PATHOLOGY MCQ

1) Hypertrophy
   a) occurs after partial hepatectomy
   b) increases function of an organ exponentionally
   c) is triggered by mechanical and trophic chemicals
   d) occurs after denervation
   e) is usually pathological

2) All the following are features of apoptosis EXCEPT
   a) cell swelling
   b) chromatin condensation
   c) formation of cytoplasmic blebs
   d) lack of inflammation
   e) phagocytosis of apoptotic bodies

3) Dystrophic calcification
   a) is formed only in coagulative necrosis
   b) does not occur on heart valves
   c) rarely causes dysfunction
   d) is rarely found on mitochondria
   e) is formed by crystalline calcium phosphate mineral

4) Irreversible cell injury is characterised by
   a) dispersion of ribosomes
   b) cell swelling
   c) nuclear chromatin dumping
   d) lysosomal rupture
   e) cell membrane defects

5) Metaplasia
   a) can be caused by vitamin B12 deficiency
   b) preserves mucus secretion in the respiratory tract
   c) is typically an irreversible process
   d) is the process that occurs in Barrett's oesophagitis
   e) is an increase in the number and size of cells in a tissue

6) Smooth endoplasmic reticulum
   a) is the site a cell steroid production
   b) is the site of cell protein synthesis
   c)
   d)
   e) is the site of cellular cytochrome oxidases
7) Pinocytosis
   a) adds to the cell membrane
   b)
   c)
   d)
   e) involves the uptake of soluble macromolecules

8) Examples of hyperplasia include
   b)
   c)
   d) glandular epithelium of pubertal breasts
   e)

9) Ribosomes
   a) have 3 subunits
   b) have 30% DNA
   c) synthesise haemoglobin
   d)
   e)

10) Which of the following is not associated with atrophy
    a) decreased smooth endoplasmic reticulum
    b) decreased rough endoplasmic reticulum
    c)
    d)
    e) decreased autophagic vacuoles

11) In acute inflammation which event occurs first
    a) arteriolar dilatation
    b) arteriolar constriction
    c) oedema
    d) leucocyte migration
    e) blood flow stasis

12) The first vascular response to injury is
    a) slowing of the circulation
    b) venular dilation
    c) recruitment of vascular beds
    d) capillary engorgement
    e) arteriolar vasoconstriction

13) Leucocytes move into the tissues from the vasculature (extravasation)
    a) by the action of actin and myosin
    b) predominantly as monocytes on the first day post injury
    c) in response to C3b
    d) in response to the Fc fragment of IgG
    e) largely in the arterioles
14) Regarding chemical mediators of inflammation

a) histamine is derived from plasma
b) C3b is within macrophages
c) The kinin system is activated in platelets
d) Nitric oxide is preformed in leukocytes
e) Serotonin is preformed in mast cells

15) Chronic inflammation is

a) always preceded by acute inflammation
b) characterised by hyperemia, oedema and leukocyte infiltration
c) most frequently results in resolution
d) the factors underlying monocyte infiltration are the same as for acute inflammation
e)

16) In the triple response the reactive hyperemia is due to

a) blushing
b) exercise
c) arteriolar dilation
d) inflammatory mediators
e) still present after sympathectomy

17) Vascular hyperemia

a) is caused by inflammatory mediators
b) results in cyanosis
c) results in oedema
d) results in brown induration

18) Platelets

a) contain alpha and beta granules
b) are biconcave discs
c) contain a nucleus
d) are found in the plasma at levels of 200-500 per microlitre
e) are the main source of thrombin

19) Macrophages may secrete

a) histamine
b) serotonin
c) prostaglandins
d) oxygen free radicals

20) Which of the following cells cannot phagocytose

a) neutrophils
b) eosinophils
c) macrophages
d) T-cells
21) The most common peripheral circulating lymphocyte is
   a) B-cell
   b) T-cell
   c)
   d)
   e)

22) Granulocytes
   a)
   b)
   c)
   d)
   e)

23) Oncogenes
   a)
   b)
   c)
   d)
   e)

24) Dysplasia
   a) is a feature of mesenchymal cells
   b) inevitably progresses to cancer
   c) is characterised by cellular pleomorphism
   d) is the same as carcinoma in situ
   e) is not associated with architectural abnormalities

25) Metastasis
   a) unequivocally prove malignancy
   b) is the most common presentation of melanoma
   c) is proven by lymph node enlargement adjacent to a tumor
   d) of breast is usually to supraclavicular nodes
   e) all of the above

