

**POOLED MCQS FOR GRE/GAT/SUBJECT  
DISCIPLINE: (PATHOLOGY)**

Subject (1-650)	MCQ's	Answer Key
1)	Which of the following represents an increase in size of a cell in response to increased demand or hormonal stimulation? A. Hypertrophy B. Hyperplasia C. Metaplasia D. Anaplasia	A
2)	Which of the following sequelae of ischemia would be considered an irreversible cellular injury? A. cellular acidosis B. fatty metamorphosis C. rupture of lysosomes D. None of these	C
3)	Which of the following would typically result in liquifactive necrosis? A. cerebral infarction from middle cerebral artery thrombosis B. liberation of pancreatic enzymes into peritoneum due to acute pancreatitis C. myocardial infarction from coronary thrombosis D. None of these	A
4)	Frozen section evaluation of a lymph node biopsy from the neck of an old dog shows granulomatous inflammation with large areas of necrosis. Which of the following would be most important to do? A. cell surface markers for lymphocyte phenotyping B. chromosomal analysis by karyotyping C. cultures for acid fast bacilli and fungi D. None of these	C
5)	A buffalo with immunodeficiency state presents with weight loss and cough. Chest x-ray shows pulmonary infiltrates. A tuberculin skin test shows no reaction. Which of the following interpretations is most correct? A. he does not now have and never has had tuberculosis B. he does not now have tuberculosis, but may have in the past C. he may or may not have tuberculosis D. None of these	C
6)	Each of the following is an example of apoptosis except: A. deletion of autoreactive T cells from thymus B. destruction of hepatocytes in chronic hepatitis C. stroke caused by thrombosis of middle cerebral artery D. None of these	C
7)	Orchiectomy (removal of testes) would be expected to cause which of the following in prostatic epithelium in a old dog: A. atrophy B. fatty change C. Cell swelling D. None of these	A
8)	One year after an intestinal operation the palpation of the incision site shows it to be firmer than surrounding. This is predominantly due to: A. increased density of collagen fibers B. increased density of elastin fibers C. increased number of regenerating cells D. None of these	A
9)	Amyloid consists of: A. extracellular deposits of altered protein in a Beta-pleated sheet B. extracellular accumulations of damaged collagen fibrils C. denatured proteins D. None of these	A
10)	Each of the following increases the risk of thrombosis EXCEPT: A. endothelial injury B. factor XIII deficiency C. venous stasis D. None of these	B
11)	Teratomas are best described as: A. cancers present at birth B. neoplasms composed of a mix of tissues from 3 germ layers C. neoplasms composed of undifferentiated anaplastic cells D. None of these	B
12)	Each of the following may contribute to formation of edema EXCEPT: A. decreased plasma oncotic pressure B. increased intravascular hydrostatic pressure C. increased serum albumin D. None of these	C
13)	Which of the following would least likely directly lead to anoxic cell injury: A. carbon monoxide poisoning B. cyanide poisoning C. hypoglycemia D. None of these	C
14)	Hyperacute graft rejection most likely involves: A. formation of granulomas in the graft B. infiltration of the graft by plasma cells	C

