopic features of the plaque lesion. 1.5

Q-2

a) Tabulate the differences between Hodgkin and non-Hodgkin Lymphomas. 02

b) Name subtypes of Hodgkin Lymphoma (HL) according to WHO Classification. 02

c) Write down the microscopic features of “mixed cellularity” subtype of HL. 01

Q-3

a) Classify the ANAEMIAS on the basis of RBCs morphology. 02

b) Enlist the causes of APLASTIC ANAEMIA. Give the salient features of bone marrow smear of the aplastic anemia. 03

Q-4.

A boy of 10-year-old is brought to Hospital Emergency with one day history of high-grade fever, chills, and cough with mucopurulent sputum. On clinical examination, the provisional diagnosis of pneumonia is made.

a) Enlist FOUR bacteria causing community acquired acute pneumonia. 01

b) Explain sequentially four stages of inflammatory response in lobar pneumonia. 02

c) What can be the complications of pneumonia? 02

Q-5

A 52 year old lady has been suffering from attacks of bloody diarrhea with stringy, mucoid material, lower abdominal pain, and cramps that are temporarily relieved by defecation. Colonoscopy demonstrates pan colitis from rectum to splenic flexure.

a) What is the most likely diagnosis based on the given scenario? 01

b) what features will a colonic biopsy biopsy show? 02

c) Tabulate features differentiating it from another disease of similar category (IBD). 02

Q-06

A- How will you differentiate "diffused: type of gastric carcinoma from intestinal type on histology? 02

B- Define early gastric carcinoma and advance gastric carcinoma 1.5

C- What is Barrett Esophagus? 1.5

Q-07

a) Mention the FOUR important causes of liver cirrhosis. 02

b) Describe its pathogenesis. 03

Q-08.

A boy of 14- years feeling fatigue for the last week. He then passes dark colored urine. His blood pressure is 160/95 mmHg. Laboratory tests show his serum creatinine is 4.4 mg/dL and BUN 41 mg/dL. A urinalysis reveals pH 6, specific gravity 1.011, - glucose - nil. Renal Biopsy report shows proliferation of endothelial, mesangial and parietal cells with inflammatory cells infiltrate.

a) What is the most appropriate diagnosis? 01

b) What is the basic underlying pathogenetic mechanism?

How this condition is Classified 01, 03

Q-09.

A child of 05 years presented with a unilateral testicular mass. Histopathology of biopsy revealed reticular network of medium-sized cuboidal to flattered cells. Structures resembling primitive glomeruli were also noticed.

a) What is the most likely diagnosis? 01

b) How you will classify the testicular tumors by WHO? 02

c) What is the value of serum markers in the context of testicular tumors. 02

Q- 10

A 47 years old lady has cervical PAP Smear examination report indicate sever dysplasia and biopsy report shows as CIN -III.

a) Give the important risk factors for the development of CIN and invasive carcinoma of cervix. 02
b) Gove the spectrum of precancerous lesions of the cervix based on histology progressive carcinoma 03

Q-11.

A 50 year old female presented with a lump in left breast. FNAC showed C4 (suspicious lesion) of the breast.

a) What will be your next step to confirm the diagnosis? 01

b) What are types of breast stromal tumors? 02

c) Write gross and microscopic features of the most common benign tumor of the breast02

Q-12.

A lady of middle age presents with painless swelling in front of her neck for the last few months. On examination her thyroid gland is diffusely enlarged. The provisional diagnosis of thyroiditis is made.

a) Name three types of thyroiditis. 1.5

b) Give the pathogenesis and microscopic features of Hashimoto's Thyroiditis. 02, 1.5

Q-13.

A 19-year-old boy develops a painful swelling at upper end of right knee for the last three months. Radiological examination showed ill-defined lesion in metaphyseal end of distal femur with raised periosteum infiltrating the soft tissue.

a) What is the most likely diagnosis? 01
b) Explain the microscopic morphological features of this lesion with other most common site 2.5
c) What are "TOPHI"? Explain with example 1.5

Q-14.

A 12 years old girl living in a former house in a village presents with high grade fever, headache , photophobia, irritability, clouding of consciousness. On examination there is evidence of neurologic impairment, and neck stiffness. Lumbar puncture yields cloudy CSF.

a) What is the most likely diagnosis? 01
b) Name the common pathogenic bacteria? 02
c) What are the findings on routine laboratory analysis of CSF in bacterial and viral type of this disease? 02

Q-15

A lady of 38 year is hypotensive and breathing rapidly with fruity odour in a hospital emergency room. Her laboratory tests show blood glucose 480mg/dl, serum K 6.5mm/l and arterial blood gas analysis shows Ph7.1, HCO31.3m Eq/L, PCO225 mmHg.

a) What is diagnosis? 01
b) What is pathogenesis of this disease? 02
c) Describe the morphology of diabetic nephropathy. 02

Q-01

A lady 58 Years has developed shortness of breath and cough with production of frothy white sputum. Her blood pressure is 145/95 mm Hg. A chest radiograph reveals a prominent left heart border. There is marked pulmonary edema. Laboratory studies show total serum cholesterol of 170 mg/dL. Which of the following is the most likely diagnosis?

A Acute rheumatic fever

B Mitral valve insufficiency

C Atherosclerotic aortic aneurysm

D Calcific aortic stenosis

E Infective endocarditis

Q-02

A 22-year-old G_2 P_1 woman has a screening ultrasound performed at 18 weeks gestation. The fetus has a heart with a membranous ventricular septal defect, overriding aorta, and marked pulmonic atresia. If the baby were to be live born, which of the following would be most likely result from these cardiac defects?

A Systemic hypertension

B Weak lower extremity pulses

C Clubbing of digits

D Telangiectasias

E Cyanosis

Q-3

A man of 48 years has sudden onset of substernal chest pain for three hours and then becomes short of breath and diaphoretic A chest x-ray shows a slightly enlarged heart and mild pulmonary edema. An ECG shows ST segment elevation in anterior leads V1 - 6. Which of the following serum laboratory test findings is most likely to be present in this man?

A Urea nitrogen of 110 mg/dL

B Sodium of 115 mmol/L

C ALT of 876 U/L

D Troponin I of 32 ng/mL

E HDL cholesterol of 55 mg/Dl

Q-4

A 04-year-old child has had failure to thrive. An echocardiogram reveals a large membranous ventricular septal defect. Which of the following complication is she likely to experience as an adult 02 decades later if this lesion remains untreated?

A Rib notching

B Mitral valve prolapse

C Pulmonary hypertension

D Myocardial infarction

E Cardiac tamponade

Q-5

A man of 42-year-old has had worsening dyspnea along with peripheral edema for the past two years A chest CT scan demonstrates a 10 cm mass involving the right ventricle that appears to have areas of hemorrhage and necrosis within it. Which of the following neoplasms is this man most likely to have?