26) Mast cell
   a) may discharge independent of IgE
   b) release lysosomes
   c)
   d)

27) Non-inflammatory oedema
   a) has a high protein content
   b) has a SG of greater than 1.012
   c) is caused by low levels aldosterone
   d) is caused by elevated oncotic pressure
   e) is associated with elevated levels of ANP
28) Metastatic calcification occurs in
   a) old lymph nodes
   b) gastric mucosa
   c) atherosclerotic vessels
   d) damaged heart valves
   e) 

29) Regarding chronic inflammation all of the following are true EXCEPT
   a) it can be caused by persistent infections
   b) it primarily involves tissue destruction
   c) it may contribute to the formation of atherosclerosis
   d) it involves mononuclear inflammatory cells
   e) it can be caused by exposure to toxic agents

30) Macrophages are derived from
   a) monocytes
   b) T-cells
   c) B-cells
   d) Eosinophils
   e) Plasma cells

31) White infarcts occur in
   a) small intestine
   b) oesophagus
   c) lung
   d) kidney
   e) sigmoid colon

32) Concerning the repair of a well opposed, clean surgical incision
   a) dermal appendages destroyed by the incision usually recover
   b) new collagen begins to accumulate after the first week
   c) granulation tissue does not occur
   d) there is an initial inflammatory response
   e) 15% of original tissue strength is attained after 1 week

33) Pulmonary congestion is associated with
   a) 
   b) 
   c) haemosiderin deposition in macrophages
   d) 

34) Regarding oedema
   a) infection does not cause pulmonary oedema
   b) hereditary angioneurotic oedema involves skin only
   c) facial oedema is a prominent component of anasacra
   d) hepatic cirrhosis is the most common cause of hypoprotenemia
   e) hypoprotenemia is the most common cause of systemic oedema
35) With respect to wound healing
   a)
   b)
   c) neutrophils proliferate at the wound margins at the same time as epithelial proliferation occurs
d) e)

36) Which occurs first in fracture healing
   a) neutrophil invasion
   b) procallus formation
   c) woven bone ossification
d) lamellar bone ossification
e) collagen deposition

37) Subchondral necrosis
   a) is rarely idiopathic
   b) associated with diving injuries
c) rarely involves ischaemia
d) e)

38) In bone fracture healing
   a) woven bone forms in the periosteum of the medullary cavity
   b) osteoblasts lay down woven bone over the procallous to repair the fracture line
c) PTH acts directly on osteoclasts to increase absorption
d) Haematoma at the fracture site plays little role in the development of procallous
e) Inadequate immobilisation aids the formation of normal callous

39) In healing by primary intention
   a) there is a large tissue defect
   b) the tissue defect cannot be reconstituted
c) it involves excessive granulation tissue
d) an epithelial spur forms on the first day
e)

40) The process of blood coagulation involves
   a) prothrombin activator converting fibrinogen to fibrin
   b) alpha 2 macroglobulin
c) the action of antithrombin 3 to promote clotting
d) the action of plasmin on fibrin
e) the removal of peptides from each fibrinogen molecule

41) DIC is associated with
   a) thrombocytosis
   b) a bleeding diathesis presentation in a patient with malignancy
c) d)
42) With respect to the clotting cascade
   a) the alternative pathway is stimulated by Ag-Ab interaction
   b) C3bBb inhibits the final common pathway
   c) As
   d) As
   e) C5a initiates arachadonic acid metabolite release from neutrophils

43) With regard to embolism
   a) arterial emboli most often lodge in the viscera
   b) pulmonary emboli are rarely multiple
   c) amniotic fluid emboli are associated with the highest mortality
   d) all emboli consist of either gas or solid intravascular mass
   e) most pulmonary emboli produce signs of respiratory distress

44) Regarding the veins of the lower limb
   a) thrombosis in the superficial veins is a common source of emboli
   b) phlegmasia alba dolens is associated with iliofemoral vein thrombosis
   c) dermatitis is a common consequence of Buerger's disease
   d) varicosity development has no genetic component
   e) 20% of venous thrombi commence in superficial veins

45) Post mortem features of clot include
   a) adherence to vascular walls
   b) absence of red cells in supernatant
   c)
   d) lines of Zahn
   e)

46) Air embolism
   a) is fatal as air is non-compressible so does not leave the heart
   b)
   c)
   d) 200 ml is the lethal dose
   e)

47) Amniotic fluid embolism
   a) is associated with a greater than 80 % mortality
   b)
   c)