	C. preformed antibodies deposited on graft endothelium	D. None of these	
15)	Unconjugated bilirubin is derived principally from:		C
	A. glucuronyl transferase activity	B. toxic liver injury	
	C. breakdown of senescent red blood cells	D. None of these	
16)	Centrilobular necrosis is associated with		C
	A. Halothane	B. Thorazine	
	C. Carbon tetrachloride	D. None of these	
17)	In comparison to periportal hepatocytes, centrilobular zones are characterized by:		C
	A. less smooth endoplasmic reticulum	B. larger nuclei	
	C. poorer oxygenation	D. None of these	
18)	Which one of the following tests would be most effective in ruling out the presence of active hepatocellular disease?		A
	A. Serum alanine aminotransferase (ALT)	B. Serum total bilirubin	
	C. cell surface markers	D. None of these	
19)	Serum concentration is increased when destruction of erythrocytes is increased		A
	A. Unconjugated bilirubin	B. Conjugated bilirubin	
	C. Both	D. None of these	
20)	Markedly increased concentration responsible for kernicterus in hemolytic disease of the newborn.		A
	A. Unconjugated bilirubin	B. Conjugated bilirubin	
	C. Both	D. None of these	
21)	Predominantly unconjugated hyperbilirubinemia is typical of:		A
	A. intravascular hemolysis	B. carcinoma of common bile ducts	
	C. carcinoma of gall bladder	D. None of these	
22)	Which one of the following are cardinal features of granulation tissue?		C
	A. Abundant collagen	B. Proliferating macrophages and lymphocytes	
	C. Proliferating capillaries and fibroblasts	D. None of these	
23)	The main feature of a healing wound is:		C
	A. Lymphocyte accumulation	B. Fibrin deposition	
	C. Granulation tissue	D. None of these	
24)	Polymorphonuclear leukocytes (neutrophils) are by definition part of		C
	A. granuloma	B. Granulation tissue	
	C. None of these	D. All of them	
25)	A keloid is composed predominantly of:		B
	A. Granulation tissue	B. Dense collagen	
	C. Loose connective tissue	D. None of these	
26)	Early granulation tissue is BEST characterized by the presence of:		C
	A. Plasma cells and macrophages	B. T lymphocytes and eosinophils	
	C. Capillary buds and fibroblasts	D. None of these	
27)	In addition to pulmonary stenosis and ventricular septal defect, Tetralogy of Fallot includes:		A
	A. Dextroposition of aorta and right ventricular hypertrophy	B. Dextroposition of aorta and left ventricular hypertrophy	
	C. Right ventricular hypertrophy and left atrial dilatation	D. None of these	
28)	Cardiac hypertrophy to occur, one of the following is required:		A
	A. Healthy myocardium and adequate nutrition (blood supply)	B. Healthy myocardium only	
	C. Abundant of blood supply only	D. None of these	
29)	The cardiac reserve is:		A
	A. ability of the heart to respond to circulatory demands over and above those of the animal/ human at rest	B. ability of the heart to respond to circulatory demands to fulfil the needs of animal / human at rest	
	C. Is the blood that is present in the peripheral circulatory	D. None of these	
30)	Which of the following is most likely to result in cyanosis?		C
	A. Anemia	B. Polycythemia	
	C. Left to right cardiac shunt	D. None of these	
31)	Each of the following can produce edema (increased fluid in the interstitial space) EXCEPT		C
	A. Cardiac failure	B. Hepatic failure	
	C. Arterial occlusion	D. None of these	

32)	Which one of the following organs is least likely to have hemorrhagic (red) infarcts:		A
	A. Heart	B. Brain	
	C. Intestine	D. None of these	
33)	Which of the following plays an important role in edema formation?		C
	A. Arteriolar dilatation	B. Decreased venous flow	
	C. All of the above	D. None of these	
34)	The most common cause of arterial stenosis is:		C
	A. Mural thrombosis	B. Embolization	
	C. Atherosclerosis	D. None of these	
35)	Each of the following result in ischemia EXCEPT		C
	A. Arterial occlusion	B. Venous occlusion	
	C. Cyanosis	D. None of these	
36)	Components of the intravascular space include each of the following EXCEPT		C
	A. Arteries	B. Veins	
	C. Peritoneal cavity	D. None of these	
37)	A transudate differs from an exudate primarily in its		C
	A. Interstitial volume	B. Presence of vasoactive mediators	
	C. Protein content	D. None of these	
38)	Each of the following produce edema EXCEPT:		C
	A. Decreased plasma protein	B. Depletion of sodium	
	C. Increased capillary hydrostatic pressure	D. None of these	
39)	Anasarca refers to:		C
	A. A tumor of lymphatics	B. Generalized vasoconstriction	
	C. Generalized edema	D. None of these	
40)	Clinical manifestations of right heart failure include each of the following EXCEPT:		C
	A. dependent edema	B. Ascites	
	C. Pulmonary edema	D. None of these	
41)	Edema associated with decreased plasma oncotic pressure may be caused by		C
	A. Sodium depletion	B. Histamine release	
	C. Liver disease	D. None of these	
42)	Edema is BEST described as:		B
	A. Purulent reaction	B. An increase in interstitial fluid	
	C. Extravascular hemorrhage	D. None of these	
43)	Left-sided heart failure is characterized by:		C
	A. Hepatomegaly	B. Dyspnea (shortness of breath)	
	C. Varices	D. None of these	
44)	Heart failure cells, i.e., macrophages loaded with haemosiderin, are most likely found in		C
	A. Ascites fluid in congestive heart failure	B. Pulmonary alveoli in mitral stenosis	
	C. Left ventricular myocardium following infarction and reperfusion	D. None of these	
45)	Cyanosis caused by mitral insufficiency is typically associated with		C
	A. Pulmonary vein thrombi	B. Pulmonary artery emboli	
	C. Pulmonary edema	D. None of these	
46)	The edema of nephrotic syndrome is best classified as		C
	A. Hypovolemic	B. Obstructive	
	C. Oncotic	D. None of these	
47)	Fat emboli are best demonstrated in the lungs by		C
	A. PCR	B. Chromatography	
	C. Frozen section examination of tissues stained with Sudan red	D. None of these	
48)	Erythroblastosis fetalis and neonatal hemolytic anemia are caused by a maternal immune response to which fetal blood group antigen:		A
	A. Rh	B. P	
	C. MN	D. None of these	
49)	Neoplasms are best characterized as:		C