A Rhabdomyosarcoma

B Mesothelioma

C Myxoma

D Angiosarcoma

E Rhabdomyoma

Q-06

What is most common cause of abdominal aortic aneurysm?

A. Trauma
B. Syphilis
C. Atherosclerosis
D. Vasculitis
E. Hypertension

RESPIRATION

Q-1

A 08-year-old boy at his birth time was complicated by the development of meconium ileus. Throughout childhood he has experienced multiple increasingly severe bouts of pneumonia with a productive cough, often with Pseudomonas aeruginosa. He is at greatest risk for development of which of the following pulmonary abnormalities?

A Adenocarcinoma

B Bronchiectasis

C Lymphangiectasis

D Pleural fibrous plaques

E Pneumocystis pneumonia

Q-2

A man of 70 year, on the 11th postoperative day ,suddenly becomes extremely dyspneic and diaphoretic, with chest pain, palpitations, and a feeling of panic. Which of the following post-operative pulmonary complications has he most likely developed?

A Pulmonary edema

B Pleural effusion

C Atelectasis

D Thromboembolism

E Diffuse alveolar damage

Q-3

A bed ridden 68-year-old man, suffers with aspiration of gastric contents. A chest radiograph reveals a 4 cm diameter mass with an air-fluid level in the right lung. A sputum gram stain reveals mixed flora. Which of the following conditions is he most likely to have?

A Squamous cell carcinoma

B Lung abscess

C Chronic bronchitis

D Bronchiectasis

E Bronchopulmonary sequestration

Q-4

A man of 62-year with history of smoking has a cough productive of copious amounts of mucoid sputum for over 3 months at a time. His last episode of pneumonia is complicated by septicemia and brain abscess and he dies. At autopsy, his bronchi microscopically demonstrate mucus gland hypertrophy. Which of the following conditions is most likely to explain his clinical course?

A Bronchiectasis

B Congestive heart failure

C Chronic bronchitis

D Bronchial asthma

E Centrilobular emphysema

Q-5

At autopsy, a 60-year-old man is found to have a peripheral 7 cm area of golden-yellow consolidation on sectioning of the left lung. Microscopically, this area has alveoli filled with foamy macrophages. Which of the following conditions involving his lung is most likely to be responsible for this finding?

A Mycoplasma pneumoniae infection

B Cystic fibrosis

C Adenocarcinoma

D Silicosis

E Squamous cell carcinoma.

A 45 years old male patient presented with fever, cough, dyspnea, sweats and rigours. Chest X-ray showed parenchymal infiltrate. On auscultation, bronchial breath sounds were heard. Diagnosis can be conformed by?

a) CBC
b) Gram stain and culture of sputum
c) Sputum for AFB
d) Blood gases
e) Bronchoscopy

Q- 8 A 55 years old man has persistent cough, weight loss and clubbing of fingers. X-ray of hand shows new bone formation beneath the periosteum. Which of the following condition is associated with it?

a) Chronic renal failure
b) Colon cancer
c) Endocrine adenoma
d) Profound anaemia
e) Lung cancer

Q- 9 A patient presents to a physician complaining of recurrent episodic diarrhea triggered by eating too much or drinking alcohol. He also starts wheezing and is flushed during the episodes. Chest X-ray shows a lung mass. Biopsy of the mass would reveal?

a) Bronchoalveolar carcinoma
b) Squamous cell carcinoma
c) Carcinoid tumour
d) Primary tuberculosis

e) Recurrent tuberculosis

Q- 10 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

GIT

Q-1

A lady of 55 years has had persistent nausea with vomiting for 5 years On upper GI endoscopy, small area of gastric fundal mucosa has loss of rugal folds. Biopsies reveal well-differentiated adenocarcinoma confined to the mucosa. Which of the following is the most likely risk factor for his neoplasm?

A Inherited APC gene mutation

B Helicobacter pylori infection

C Chronic alcohol abuse

D Use of non-steroidal anti-inflammatory drugs

E Vitamin B12 deficiency

Q-2

A male of 37-year has history of colon cancer in his family. His stool is positive for occult blood. On Colonoscopy, there are 7 polyps in the ascending colon: three of these are small 0.5 cm pedunculated tubular adenomas; three are 1 cm tubulovillous adenomas in the cecum containing a focus of well differentiated adenocarcinoma. Which of the following is his most likely underlying diagnosis?

A Peutz-Jeghers syndrome

B Chronic ulcerative colitis

C Hereditary non-polyposis colon carcinoma

D Adenomatous polyposis coli

E Gardner syndrome

Q-3

Aman of 67 has anorexia, vomiting, and vague abdominal pain accompanied by weight loss of 6 kg . An abdominal CT scan shows the stomach is shrunken with the gastric wall thickened to 1 cm and with extensive overlying mucosal erosions. Multiple masses from 1 to 4 cm in size are scattered within the liver. Which of the following conditions most likely preceded development of his illness?

A Acquired immunodeficiency syndrome

B Hyperglycemia

C Chronic alcoholism

D Pernicious anemia

E Systemic sclerosis

Q-4

A young male of 20-year has family history of colon cancer. He undergoes colonoscopy and there are over 200 tubular adenomas ranging in size from 0.2 to 1 cm on gross Which of the following genetic diseases is he most likely to have?

A Hereditary non-polyposis colon carcinoma syndrome

B Gardner syndrome

C Peutz-Jeghers syndrome

D Adenomatous polyposis coli

E Multiple Endocrine Neoplasia

Q-5

A lady of 45-year has experienced progressive fatigue, pruritus, and icterus for the past 4 months. Cholangiography reveals the widespread obliteration of intrahepatic bile ducts. A liver biopsy shows periductular 'onion skin' fibrosis with a moderate lymphocytic infiltrate. Which of the following underlying diseases is he most likely to have?

A Ulcerative colitis

B Systemic lupus erythematosus

C Wilson disease

D Hepatitis B viral infection

E Primary biliary cholangitis

Q-06

A young lady of 35 years has complain of “heartburn” and epigastric pain and is relieved by antacid. She is smoker and habitual of alcohol consumption.

A. Columnar intestinal metaplasia
B. Excessive acid production by stomach
C. Excessive NAISD Consumption
D. H.Pylori infection
E. Hiatal hernia

Q-07

The most common tumor of appendix is ?