48) Fat embolism syndrome is associated with
   a)
   b)
   c) mortality of greater than 20 %
   d)
   e) petechial rash, non-thrombocytopenic
49) T lymphocytes
   a) contain CD3 proteins
   b) are the basis for type 2 hypersensitivity
   c) differentiate into antibody producing plasma cells
   d) are capable of cytotoxic activity
   e) are activated in the presence of soluble antigens

50) In transplant rejection the hyperacute rejection is
   a) cell mediated
   b) prevented largely by cross-matching blood
   c) controlled by immunosuppressive drugs
   d)

51) All the following are type 1 hypersensitivity primary mast cell mediators EXCEPT
   a) histamine
   b) tryptase
   c) heparin
   d) platelet activating factor
   e) eosinophil chemotactic factor

52) Type 2 hypersensitivity
   a) involve cell mediated immune responses
   b) explain the tuberculin skin test
   c) involve IgE on mast cells
   d) explain many transfusion reactions
   e) include serum sickness as an example

53) A man with type B blood
   a) has the commonest blood type
   b) cannot have a child with type O blood
   c) cannot have a child with type AB blood
   d) cannot have a child with type A blood
   e) none of the above

54) Passive immunity is achieved by administering
   a) live virus
   b) attenuated virus
   c) adsorbed toxin
   d) activated T-cells
   e) all of the above

55) The majority of AIDS cases are reported from
   a) homosexual males
   b) IV drug abusers
   c) Haemophilliacs
   d) Heterosexual contact
   e) Recipients of blood products
56) The following are opportunistic AIDS infections EXCEPT
   a) PCP
   b) Atyoical mycobacterium
   c) CMV
   d) Mycoplasma pneumonia
   e)

57) HIV is associated with
   a)
   b)
   c)
   d) polyclonal hypergammaglobulinemia
   e)

58) Staph aureus
   a) has enterotoxins which stimulate emetic receptors in the abdominal viscera
   b) has a lipase which degrades lipids on the skin surface
   c) has a capsule that allows it to attach to artificial materials
   d) has receptors on it’s surface which allow binding to host endothelial cells
   e) all of the above

59) Staph aureus can cause all of the following EXCEPT
   a) food poisoning
   b) osteomyelitis
   c) carbuncles
   d) scarlet fever
   e) scalded skin syndrome

60) Which of the following is NOT a DNA virus
   a) HSV
   b) HBV
   c) HIV
   d) EBV
   e) VZV

61) With respect to streptococcal infection
   a)
   b)
   c) may result in glomerulonephritis 3 weeks post infection
   d)

62) Non-thrombocytopenic purpura is associated with
   a) aplastic anemia
   b) SLE
   c) Meningococcemia
   d) HIV
   e) EBV
63) With hepatitis B infection

a) 

b) 

c) HbeAg is associated with viral replication

d) 

e) 

64) In hepatitis B

a) Anti-HBs appears soon after HbsAg

b) Infection does not play a role in hepatocellular carcinoma

c) HbsAg appears soon after overt disease

d) The majority of cases of persistent infection result in cirrhosis

e) Acute infection causes sub-clinical disease in 65% of cases

65) Hepatitis C

a) is acquired by faecal-oral transmission

b) has it’s highest prevalence in haemodialysis patients

c) transmission by sexual contact is at a high rate

d) exposure confers effective immunity to subsequent infection

e) causes chronic hepatitis at a higher rate than hepatitis B

66) With hepatitis C infection

a) Associated with sexual transmission primarily

b) More than 50 % become chronic

c) Transmission increases in pregnancy

d) 

e) 

67) With hepatitis E infection

a) it is transmitted primarily parenterally

b) it accounts for a greater than 20 % mortality in pregnant mothers

c) 

d) 

e) 

68) Clostridium species

a) are all spore producing

b) C.tetani produces an endotoxin which causes muscle spasm

c) Vaccination against C.tetani has not significantly reduced the incidence of tetanus

d) C.botulinum toxin blocks serotonin and dopamine receptors

e) C.perfringens causes wound infections 10 days post operatively

69) All the following infections are associated with splenomegaly EXCEPT

a) leprosy

b) toxoplasmosis

c) tuberculosis

d) typhoid fever

e) CMV
70) Bacterial endotoxin
   a) is exemplified by streptokinase
   b) is the cause of the severe form of diptheria
   c) is the cause of gas gangrene
   d) induces the production of TNF
   e) is the outer cell wall of gram positive bacteria