	A. Malignant tumors	B. A proliferation of cells that is characterized by its ability to invade contiguous structures	
	C. A cellular proliferation in which growth is for the most part autonomous	D. None of these	
50)	Which one of the following is a malignant neoplasm?		A
	A. Seminoma	B. Trichoepithelioma	
	C. Chondroma	D. None of these	
51)	Most common malignant tumor in bitches		C
	A. Carcinoma of the stomach	B. Multiple myeloma	
	C. venereal tumour	D. None of these	
52)	Which of the following findings is most useful for the staging of a tumor?		C
	A. Presence of necrosis	B. Presence of abnormal mitoses	
	C. Presence of metastases	D. None of these	
53)	Benign tumors arising from the salivary gland epithelium are called		B
	A. Transitional cell epitheliomas	B. Adenomas	
	C. Fibromas	D. None of these	
54)	Which of the following finding is most important for the grading of tumors?		C
	A. Presence of tumor cells in the vascular spaces	B. Level of invasion	
	C. Microscopic pleomorphism of nuclei and the number of mitoses	D. None of these	
55)	Chondroma of the larynx is a:		A
	A. Tumor of cartilage	B. Precursor of leiomyosarcoma	
	C. Precursor of carcinoma	D. None of these	
56)	A benign tumor composed of smooth muscle cells is called:		A
	A. Leiomyoma	B. Rhabdomyoma	
	C. Angioma	D. None of these	
57)	Many retinoblastomas are marked by the following chromosomal abnormality:		C
	A. Monosomy	B. Translocation	
	C. Deletion	D. None of these	
58)	Asbestos exposure predisposes to the development of tumors of the:		B
	A. Uterus	B. Pleura	
	C. Liver	D. None of these	
59)	Eosinophils typically increase in number in response to which of the following?		C
	A. Gram-positive cocci	B. Mycobacteria	
	C. Parasites	D. None of these	
60)	Epithelioid cells within granulomas are derived from which of the following?		B
	A. Plasma cells	B. Macrophages	
	C. Lymphocytes	D. None of these	
61)	All of the following are true regarding platelet-activating factor (PAF) EXCEPT:		C
	A. Induces platelet aggregation	B. Stimulates platelet secretion	
	C. It is a preformed molecule present in various cells	D. None of these	
62)	Biologically active metabolites of arachidonic acid include all of the following EXCEPT:		C
	A. Leukotrienes (SRS)	B. Thyromboxane A2	
	C. Complement	D. None of these	
63)	Aspirin may reduce inflammatory responses by inhibiting which of the following enzymes?		A
	A. Cyclooxygenase	B. Lipoxxygenase	
	C. Phospholipase C	D. None of these	
64)	Bacterial opsonization is mediated by which one of the following?		C
	A. Hageman factor	B. Prostaglandin I2	
	C. Immunoglobulin G	D. None of these	
65)	Predominant cell types in typical chronic inflammatory reactions include all of the following EXCEPT:		A
	A. Polymorphonuclear leukocytes	B. Macrophages	
	C. T helper lymphocytes	D. None of these	
66)	Neutrophilia is most frequently seen in association with which of the following?		C
	A. Allergic dermatitis	B. Fungal esophagitis	
	C. Bacterial pneumonia	D. None of these	