A. Adenoma
B. Mucinous adenocarcinoma
C. Mesothelioma
D. Squamous cell carcinoma
E. Carcinoid Tumor

Q11-A 45-year-old male presents with fever, chronic diarrhea, and weight loss. He is found to have multiple pain and swelling of his joints (migratory polyarthritis) and generalized lymphadenopathy. Physical examination reveals skin hyperpigmentation. A biopsy from his small intestines reveals the presence of macrophages in the lamina propria that contain PASpositive

cytoplasm. The best diagnosis for this individual is

a) Abetalipoproteinemia
b) Crohn's disease
c) Hartnup disease
d) Nontropical sprue
e) Whipple's disease

Q-12 Which one of the following statements is more characteristic of ulcerative colitis than of Crohn's disease?

a) Fibrosis may produce a "lead pipe" appearance with "creeping fat" around the outside of the gut
b) Inflammation begins in the rectum and extends proximally without skip lesions
c) Microscopy may reveal transmural inflammation with noncaseating granulomas
d) Sudden abdominal pain may result from intestinal obstruction due to pericolonic Abscess
e) Transmural involvement may produce fissures, fistulas, and bowel obstruction

Q-13

Q-14-A 2 year old healthy child presents with no passage of stool for one day, has distended very tender abdomen and no bowel sounds. Abdomen X-ray reveals distended small loops with air fluid levels, which is the most likely diagnosis.

a) Meckel diverticulum
b) Duodenal atresia
c) Hirschsprung disease
d) Pyloric stenosis
e) Intussusception

Q-15- A young male 20 years of age with family history of colonic polyps presents for checkup and on colonoscopy has multiple polyps in colon for which colostomy is performed. Molecular analysis of his somatic cells will reveal mutation of which of the following genes.

a) APC

b) P-53
c) K- RAS
d) HNPCC
e) NOD2

LIVER

Q-1

Conjugated hyperbilirubinemia is seen in

A. Haemolytic anaemia
B. Physiological jaundice of newborn
C. Crigler najjar syndrome
D. Viral hepatitis
E. Dubin- jhonson syndrome

Q-2

A man of44 years present with ascites. Liver biopsy reveals diffused portal tract bridging fibrosis and nodular regeneration of liver cells without hepatocytes necrosis. These findings are characteristic for?

A. Alcoholic hepatitis
B. Viral hepatitis
C. Drug toxicity
D. Cirrhosis
E. Chronic congestion

Q-3

A man of 64 years has ascity with firm nodular liver on physical examination. His blood is positive for HBSAg and ANTI- HBc. and marked elevation of alpha-fetoprotein AFP). Which of the following is most likely diagnosis?

A. Hepatocellular Carcinoma
B. Massive hepatic cellular necrosis
C. Marked steatosis
D. Autoimmune hepatitis
E. Adenocarcinoma of gall bladder

Q-4

A man of 45 years has complaints of ascites, red tongue, dry and slightly yellowish skin gynecomastia with testicular atrophy, tremor and short-term memory. Which of the following is most likely associated?

A. Bronchogenic carcinoma
B. Colonal carcinoma
C. Brain tumor
D. Hepatic cirrhosis
E. Congestive heart failure.

Q-5

A lady of 24 years during makeup notices yellowness of eye (sclera). And her liver function tests show total serum bilirubin 4.5 mg/dl, with 0.5 direct bilirubin, ALT 65 IU/L, AST,48 IU/L. the condition is most likely?

A. Choledochal cyst
B. Primary Biliary Cirrhosis
C. Gilberts Syndrome
D. Hepatitis –C
E. Chronic cholelithiasis.

Q-06

A lady of 27 years presented with fever, malaise, yellowness of ere and pain right hypochondrium. Ultrasound reveals mildly enlarged liver with raised serum ALT and Alkaline phosphatase and increased Ig-M and anti -Hepatitis A titer. Which of the following is most likely result of this infection?

A. Cirrhosis
B. Complete resolution
C. Become chronic carrier state
D. Fulminate hepatitis
E. Hepatocellular carcinoma

Q-16A 12 year old boy with sickle cells anemia presents with recurrent colicky abdomian pain, cholecystectomy revealed black colored stones. These stones are composed of

a) Bilirubin
b) Carbon
c) Cholestnol
d) Struvite
e) Urate

Q-33 A 45 year old female presents with ascites, liver biopsy reveals diffuse portal tract bridging and nodular regeneration. This is characteristic for.

a) Alcoholic hepatitis
b) Viral hepatitis
c) Drug toxicity
d) Cirrhosis
e) Chronic congestion

Q-34 Three weeks after a meal at trucker's café a 28 year old man develops malaise fatigue, and loss of appetite, and dark urine. On physical examination, he has yellow sclera, lab findings show, serum AST 62 u/L and ALT of 58 u/L. The total bilirubin is 3.9 mg/dl. Which of the following serological findings are positive in this patients.

a) Anti. HBS
b) IgM anti- HDV
c) Anti-HCV
d) IgM anti HAV
e) Anti- HBC

Q-35 A 19 year psychotic old woman is bothered by a tremor at rest, which becomes worse over the next 6 months. A slit lamp examination shows corneal Kayser-Fleischer rings. Lab findings include total serum protein 5.9 g/dL. Albumin

3.1 mg/dL. AST 128 ul ; ALT 157 u/L and alkaline phosphatase 56 u/L. Which of the following additional serological tests is most likely to be reported in this patient.

a) Decreased serum ceruloplasmin level
b) Positive HBsAg
c) Decreased α1 antitrypsin level
d) Increased serum ferritin level
e) Positive anti mitochondrial antibody

Q-20 A 45 year old man presented to the emergency with severe abdominal pain and vomitting. Pain was radiating to back. Serum amylase level was 2000 u/L. which of the following are predisposing factor for this condition

a) H. phylori infection
b) Hepatatis B and iron load
c) Obesity and high cholesterol
d) Stress and cigarrette
e) Alcohal use and gall-stones

URINARY SYSTEM.

Q- 1

A child of 04 years has palpable a mass on the right side of abdomen. An abdominal CT scan reveals a 10 cm solid mass involving the right kidney. The biopsy of resected mass reveals sheets of small blue cells along with primitive tubular structures. which of the following neoplasms is this child most likely to have had?

A Angiomyolipoma

B Renal cell carcinoma

C Urothelial carcinoma

D Wilms tumor

E Medullary fibroma

Q-2

A clinical study is performed involving subjects with glomerulonephritis. One group of subjects has a diagnosis of crescentic glomerulonephritis and another has membranous nephropathy. Which one of the following laboratory findings is most likely to be found in the absence of other findings in subjects with membranous nephropathy?

A Rapid onset

B Red blood cell casts

C Oliguria

D Albuminuria

E Hypertension

Q-3

The Laboratory studies of 20 years old mad show his serum creatinine is 4.4 mg/dL and BUN 40 mg/dL. A urinalysis reveals pH 6, specific gravity 1.011, 3+ blood, 1+ protein, nil- glucose, and no ketones. On urine microscopic examination there are numerous RBC casts. Which of the following pathologic findings on renal biopsy is most likely to be present in this man?