71) In aseptic meningitis
   a) the glucose in the CSF is raised
   b) the most commonly identified agent is an enterovirus
   c) there is a more fulminant course than bacterial meningitis
   d) there is no brain swelling
   e) microscopically there is a large infiltration of leukocytes

72) In infectious disease
   a) bacterial endotoxin is inner cell wall mucoprotein
   b) exotoxin molecular mechanisms are mostly unknown
   c) microbes propagating in the gut lumen are accessible to IgA antibodies
   d) macrophages in bronchi play a major role in protecting the lungs from infection
   e) bacterial adhesins which bind bacteria to host cells have a broad range of host cell specificity

73) In malaria
   a) plasmodium vivax causes severe anemia
   b) parasites mature in red blood cells
   c) inoculated sporozites immediately invade the spleen
   d) plasmodium falciparum initially causes hepatomegaly
   e) cerebral malaria is caused by parasites invading grey matter

74) Rickettsial infection
   a)
   b)
   c)
   d) principally affects the endothelium
   e)

75) Which of the following tissues is the most susceptible to radiation injury
   a) GI mucosa
   b) CNS
   c) Lymph and haemopoetic
   d) Bone
   e) Lungs

76) With electrical injury
   a) death is always due to thermal burn
   b) dry skin is a good electrical conductor
   c) ampage of the current is important
   d) all body tissues conduct electricity
77) Which of the following is an anti-oxidant
   a) vitamin D
   b) vitamin B12
   c) vitamin E
   d) vitamin K
   e) vitamin B6

78) Which deficiency causes diarrhea, dermatitis and dementia
   a) pyridoxine
   b) vitamin A
   c) riboflavin
   d) vitamin B1
   e) niacin

79) Decreased levels of B12 are associated with all the following EXCEPT
   a) autoimmune gastritis
   b) crohn's disease
   c) subacute combined degeneration of the cord
   d) 
   e) 

80) Regarding Iron which of the following is INCORRECT
   a) absorption is increased by vitamin C
   b) most is found in myoglobin
   c) most is absorbed in the duodenum
   d) women have smaller iron stores than men
   e) transferrin is usually 33% saturated

81) Which is true of the pituitary gland
   a) anterior-LH-basophils
   b) posterior-vasopressin-basophils
   c) anterior-GH-basophils
   d) 
   e) 

82) Pituitary adenoma may cause
   a) Graves disease
   b) hypothyroidism
   c) acromegaly
   d) 
   e) 

83) Which is true of the pituitary
   a) posterior-prolactin-acidophils
   b) posterior-vasopressin-basophils
   c) anterior-LH-basophils
   d) 

84) The type of emphysema associated with smoking is
   a) panacinar
   b) centriacinar
   c) distal acinar
   d) irregular
   e) none of the above

85) Squamous cell lung carcinoma
   a) has a 5 year survival rate of 60%
   b) is most commonly associated with smokers
   c) is commonest peripherally
   d) is commonest in females
   e)

86) Intrinsic asthma is commonly triggered by
   a)
   b)
   c) viral infections
   d)
   e)

87) TB pathogenicity is due to
   a)
   b)
   c)
   d)
   e)

88) Lobar pneumonia
   a) is more common in the young and the elderly
   b) involves morphological changes of red to grey hepatisation
   c) not usually associated with a productive cough
   d) is associated with immunosuppression
   e) rarely caused by streptococcus

89) Chronic bronchitis is characterised by
   a) smooth muscle hypertrophy
   b) leucocyte infiltration
   c) mucus gland hypertrophy
   d) increased size of goblet cells

90) All the following cause compressive atelectasis EXCEPT
   a) pneumothorax
   b) asthma
   c) CCF
   d) Peritonitis
   e) Pleural effusion
91) Which is not true of bronchogenic cysts

   a) they may become dysplastic
   b) they occasionally cause pneumothorax
   c) they have an epithelial layer
   d) they may contain mucus
   e) they are often associated with bronchioles

92) Chronic bronchitis major morphological change involves

   a) leukocyte infiltration
   b) decreased goblet cell number
   c) smooth muscle hypertrophy
   d) increased mucosal gland depth (REID index)

93) In males the relative risk of cigarette smoking causing a cancer is highest for

   a) lung
   b) larynx
   c) oesophagus
   d) pancreas
   e) lip, oral, and pharynx

94) Cessation in cigarette smoking causes a prompt reduction in the risk of

   a) lung cancer
   b) stroke
   c) cancer of the bladder
   d) MI
   e) COPD

95) Regarding bronchogenic carcinoma

   a) it most often arises around the hilum of the lung
   b) distant spread occurs solely by lymphatic spread
   c) metastasis are most common to the liver
   d) small cell carcinoma is the most common type
   e) surgical resection is often effective for small cell carcinoma

96) In emphysema

   a) a deficiency of alpha 1 antitrypsin is protective
   b) centriacinar destruction leads to obstructive overinflation
   c) the protease-antiprotease mechanism is the most plausible explanation of the disease
   d) smokers have an increased number of macrophages in the bronchi
   e) elastase activity is unaffected by oxygen free radicals

97) In chronic bronchitis

   a) the hallmark is hypersecretion of mucus in the large airways
   b) there is a marked increase in goblet cells in the main bronchi
   c) infection is a primary cause
   d) cigarette smoke stimulates alveolar leukocytes
   e) dysplasia of the epithelium leads to emphysema
98) In bronchial asthma

   a) extrinsic asthma is initiated by diverse non-immune mechanisms
   b) sub-epithelial vagal receptors in respiratory mucosa are insensitive to irritants
   c) IgG plays a role
   d) Bronchial wall smooth muscle is atrophic
   e) Primary mediators include eosinophilic and neutrophilic chemotactic factors

99) In bacterial pneumonia

   a) patchy consolidation of the lung is the dominant feature of bronchopneumonia
   b) a lobar distribution is a function of anatomical variations
   c) Klebsiella pneumonia is a common virulent agent
   d) Alveolar clearance of bacteria is achieved by lymphocytes
   e) The nasopharynx is inconsequential in defending the lung against infection

100) Smoking is associated with all the following diseases EXCEPT

   a) spontaneous abortion
   b) atherosclerosis
   c) bladder carcinoma
   d) chronic liver disease
   e) 

101) Smoking is associated with

   a)
   b)
   c)
   d) particle deposition in alveolar macrophages

102) In pulmonary tuberculosis

   a) the Ghon complex is a parenchymal peri-hilar lesion
   b) bacilli establish themselves in sites of low oxygen tension
   c) liquefactive necrosis precedes granuloma formation
   d) Langhans cells occur in coalescent granulomas
   e) Primary TB causes more damage to lungs than secondary TB

103) The commonest site of primary TB lesion in lung is

   a) apex
   b) base
   c) hilum
   d) lower zone of upper lobe
   e) peripherally

104) Regarding the changes to myocardium after MI

   a) pallor at 24 hours
   b) wavy fibres are found centrally
   c) decreased contractility after 5 minutes
   d) liquefactive necrosis is typical
   e) sarcoplasm is resorbed by leukocytes
105) In compensated cardiac hypertrophy changes include

a) diffuse fibrosis
b) hyperplasia
c) decreased sarcomeres
d) increased capillary density
e) increased capillary/myocyte ratio

106) In atherosclerosis the cells at the centre of the plaque are

a) macrophages
b) foam cells
c) leukocytes
d) smooth muscle cells

107) All of the following are major risk factors for atherosclerosis EXCEPT

a) obesity
b) hyperlipidemia
c) smoking
d) hypertension
e) diabetes

108) Endocarditis in IV drug abusers typically

a) involves the mitral valve
b) is caused by candida albicans
c) does not cause fever
d) has a better prognosis than other types of endocarditis
e) is caused by staph aureus

109) The commonest cause of fungal endocarditis is

a) actinomycosis
b) as
c) as
d) candida
e) blatomycosis

110) With regard to MI

a) gross necrotic changes are present within 3-5 hours
b) irreversible cell injury occurs in less than 10 minutes
c) fibrotic scarring is completed in less than 2 weeks
d) death occurs in 20 % of cases in less than 2 hours
e) is most commonly caused by occlusion of the left circumflex coronary artery

111) Septic shock may cause all of the following EXCEPT

a) myocardial depression
b) vasoconstriction
c) DIC
d) ARF
e) ARDS
112) Regarding pericarditis

a) constrictive pericarditis only rarely follows suppurative pericarditis
b) primary pericarditis is usually bacterial in origin
c) serous pericarditis may be due to ureamia
d) haemorrhagic pericarditis is most commonly due to Klebsiella infection
e) fibrinous pericarditis is due to TB until proven otherwise

113) Shock results in

a)
b)
c)
d) decreased capillary hydrostatic pressure
e)

114) Patient who has a normal blood pressure post MI must have

a) increased cardiac output
b) increased systolic filling pressure
c) increased right atrial pressure
d)

115) Acute endocarditis

a) has a less than 20 % mortality
b) is caused by virulent micro-organisms
c) 30 % is caused bacteria
d)
e)