A Glomerular crescents

B Widened proximal tubules

C Neutrophilic infiltrates

D Basememt membrane thickening

E IgA deposited in glomerular capillaries

Q-4

A 39-year-old male has the sudden onset of severe right flank pain. Urine microscopic examination shows many RBCs but few WBCs. The specific gravity is 1.015 and the pH is 5.5. Which of the following is the most likely diagnosis?

A Nodular prostatic hyperplasia

B Membranous nephropathy

C Ureteral calculus

D Renal angiomyolipoma

E Urothelial carcinoma of bladder

Q-5

A chronic smoker man of 53-year, passed dark coloured urine for the past week. A urinalysis shows pH 5.5, specific gravity 1.013, 2+ blood, no protein, and no glucose. Urine cytology is performed and there are atypical cells seen. A cystoscopy is performed, but no mucosal lesions are noted. Which of the following is the most likely diagnosis?

A Adenocarcinoma of prostate

B Urothelial carcinoma of renal pelvis

C Acute interstitial nephritis

D Nodular glomerulosclerosis

E Squamous cell carcinoma of penis

MGS.

Q-1

A 70-year-old man has a firm enlarged prostate and Prostate biopsies show small, crowded glands containing cells with prominent nucleoli within the nuclei. Which of the following is the most likely diagnosis?

A Adenocarcinoma

B Nodular hyperplasia

C Chronic prostatitis

D Urothelial carcinoma

E Recent infarction

Q-2

A 23-year-old young man has normal palpable testes. However, the spermatic cord on the left has the feel of a 'bag of worms'. Laboratory studies show oligospermia. Which of the following conditions is this man most likely to have?

A Hydrocele

B Testicular torsion

C Spermatocele

D Varicocele

E Seminoma

Q-3

A 36-year-old man has feeling of heaviness in his scrotum for over 6 months. An ultrasound reveals a solid 5 cm mass in the right testis. Laboratory studies show a serum alpha-fetoprotein (AFP) of 81 ng/mL and human chorionic gonadotrophin (HCG) of 15 IU/L. A right orchiectomy is performed and Microscopic examination shows cords and sheets of primitive cells with large nuclei. Which of the following is the most likely diagnosis?

A Teratoma

B Embryonal carcinoma

C Mumps orchitis

D Leydig cell tumor

E Choriocarcinoma

Q- 24 A 72-year-old man gets up several times during a football match to go to the restroom to urinate, even though he has had only one cup of tea. This is a problem that has plagued him for 4 years. When he visits his physician for a checkup, on physical examination he has a diffusely enlarged prostate palpated on digital rectal examination. Laboratory studies show his serum prostate specific antigen is 6 ng/mL. Which of the following pathologic findings is most likely to be present in this man?

a) Adenocarcinoma
b) Acute inflammation
c) Multiple infarctions
d) Nodular hyperplasia
e) Granulomas

Q- 25 A pathologic study is performed in men ranging from 50 to 100 years of age who had serum prostate specific antigen levels above 15 ng/mL and who underwent prostatectomy following biopsies in which there was adenocarcinoma on microscopic examination. In which of the following regions of the prostate are these adenocarcinomas most likely to arise?

a) Anterior fibromuscular stroma
b) Central zone
c) Peripheral zone
d) Periurethral zone
e) Transitional zone

Q- 26 A 2-year-old boy is brought to the physician because his mother (a geometry teacher) has observed that his scrotum is no longer symmetrical. On physical examination the child has enlargement of the left testis. An ultrasound scan shows a 2 cm solid mass within the body of the testis. Laboratory studies show a serum alpha-fetoprotein of 226 ng/mL. Which of the following neoplasms is this child most likely to have?

a) Leydig cell tumor
b) Neuroblastoma
c) Rhabdomyosarcoma
d) Teratoma
e) Yolk sac tumor

FGS.

Q- 30 In which of the following breast lesions is there a prominent giant cell reaction?

a) Acute mastitis
b) Fat necrosis

c) Fibrosarcoma
d) Fibrocystic changes
e) Sclerosing adenosis

Q- 31 A 65 years old woman presents with a pathological fracture of the shaft of humerus. X-ray shows multiple lytic and blastic bone lesions. Biopsy of lesion reveals adenocarcinoma. Which is the site of primary tumour?

a) Breast
b) Thyroid
c) Colon
d) Kidney
e) Lung

Q- 32 A 3-year-old child has become more irritable over the past two months and does not want to eat much at meals. On physical examination the pediatrician notes an enlarged abdomen and can palpate a mass on the right. An abdominal CT scan reveals a 10 cm solid mass involving the right kidney. The resected mass has a microscopic appearance with sheets of small blue cells along with primitive tubular structures. The child receives chemotherapy and radiation therapy, and there is no recurrence. Which of the following neoplasms is this child most likely to have had?

a) Angiomyolipoma
b) Renal cell carcinoma
c) Urothelial carcinoma
d) Wilms tumour
e) Medullary carcinoma.

Q-1

A female of 47-year has a 10 cm fluid-filled cystic mass in the right ovary on ultra sound. FNAC of the lesion reveals clusters of malignant epithelial cells surrounding psammoma bodies. Which of the following neoplasms is she most likely to have?

A Endometrioid carcinoma

B Serous cystadenocarcinoma

C Malignant mesothelioma

D Mature cystic teratoma

E Squamous cell carcinoma

Q-2

A PAP Smear of 28-year- reveals severely dysplastic cells. A biopsy of the cervix is performed and microscopic examination shows Cervical Intraepithelial Neoplasia III (CIN III). Infection with which of the following organisms is most likely to cause her disease?

A Herpes simplex virus infection

B Epstein-Barr virus

C Candida albicans

D Human papillomavirus

E Trichomonas vaginalis

Q-3

A 44-year-old woman went under total abdominal hysterectomy. On Gross examination, a irregular reddish-tan mass located in the myometrium shows bundles of smooth muscle cells poorly along with heterogeneous elements of pleomorphic cartilaginous cells. There are also areas with differentiated gland formation. Mitotic figures are frequent. Which of the following neoplasms is she most likely to have?

A Leiomyosarcoma

B Sarcoma botryoides

C Malignant mixed mullerian tumor

D Endolymphatic stromal myosis

E Leiomyoma with focal degeneration

Q-04

A 05 years old girl begins development of secondary sex characters and ultrasound shows a ovarian mass. The biopsy report of this lesion shows granulosa cell tumor. Which of the following histological findings is characteristic of this type of tumour?