116) Congestive cardiac failure may be caused by

a) vitamin A deficiency
b) niacin deficiency
c) vitamin D deficiency
d) thiamine deficiency
e) vitamin C deficiency

117) Following myocardial infarction

a) ATP is down to 50% at 10 minutes
b) Irreversible cell injury occurs within 5 minutes
c) ATP depletion begins at 2 minutes
d) Microvascular injury occurs within 30 minutes
e) Wavy fibres are present within 20 minutes

118) Thrombocytopenia

a) occurs commonly in HIV
b) causes spontaneous bleeding at levels of less than 90,000/mm

c) occurs with hyposplenism
d) is related to platelet survival in paroxysmal nocturnal haemoglobinuria
e) is not associated with megaloblastic anaemia
A young man presents with central chest pain presumed to be associated with vasoconstriction. The most likely cause of the pain is local

a) hypoxia  
 b) decreased ATP  
 c) increased CO2  
 d) catecholamines acting on alpha 1 receptors  
 e) acetylcholine stimulation

An adult male with an ejection fraction of 80 % could be due to

a) myocardial ischaemia  
 b) arrhythmia  
 c) thiamine deficiency  
 d)

Which risk factors have the greatest association with atherosclerosis

a) hypertension, diabetes, smoking, hyperlipidemia  
 b) hypertension, male, family history  
 c) hypertension, obesity, sedentary lifestyle  
 d) hypertension, female, OCP  
 e) age, family history, sex

Central pathophysiological feature of shock

a) hypotension  
 b) decreased blood volume  
 c) cellular hypoxia at a tissue level  
 d) infection  
 e) cardiac failure

Malignant hypertension

a) 75 % recover with no loss of renal function  
 b) is associated with abnormal renin levels  
 c)  
 d)  
 e) affects 1 to 5 % of sufferers

The cause of fluid retention peripherally with congestive cardiac failure is

a) increased renin  
 b) increased GFR  
 c) increased angiotensin 2  
 d) increased aldosterone

Rheumatic carditis is associated with

a) Curschmann spirals  
 b) Ito cells  
 c) Aschoff bodies  
 d) Nutmeg cells  
 e) Reed-sternberg cells
126) Bradykinin
   a) causes smooth muscle dilatation
   b) kallikrein causes prohormone degradation to produce bradykinin
   c)
   d)

127) Diabetes is associated with
   a) carbuncles
   b) mucormycosis
   c)
   d)
   e) all of the above

128) Pathogenesis of type 1 diabetes is associated with
   a) decreased insulin sensitivity
   b) abnormal glucokinase activity
   c) no antibodies found at diagnosis
   d) auto-immune insulitis
   e) twin concordance greater than 70 %

129) Which of the following is characteristic of type 11 diabetes
   a) early insulinitis
   b) not affected by pregnancy
   c) decreased peripheral receptor sensitivity
   d) less than 50 % concordance in twins
   e) 90 % of patients displaying antibodies to insulin receptors within 1 year of diagnosis

130) Type 11 diabetes is characterised by
   a) onset in early adulthood
   b) 50 % concordance in twins
   c) severe beta cell depletion
   d) islet cell antibodies
   e) normal or increased blood insulin levels

131) In type 1 diabetes
   a) associated organ-specific auto-immune disorders are common
   b) a genetic susceptibility is not supported by evidence
   c) Finnish children have a 70 fold increase compared with Korean children
   d) Influenza and varicella viruses are suspected as initiators of the disease
   e) Children who ingest cows milk early in life may have a lower incidence

132) Regarding pancreatitis
   a) the second most common cause is infectious agents
   b) trypsin is implicated as an activator of the kinin system
   c) the chronic form is usually due to gallstones
   d) duct obstruction is not the mechanism in alcoholic pancreatitis
   e) elastase is the only pancreatic enzyme that acts to limit pancreatitis
133) In acute pancreatitis
   a) fat necrosis occurs in other intra-abdominal fatty deposits
   b) trauma is the precipitating cause in 30% of cases
   c) alcohol is directly toxic to the Islets of Langerhans
   d) Kallikrein converts trypsin to activate the complement system
   e) Erythromycin has been implicated in severe cases

134) With regards to jaundice
   a) Conjugated bilirubin causes kernicterus in adults
   b) Unconjugated bilirubin does not colour sclera
   c) Unconjugated bilirubin is tightly bound to albumin
   d) Unconjugated bilirubin produces bilirubin in urine
   e) Conjugated bilirubin is tightly bound to albumin

135) In cirrhosis
   a) fibrosis is confined to the delicate bands around central veins
   b) nodularity is uncommon
   c) vascular architecture is preserved
   d) the Ito cell is a major source of excess collagen
   e) the left lobe of the liver is most affected

136) Cirrhosis is associated with
   a)
   b) reorganised liver vasculature with scarring
   c)
   d)
   e)

137) Oesophageal varices
   a) occur in one third of all cirrhosis patients
   b) account for more than 50% of episodes of haematemesis
   c) are most often associated with hepatitis C cirrhosis
   d) have a 40% mortality during the first episode of rupture
   e) lie primarily in the middle portion of the oesophagus

138) Concerning acute tubular necrosis
   a) cephalosporins are not a causative agent
   b) nephrotoxic causes are associated with a poor prognosis
   c) casts are found in the loop of Henle
   d) rhabdomyolysis is not a cause
   e) ischaemic tubular necrosis is uncommon after haemorrhagic shock

139) Regarding acute tubular necrosis
   a) it is associated with hyperkalemia not hypokalemia in recovery
   b) non-oliguric has a better recovery
   c) it is associated with ischaemic cortical cells
   d) 80% are associated with anuria
140) Ischaemic tubular necrosis is associated with
   a) maintenance stage with polyuria
   b) predominantly proximal necrosis
   c) intact basement membranes
   d) tubular cast obstruction
   e) distal necrosis only

141) Hypertensive renal disease
   a) 60 % of renovascular hypertension is due to fibromuscular hyperplasia
   b) malignant hypertension only arises if previous hypertension
   c) onion skinning correlates with degree of renal failure
   d) e)

142) The morphology of renal failure includes
   a) 
   b) 
   c) 
   d) 
   e) 

143) Regarding the hepatorenal syndrome
   a) it is irreversible
   b) one loses the ability to concentrate urine
   c) urine has a high sodium concentration
   d) the urine is hyperosmolar
   e) the favoured theory of it’s generation involves increased renal blood flow

144) Urolithiasis
   a) presence of hypercalcemia implies renal insufficiency
   b) a patient with leukemia is likely to make cystine calculi
   c) calcium is the major component of 35% of calculi
   d) struvite stones are made up of magnesium-ammonium-phosphate
   e) the commonest cause of calcium oxalate stones is hypercalciuria

145) In pyelonephritis
   a) 85 % of infections are caused by G-ve bacteria
   b) uretral obstruction makes haematogenous infection less likely
   c) uretral obstruction allows bacteria to ascend the ureter into the pelvis
   d) infection is less likely during pregnancy
   e) papillary necrosis and perinephric abscess are common seqelae

146) Cushing syndrome is associated with
   a) osteoporosis
   b) general obesity
   c) hypotension
   d)
147) Macrocytic anaemia is associated with all the following except

a) Hyperthyroidism
b) Neoplasm
c) Folate and B12 deficiency
d) Pregnancy
e) EBV

148) Myositis ossificans

a) Morphologically resembles osteosarcoma
b) Resembles the repair process following a muscle tear
c) 
d) 
e)

149) Internal carcinoma is associated with which of the following skin disorders

a) 
b) 
c) 
d) acanthosis nigricans
e) 

150) Hypothyroidism is associated with all of the following EXCEPT

a) cretinism
b) 
c) 
d) decreased hair growth
e) cold intolerance

151) Which of the following reactions is cell mediated

a) SLE
b) Arthus reaction
c) Anaphylaxis
d) Graft rejection
e) Goodpastures

152) Myelofibrosis

a) causes decreased megakaryocytes
b) stimulates erythropoetin production
c) causes leukoerythroblastic anaemia
d) 

153) The commonest cause of thyroid carcinoma is

a) medullary
b) follicular
c) papillary
d) anaplastic
e) squamous
154) Stress fractures