A. Signet- ring cell s
B. Call -Exner bodies
C. Schiller bodies
D. Transitional cell epithelium
E. Hyper functioning thyroid tissue

Q- 21 A two year old girl presented with a ten day history of a mass protruding from the vagina. Examination revealed a 5 cm purple mass at introitus. Examination under anaesthesia revealed a polypoid mass resembling a bunch of grapes arising from upper one third of the vagina.

a) Squamous cell carcinoma
b) Sarcoma botryoides
c) Papillary hidradenoma
d) Extramammary pagets disease
e) Condyloma accuminatum

Q- 42 The most important distinguishing feature between a leiomyoma and leiomyosarcoma is

a) Mitosis, necrosis and cellular atypia
b) Necrosis only
c) Cellular atypia
d) Necrosis and cellular atypia
e) Hyalinization

Q- 23 A young female with history of molar pregnancy presents with bloody discharge, elevated β-HCG levels. A mass was identified in the uterus which microscopically showed invasion of malignant cytotrophoblasts and syncytiotrophoblasts but no villi were identified. What is the diagnosis?

a) Partial mole
b) Complete mole
c) Invasive mole
d) Gestational Chorocarcinoma
e) Non-gestational choriocarcinoma

BREAST.

Q-1

A girl of 17-year notes a firm mass of 1 x 2 cm in her left breast. No axillary lymph adenopathy is present. Her urine pregnancy test is negative. Mammography confirms the presence of a rounded density, which has no microcalcifications. Which of the following is the most likely diagnosis?

A Focus of fat necrosis

B Fibroadenoma

C Intraductal papilloma

D Infiltrating ductal carcinoma

E Phyllodes tumor

Q-2

The mammogram of a 35-year-old lady shows an irregular 2 cm density that contains scattered microcalcifications. Biopsy of this mass reveals extensive fat necrosis. Which of the following is the most likely cause for this breast lesion?

A Pregnancy

B Prolactinoma

C Trauma

D Fibrocystic changes

E Lobular carcinoma in situ

Q-3

A 44-year-old woman notes a mass of her right breast.. On physical examination the overlying skin is normal with no axillary lymphadenopathy. Mammography reveals a solid 12-cm circumscribed mass and biopsy report shows a cellular stromal component along with an epithelial component. Which of the following is the most likely diagnosis?

A Fibroadenoma

B Phyllodes tumor

C Sclerosing adenosis

D Hamartoma

E Medullary carcinoma

Q-4

A lady of 33-year felt a firm mass of about 05 cm in her right breast. A right mastectomy with axillary lymph node dissection is performed. Microscopic examination shows a poorly differentiated carcinoma that is negative for estrogen and progesterone receptors and negative for HER2/neu. Her 32 year old sister is found to have a similar lesion. Which of the following is the most likely risk factor for this woman's breast cancer?

A BRCA1 mutation

B Late menarche

C Positive antinuclear antibody test

D Exposure to hydrocarbon compounds

E Prior fibrocystic changes

ENDOCRINOLOGY.

Q-1

A 27-year-old lady has intolerance to heat and eating more but has lost 5 kg in the past 2 months. On physical examination her temperature is 37.5°C, pulse 101/minute, respiratory rate 22/minute, and blood pressure 145/85 mm Hg. Which of the following laboratory findings is most likely to be present in this woman?

A Decreased catecholamines

B Decreased iodine uptake

C Decreased plasma insulin

D Decreased TSH

E Increased ACTH

Q-2

A 43-year-old lady has noted diffuse, symmetrical thyroid enlargement without tenderness. FNAC of the thyroid yields cells consistent with a neoplasm and her serum ionized calcium is elevated. A thyroidectomy is performed. Immunostaining for calcitonin of the permanent sections is positive, which of the following neoplasms is she most likely to have?

A Anaplastic carcinoma

B Medullary carcinoma

C Papillary thyroid carcinoma

D Metastatic renal cell carcinoma

E Parathyroid carcinoma

Q-3

A 54-year-old diabetic man has noted the presence of bone pain especially in hands and the range of motion is slightly decreased. Laboratory studies show sodium 139 mmol/L, potassium 4.0 mmol/L, calcium 7.8 mg/dL, phosphorus 5.7 mg/dL, total protein 6.2 g/dL, and albumin 4.0 g/dL. Which of the following conditions is this man most likely to have?

A Adrenal adenoma

B Medullary thyroid carcinoma

C Extra-adrenal pheochromocytoma

D Parathyroid hyperplasia

E Pituitary adenoma

Q-4

A 50-year-old woman has had increasing cold intolerance, weight gain of 4 kg, and sluggishness with dry, coarse skin and alopecia of the scalp. Her thyroid is not palpably enlarged. Her serum TSH is 11.7 mU/L with thyroxine of 2.1 micrograms/dL. A year ago, anti-thyroglobulin and anti-microsomal autoantibodies were detected at high titer. Which of the following thyroid diseases is she most likely to have?

A DeQuervain disease

B Papillary carcinoma

C Hashimoto thyroiditis

D Multinodular goiter

E Graves' disease

Q-5

A 48-year-old woman has experienced constant back pain exacerbated by movement with increasing weakness over the past 3 months. She is overweight, with a BMI of 28. A radiograph of the spine reveals a compressed fracture at T10. Which of the following pathologic lesions is most likely to explain her findings?

A Adrenal cortical carcinoma

B Anaplastic thyroid carcinoma

C Empty sella syndrome

D Pheochromocytoma

E Multinodular goiter

BONE AND SOFT TISSUE.

Q-1

A 56-year-old man has increasing back pain which is worse at the end of the day and has bony enlargement of the distal interphalangeal joints. A radiograph of the spine reveals the presence of prominent osteophytes involving the vertebral bodies. There is sclerosis with narrowing of the joint space at the right acetabulum also. Which of the following diseases is he most likely to have?

A Gout

B Rheumatoid arthritis

C Osteoarthritis

D Osteomyelitis

E Pseudogout

Q-2

A radiograph of 51-year-old man reveals a 10 x 13 cm mass involving the right ischium of the pelvis. The mass has irregular borders and there are extensive areas of bony destruction along with some scattered calcifications. The lesion is resected, and grossly the mass has a bluish-white cut surface. Which of the following is the most likely diagnosis?

A Osteosarcoma

B Enchondroma

C Osteoblastoma

D Chondrosarcoma

E Paget sarcoma

Q-3

A 11-year-old boy has pain in his left knee and radiograph reveals a mass in the diaphyseal region of the left femur with overlying cortical erosion and soft tissue extension. The bone biopsy report shows numerous small round blue cells. Karyotypic analysis of these cells shows t(11;22). Which of the following neoplasms is he most likely to have?