a) do not incite a paracortical reaction
b)
c)d)
e) result from repetitive stresses or abnormal axial loading
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>E (C)</td>
<td>41.</td>
<td>B</td>
<td>81. A</td>
</tr>
<tr>
<td>2.</td>
<td>A</td>
<td>42.</td>
<td>E</td>
<td>82. B,C</td>
</tr>
<tr>
<td>3.</td>
<td>E</td>
<td>43.</td>
<td>C</td>
<td>83. C</td>
</tr>
<tr>
<td>4.</td>
<td>E</td>
<td>44.</td>
<td>B</td>
<td>84. B</td>
</tr>
<tr>
<td>5.</td>
<td>D</td>
<td>45.</td>
<td>A</td>
<td>85. B</td>
</tr>
<tr>
<td>6.</td>
<td>A</td>
<td>46.</td>
<td>- ?D</td>
<td>86. C</td>
</tr>
<tr>
<td>7.</td>
<td>E</td>
<td>47.</td>
<td>A</td>
<td>87. –</td>
</tr>
<tr>
<td>9.</td>
<td>C</td>
<td>49.</td>
<td>A (D)</td>
<td>89. C</td>
</tr>
<tr>
<td>10.</td>
<td>E</td>
<td>50. –</td>
<td>90. B</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>B</td>
<td>51.</td>
<td>D</td>
<td>91. A</td>
</tr>
<tr>
<td>12.</td>
<td>E</td>
<td>52.</td>
<td>D</td>
<td>92. D</td>
</tr>
<tr>
<td>14.</td>
<td>D (E)</td>
<td>54.</td>
<td>D</td>
<td>94. A (D)</td>
</tr>
<tr>
<td>15.</td>
<td>D</td>
<td>55.</td>
<td>A (D)</td>
<td>95. A</td>
</tr>
<tr>
<td>17.</td>
<td>C</td>
<td>57.</td>
<td>D</td>
<td>97. A</td>
</tr>
<tr>
<td>20.</td>
<td>D</td>
<td>60.</td>
<td>C</td>
<td>100. D</td>
</tr>
<tr>
<td>22.</td>
<td>–</td>
<td>62.</td>
<td>C</td>
<td>102. D</td>
</tr>
<tr>
<td>23.</td>
<td>–</td>
<td>63.</td>
<td>C</td>
<td>103. E</td>
</tr>
<tr>
<td>24.</td>
<td>C</td>
<td>64.</td>
<td>E</td>
<td>104. A</td>
</tr>
<tr>
<td>29.</td>
<td>– (B)</td>
<td>69.</td>
<td>A</td>
<td>109. D</td>
</tr>
<tr>
<td>30.</td>
<td>A</td>
<td>70.</td>
<td>D</td>
<td>110. D</td>
</tr>
<tr>
<td>31.</td>
<td>D</td>
<td>71.</td>
<td>B</td>
<td>111. A (B)</td>
</tr>
<tr>
<td>32.</td>
<td>D</td>
<td>72.</td>
<td>D (E)</td>
<td>112. C</td>
</tr>
<tr>
<td>33.</td>
<td>C</td>
<td>73.</td>
<td>B</td>
<td>113. D</td>
</tr>
<tr>
<td>34.</td>
<td>C</td>
<td>74.</td>
<td>D</td>
<td>114. B</td>
</tr>
<tr>
<td>35.</td>
<td>C</td>
<td>75.</td>
<td>C</td>
<td>115. B</td>
</tr>
<tr>
<td>36.</td>
<td>A</td>
<td>76.</td>
<td>C,D</td>
<td>116. D</td>
</tr>
<tr>
<td>37.</td>
<td>B</td>
<td>77.</td>
<td>C</td>
<td>117. D (A)</td>
</tr>
<tr>
<td>38.</td>
<td>B (A)</td>
<td>78.</td>
<td>E</td>
<td>118. A</td>
</tr>
<tr>
<td>39.</td>
<td>D</td>
<td>79.</td>
<td>A</td>
<td>119. A</td>
</tr>
<tr>
<td>40.</td>
<td>E</td>
<td>80.</td>
<td>B</td>
<td>120. C</td>
</tr>
</tbody>
</table>

132. B
133. A
134. C
135. D
136. B
137. D
138. C
139. B
140. D
141. –
142. –
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>143.</td>
<td>D</td>
</tr>
<tr>
<td>144.</td>
<td>D</td>
</tr>
<tr>
<td>145.</td>
<td>A</td>
</tr>
<tr>
<td>146.</td>
<td>A</td>
</tr>
<tr>
<td>147.</td>
<td>E</td>
</tr>
<tr>
<td>148.</td>
<td>A</td>
</tr>
<tr>
<td>149.</td>
<td>D</td>
</tr>
<tr>
<td>150.</td>
<td>D</td>
</tr>
<tr>
<td>151.</td>
<td>D</td>
</tr>
<tr>
<td>152.</td>
<td>C</td>
</tr>
<tr>
<td>153.</td>
<td>C</td>
</tr>
<tr>
<td>154.</td>
<td>E</td>
</tr>
</tbody>
</table>