A Ewing sarcoma

B Medulloblastoma

C Neuroblastoma

D Chondroblastoma

E Osteoblastoma

Q-4

A 32-year-old man has swelling and pain about his left knee. A radiograph reveals a 7 cm lytic lesion involving the epiphyseal region of the distal femur with a 'soap bubble' appearance. The biopsy shows numerous multinucleated cells in a stroma with plump to spindle shaped mononuclear cells. Which of the following is the most likely diagnosis?

A Osteosarcoma

B Chondrosarcoma

C Pleomorphic sarcoma

D Giant cell tumor

E Tuberculosis

Q-5

A boy of 06 years presents with waddling gait and difficulty in climbing up the ladder steps. He uses arms and shoulders to rise up from floor. Which one of the following is mostlikely diagnosis?

A. Inclusion body myositis
B. Weding-Hoffmanndisease
C. Ploymyositis
D. Duchene's muscular dystrophy
E. Becker type muscular dystrophy.

Q-34 A 47-year-old man develops malaise over the past month. On examination he has peripheral pitting edema. Laboratory studies show elevated serum creatinine and urea nitrogen. A renal biopsy is performed and shows membranous nephropathy. Which one of the following is most likely to be found in this man?

a) Cystitis
b) RBC cast
c) Oliguria
d) Albuminuria
e) Leukocytosis

Q-35 A 50-year-old man was diagnosed at age 15 with type 1 diabetes mellitus. His disease has been poorly controlled, as evidenced by elevated hemoglobin A1C levels. He develops a non-healing ulcer of his foot at age 35. At age 45, he has an increasing serum urea nitrogen and a urinalysis shows sp gr 1.012, pH 6.5, 1+ protein, no blood, 1+ glucose, negative leukocyte esterase, negative nitrite, and no ketones. Which of the following renal diseases is he most likely to have?

a) Nodular glomerulosclerosis
b) Papillary necrosis
c) Crescentic Glomerulonephritis
d) Pyelonephritis
e) Hperplastic Arteriosclerosis.

Q-36

Q-37 An 80-year-old woman has had no major medical problems, but she has never been physically active for most of her life. One day she falls out of bed and immediately notes a sharp pain in her left hip. She is subsequently unable to ambulate without severe pain. Radiographs show not only a fracture of the left femoral head, but also a compressed fracture of T10. Which of the following conditions is she most likely to have?

a) Vitamin D deficiency
b) Acute Osteomyelitis
c) Osteogenesis imperfect
d) Osteoporosis
e) Metastatic breast carcinoma

Q-38 A 58-year-old man has the sudden onset of severe pain in his left great toe. There is no history of trauma. On examination there is edema with erythema and pain on movement of the left 1st metatarsophalangeal joint, but there is no overlying skin ulceration. A joint aspirate is performed and on microscopic examination reveals numerous neutrophils and needle-shaped crystals. Over the next 3 weeks, he has two more similar episodes. On physical examination between these attacks, there is minimal loss of joint mobility. Which of the following laboratory test findings is most characteristic for his underlying disease process?

a) Hyperglycemia
b) Positive Antinuclear antibody
c) Hyperuricemia
d) Hypercalcemia
e) High Rheumatoid Factor titre

Q-39 An 11-year-old boy has pain in his left leg that has persisted for 3 weeks. On physical examination his temperature is 37.9°C. A radiograph of the leg reveals a mass in the diaphyseal region of the left femur with overlying cortical erosion and soft tissue extension. A bone biopsy is performed and the lesion on microscopic examination shows numerous small round blue cells. Karyotypic analysis of these cells shows t(11;22). Which of the following neoplasms is he most likely to have?

a) Ewing sarcoma
b) Medulloblastoma
c) Neuroblastoma

d) Chondroblastoma
e) Osteoblastoma

Q-40 A 16-year-old boy has noted pain in his left knee after each hockey practice session for the past month. On examination there is tenderness to palpation of his left knee, with reduced range of motion. A plain film radiograph of the left leg reveals a mass of the proximal tibial metaphysis that erodes bone cortex, lifting up the periosteum where reactive new bone is apparent. The mass does not extend into the epiphyseal region. A bone biopsy is performed and microscopic examination shows atypical, elongated cells with hyperchromatic nuclei in an osteoid stroma. Which of the following neoplasms is he most likely to have?

a) Ewing sarcoma
b) Osteosarcoma
c) Chondrosarcoma
d) Multiple myeloma
e) Metastatic seminoma

Q-41 A 56-year-old woman has a 27 year history of poorly controlled diabetes mellitus. She develops an ulceration on the ball of her foot that does not heal for 2 months. Which of the following complications involving bone is she most likely to develop?

a) Chondrocalcinosis
b) Osteomyelitis
c) Osteosarcoma
d) Squamous cell carcinoma
e) Osteopetrosis

CNS

Q-1

A 27-year-old primigravida has noted minimal fetal movement. A fetal ultrasound is performed at 17 weeks gestation and shows an intact fetal cranial vault, mild ventriculomegaly, intact cerebral hemispheres, and head measurements that are small for gestational age. The maternal

serum alpha-fetoprotein (AFP) is increased. Which of the following fetal congenital abnormalities is most likely to be present in this case?

A Meningocele

B Encephalocele

C Arnold-Chiari II malformation

D Lissencephaly

E Alobar holoprosencephaly

Q02

A 50-year-old man has complaint of is noted that he has become more forgetful and has frontal release signs and memory loss. MR imaging of the brain is performed and shows a 3 cm diameter left frontal lobe mass with areas of calcification. Which of the following diagnoses is most likely to be made on microscopic examination of this mass?

A Vascular malformation

B Oligodendroglioma

C Meningioma

D Schwannoma

E Organizing abscess

Q-03

A man of 52-year has headaches and difficulty concentrating for the past 2 months. He then begins to exhibit odd behavior. MR imaging of the brain reveals a large mass with extensive necrosis in the left cerebral hemisphere extending across corpus callosum into the right hemisphere. Which of the following neoplasms is he most likely to have?

A Meningioma

B Glioblastoma

C Medulloblastoma

D Metastatic adenocarcinoma

E Pilocytic astrocytoma’

Q-54 A 67-year-old male presents with a slowly growing lesion that involves the lower portion of his left lower eyelid. You examine the lesion and find it to be a pearly papule with raised margins and a central ulcer (rodent ulcer). Histologic sections from this lesion would most likely reveal:
a. Reactive epidermal cells surrounding a central superficial ulcer
b. Infiltrating groups of basaloid cells with peritumoral clefting
c. Infiltrating groups of eosinophilic cells with keratin formation
d. Dermal aggregates of small cells histologically similar to oat cell carcinoma
e. An in situ lesion with full-thickness epidermal atypia
Q-55 Porphyrias result from the abnormal synthesis of:
a. a-globin
b. b-globin
c. Heme
d. Spectrin
e. Transferrin
Q-56
Q-57 A 22-year-old female presents with fever, weight loss, night sweats, and painless enlargement of several supraclavicular lymph nodes. A biopsy from one of the enlarged lymph nodes shows binucleate or bilobed giant cell with prominent acidophilic
“owl-eye” nucleoli . What are these cells called?
a. Call-Exner cell
b. Hürthle cell
c. Reed-Sternberg cell
d. Sézary cell
e. Strap cell
Q-58 A 38-year-old male presents with increasing weakness and is found to have a markedly elevated peripheral leukocyte count. Laboratory testing on peripheral blood finds a decreased leukocyte alkaline phosphatase
(LAP) score, while chromosomal studies on a bone marrow aspirate find the presence of a Philadelphia chromosome. This abnormality refers to a characteristic chromosomal translocation that involves the oncogene:

a. *p53*
b. *c-abl*
c. *c-myc*
d. *erb-B*
e. *N-myc*

Q-59 A bone marrow aspirate is obtained from a 70-year-old man whose symptoms include weakness, weight loss, and recurrent infections. Laboratory findings include proteinuria, anemia, and an abnormal component in serum proteins. X-ray shows lytic bone lesions. Bence Jones proteinuria is seen. What is the most likely diagnosis?

a. Monomyelocytic leukemia
b. Histiocytic leukemia
c. Multiple myeloma
d. Gaucher's disease
e. Leukemic reticuloendotheliosis

Q-60. A 55-year-old woman is suspected to have a brain tumor because of the onset of seizure activity. Computed tomography (CT) scans and skull x-rays demonstrate a mass in the right cerebral hemisphere that is markedly calcific. This tumor most likely originated from

a. Astrocytes
b. Microglial cells
c. Ependymal cells
d. Oligodendrogliocytes
e. Schwann cells

SKIN.

Q -01

Which ONE of the following is not a virus infection of the skin?

A. Condyloma acuminatum.

B. Molluscum contagiosum.

C. Pemphigus vulgaris.

D. Verruca vulgaris.

E. Zoster

Q-02

Dermatitis herpetiformis is associated with which ONE of the following condition?

A. Ankylosing spondylitis.

B. Coeliac disease.

C. Diverticulitis.

D. Emphysema.

E. Whipple's disease.

Q-52 . A 5-year-old boy presents with projectile vomiting and progressive ataxia. Workup finds obstructive hydrocephalus due to an infiltrative tumor originating in the cerebellum. What is the most likely diagnosis for this cerebellar tumor?
a. Ependymoma
b. Glioblastoma multiforme
c. Medulloblastoma
d. Oligodendroglioma
e. Schwannoma

Q-53 A 72-year-old male presents with a slowly growing, ulcerated lesion located on the pinna of his right ear. The lesion is excised, and histologic sections reveal infiltrating groups of cells in the dermis. These cells have eosinophilic cytoplasm,

intercellular bridges, and intracellular keratin formation. What is the correct diagnosis for this lesion?
a. Basal cell carcinoma
b. Dermatofibrosarcoma protuberans
c. Merkel cell carcinoma
d. Poorly differentiated adenocarcinoma
e. Squamous cell carcinoma

BLOOD.

Q-1

A female of 33-year non-tender cervical and supraclavicular lymphadenopathy and histopathology report of lymph node biopsy shows occasional CD15+ and CD30+ Reed-Sternberg cells along with large and small lymphocytes and bands of fibrosis. Which of the following is the most likely diagnosis?

A Burkitt lymphoma

B Hodgkin lymphoma

C Cat scratch disease

D Mycosis fungoides

E Multiple myeloma

Q-2

A 14-year-old boy has a palpable spleen tip. A CBC shows Hb% of 8.8 g/dL, Hct 24.1%, MCV 65 fL , platelet count 187,000/microliter, and WBC count 7400/microliter. His serum ferritin is 3740 ng/mL. A bone marrow biopsy is performed and on microscopic examination reveals a myeloid:erythroid ratio of 1:4, and there is 4+ stainable iron. Which of the following is the most likely diagnosis?

A G6PD deficiency

B Beta-thalassemia

C Sickle cell anemia

D Hereditary spherocytosis

E Malaria.

Q-3

A 59-year-old male has had fatigue, fever, and episodes of epistaxis and Laboratory studies show Hb% 12.5 g/dL, Hct 37.6%, MCV 89 fL, platelet count 170,000/microliter, and WBC count 52,000/microliter. Examination of his peripheral blood smear shows large blasts with Auer rods. Which of the following risk factors most likely preceded development of his current illness?

A Malaria

B Infectious mononucleosis

C Diabetes mellitus

D Beta-thalassemia

E Myelodysplasia

Q-4

A study is conducted to determine what changes in the size of the spleen take place with hematologic disorders. The spleen sizes are estimated from CT scans for adult patients who developed complications of their hematologic disease. For which of the following diseases is the spleen most likely to remain normal in size?

A Autoimmune hemolytic anemia

B Chronic alcohol abuse

C Myeloproliferative disorder

D Idiopathic thrombocytopenic purpura

E Sickle cell anemia

Q-5

A 47-year-old man has a fever with cough for a month and there are crackles auscultated in upper lung fields. A chest radiograph shows a reticulonodular pattern with upper lobe cavitary lesions. His sputum is positive for acid fast bacilli. A CBC shows: Hgb 14.2 g/dL, WBC count 44, 500/uL with differential count of 59 segs, 20 bands, 8 metas, 4 myelos, 2 promyelos, 5 lymphs, and 2 monos. Which of the following laboratory test findings is most likely to be present in this

man?

A High leukocyte alkaline phosphatase

B Karyotype with 46, XY, t(9;22)

C Monoclonal gammopathy

D Elevated D-dimer

E Positive TdT assay

CLINICALLY CHEMISTRY.

Q-1

A 27-year-old woman is irritable and complains that the work area is too hot. She seems nervous and often spills her tea. She has been eating more but has lost 7 kg in the past 2 months. On physical examination her temperature is 37.5°C, pulse 101/minute, respiratory rate 22/minute, and blood pressure 145/85 mm Hg. Which of the following laboratory findings is most likely to be present in this woman?

A Decreased catecholamines

B Decreased iodine uptake

C Decreased plasma insulin

D Decreased TSH

E Increased ACTH

Q-2

A 45-year-old man has head CT scan and it reveals enlargement of the sella turcica. Which of the following hormones is most likely being secreted in excessive amounts in this man?

A Antidiuretic hormone

B Prolactin

C ACTH

D Growth hormone

E Luteinizing hormone

Q-3

A lady 38-year has symmetrically enlarged but nontender thyroid gland. There is no palpable lymphadenopathy. She is afebrile. Her serum TSH is 3.5 mU/L with total thyroxine of 8.2 micrograms/dL. Thyroid peroxidase antibody is not detected. Two years later, her thyroid has not appreciably changed in size. Which of the following conditions is she most likely to have?

A Graves disease

B Nodular goiter

C Hashimoto thyroiditis

D Anaplastic carcinoma

E Follicular adenoma

Q-4

A 56-year-old lady has had a 4 kg weight loss over the past 3 months. On physical examination she is afebrile and hypotensive. Bilateral papilledema is noted. A head CT scan shows marked diffuse cerebral edema with effacement of the lateral ventricles. Laboratory studies show a sodium of 108 mmol/L, potassium 4.0 mmol/L, chloride 83 mmol/L, CO2 14 mmol/L, glucose 82 mg/dL, and creatinine 0.5 mg/dL. Which of the following is most likely to cause these findings?

A Small cell lung carcinoma

B Blunt head trauma

C Hypothalamic glioma

D Meningitis

E Pituitary macroadenoma

Q-5

A 29-year-old primigravida has marked vaginal bleeding after the onset of labor and a lacerated low-lying placenta is removed. She remains hypotensive for 6 hours and requires transfusion of

12 packed RBC units. She becomes more sluggish and tired. Laboratory findings include hyponatremia, hyperkalemia, and hypoglycemia. Which of the following pathologic lesions is she most likely to have had following delivery?

A Bilateral adrenal hemorrhage

B Pituitary necrosis

C Subacute thyroiditis

D Metastatic choriocarcinoma

E Insulitis

Q-42 A patient presented with a lump in his neck.Physical examination revealed a solitary firm thyroid nodule on left side. The nodule doesn't enhance during 99 mTc imaging. Serum T3,T4, TSH is normal and serum calcitonin is elevated. Biopsy will reveal which of the following.

a) Parathyroid adenoma
b) Follicular carcinoma
c) Medullary carcinoma
d) Parathyroid carcinoma
e) Hashimotos thyroiditis.

Q-43 A biopsy of large neck mass shows benign thyroid lesion composed of colloid filled follicles separated by fibrous scars. The most likely diagnosis is

a) Multinodular goiter
b) Diffise non toxic goiter
c) Sub acute thyroididtis
d) Thyroid adenoma
e) Thyroid cyst.

Q-44 A patient has enlarged thyroid gland. Needle aspiration shows cell clusters suspicious of papillary carcinoma thyroid. Which of the findings support the diagnosis.

a) Anistschow cells
b) Psammmoma bodies
c) Auer Rods
d) Reed Sternberg cells

e) Roth spots.

Q-45 A women with metastatic lung cancer develops profound weakness with alternating diarrhea and constipation. Physical examination reveals hyperpigmentation of skin even in areas protected from the sun. which endocrine organ is involved in the tumour.

a) Pitutary gland
b) Adrenal gland
c) Endocrine pancreas
d) Ovaries
e) Thyroid gland.

Q-46 A 55 year old women presents with increasing muscle weakness and fatigue. Physical examination finds an obese adult woman with purple abdominal stria and increased facial hair. The excess adipose tissue is mainly distributed to face, neck, and trunk. Lab findings include increased plasma levels of cortisol and glucose. Which of the following is the most likely diagnosis.

a) Addisons disease
b) Barretts syndrome
c) Conns syndrome
d) Cushing syndrome
e) Schmidtt syndrome.

Q- 47A 29-year-old primigravida who received no prenatal care has marked vaginal bleeding after the onset of labor at 38 weeks gestation. Cesarean section is performed and a lacerated low-lying placenta is removed. She remains hypotensive for 6 hours and requires transfusion of 12 packed RBC units. Postpartum, she becomes unable to breast-feed the infant. She does not have a resumption of normal menstrual cycles. She becomes more sluggish and tired. Laboratory findings include hyponatremia, hyperkalemia, and hypoglycemia. Which of the following pathologic lesions is she most likely to have had following delivery?

a) Bilateral adrenal hemorrhage
b) Pituitary necrosis
c) Metastatic choriocarcinoma
d) Subacute thyroiditis
e) Insulitius.

Q-48 A 49-year-old woman has had increasing cold intolerance, weight gain of 4 kg, and sluggishness over the past two years. A physical examination reveals dry,

coarse skin and alopecia of the scalp. Her thyroid is not palpably enlarged. Her serum TSH is 11.7 mU/L with thyroxine of 2.1 micrograms/dL. A year ago, anti-thyroglobulin and anti-microsomal autoantibodies were detected at high titer. Which of the following thyroid diseases is she most likely to have?

a) DeQuervain disease
b) Papillary carcinoma
c) Hashimoto thyroiditis
d) Multinodular goiter
e) Graves disease

Q-49 A 50-year-old man has episodic headaches for 3 months. On physical examination his blood pressure is 185/110 mm Hg, with no other remarkable findings. Laboratory studies show sodium 145 mmol/L, potassium 4.3 mmol/L, chloride 103 mmol/L, C02 26 mmol/L, glucose 91 mg/dL, and creatinine 1.3 mg/dL. An abdominal CT scan shows a 7 cm left adrenal mass. During surgery, as the left adrenal gland is removed, there a marked rise in blood pressure. Which of the following laboratory test findings most likely explains his findings?

a) Decreased serum cortisol
b) Decreased urinary homovanillic acid
c) Increased serum ACTH
d) Increased urinary free catecholamines
e) Elevated serum ANCA

Q-50 A 50-year-old man has the sudden onset of substernal chest pain. The pain persists for the next three hours. He then becomes short of breath and diaphoretic. He goes to the emergency department and on physical examination his vital signs include T 37°C, P 100/minute, RR 26/minute, and BP 130/90 mm Hg. A chest x-ray shows a slightly enlarged heart and mild pulmonary edema. An EKG shows ST segment elevation in anterior leads V1 - 6. Which of the following serum laboratory test findings is most likely to be present in this man?

a) Urea nitrogen of 110 mg/dL
b) Sodium of 115 mmol/L
c) ALT of 876 U/L
d) Troponin I of 32 ng/mL
e) HDL cholesterol of 55 mg/dL

Q-51 A clinical study is performed with pediatric subjects who had a diagnosis of minimal change disease. These patients were observed to have prominent periorbital edema at diagnosis. Laboratory test findings from serum and urine tests were analyzed. Which of the following urinalysis test findings is most likely to have been consistently present in these subjects?.

a) Nitrite positive
b) Proteinuria >3.5 gm/24 hours
c) Hematuria with >10 RBC/hpf
d) Calcium oxalate crystsls
e) Renal tubular epithelial cells and casts