67)	Each of the following regarding plasma cells is true EXCEPT:		C
	A. The nuclei display prominent peripheral chromatin	B. They are derived from B lymphocytes	
	C. They contain prominent absorptive vacuoles	D. None of these	
68)	Tissue macrophages are derived from which one of the following?		
	A. Resident activated fibroblasts	B. Activated B lymphocytes	
	C. Circulating monocytes	D. Platelets	
69)	Chemotactic factors are produced by:		C
	A. Lymphocytes	B. Monocytes	
	C. All of the above	D. None of these	
70)	Secretory granules are prominent in all of the following EXCEPT:		C
	A. Eosinophils	B. Pancreatic islet cells	
	C. Lymphocytes	D. None of these	
71)	Upon activation, macrophages release all of the following from granules EXCEPT		C
	A. Collagenase	B. Elastase	
	C. Cathepsins	D. None of these	
72)	Reactive oxygen metabolites are produced by all the following EXCEPT:		B
	A. Macrophages	B. Lymphocytes	
	C. Monocytes	D. None of these	
73)	Which of the following regarding thromboxane A2 is true?		C
	A. It degrades basement membranes	B. It is produced via the lipoxygenase pathway	
	C. It stimulates platelet aggregation	D. None of these	
74)	Which of the following regarding plasma cells is true?		B
	A. They secrete arylsulfatase B	B. They are derived from B-lymphocytes	
	C. They display scant endoplasmic reticulum	D. None of these	
75)	Massive liver necrosis developed due to mushroom poisoning. Which of the following is a definitive sign of liver cell necrosis?		C
	A. Loss of glycogen from the cytoplasm	B. Hydropic change	
	C. Karyorrhexis	D. None of these	
76)	Yellow amorphous material in a lymph node affected by tuberculosis represents		B
	A. Liquefactive necrosis	B. Caseous necrosis	
	C. Coagulative necrosis	D. None of these	
77)	Which of the following is diagnostic of pyknosis?		B
	A. Enlargement of the nucleoli	B. Condensed nuclear chromatin	
	C. Dilated rough endoplasmic reticulum	D. None of these	
78)	The intracellular brown pigment found in the liver of patients with cirrhosis, diabetes, skin hyperpigmentation and iron overload is called		B
	A. Lipofuscin	B. Hemosiderin	
	C. Melanin	D. None of these	
79)	Which of the following is an example of metastatic calcification:		B
	A. Calcification of breast carcinoma visible by mammography	B. Pulmonary calcification in hyperparathyroidism	
	C. Calcific stenosis of mitral valve	D. None of these	
80)	Lipofuscin typically accumulates in the liver cells that show signs of:		A
	A. Atrophy	B. Dysplasia	
	C. Metaplasia	D. None of these	
81)	Acetaminophen in high doses is a hepatotoxin that injures cells by		C
	A. Damaging DNA and thereby inhibiting cellular proliferation	B. Mitochondrial de-energization	
	C. Lipid peroxidation	D. None of these	
82)	Aortic stenosis was diagnosed in a 60 year old man. This disease is most likely associated with:		C
	A. Dystrophic calcification	B. Atrophy of left ventricle	
	C. Squamous metaplasia of the valve	D. None of these	
83)	Factors that increase the risk of ischemic heart disease include each of the following EXCEPT		A
	A. elevated serum HDL	B. hypertension	
	C. diabetes mellitus	D. None of these	
84)	The foam cells in an atherosclerotic plaque contain large amounts		A

	A. cholesterol esters	B. triglycerides	
	C. proteoglycans	D. None of these	
85)	Complications of pulmonary tuberculosis include each of the following EXCEPT		B
	A. hemoptysis	B. malignant tumors	
	C. cavitation	D. None of these	
86)	Bats may act as a reservoir for human		A
	A. rabies	B. tuberculosis	
	C. malaria	D. None of these	
87)	Rotavirus infections can cause which clinical entity?		C
	A. stool leukocytes	B. exanthema	
	C. watery, non-bloody diarrhea	D. None of these	
88)	Hydropic swelling of the cell is characterized by each of the following EXCEPT		C
	A. efflux of potassium from the cell	B. influx of sodium into the cell	
	C. increased number of cytoplasmic organelles	D. None of these	
89)	Squamous metaplasia typically occurs in		A
	A. the bronchi of chronic smokers	B. skin exposed to sunlight	
	C. a callus	D. None of these	
90)	Hypertrophic heart muscle cells contain increased amounts of		B
	A. phagosomes	B. Total RNA contents	
	C. rough endoplasmic reticulum	D. None of these	
91)	Each of the following accumulate reversibly in the liver EXCEPT		B
	A. vitamin B12	B. inhaled carbon particles	
	C. glycogen	D. None of these	
92)	Each of the following are signs of necrosis EXCEPT		B
	A. cell membrane rupture	B. lipofuscin	
	C. pyknosis	D. None of these	
93)	Enzymatic necrosis affecting the pancreas and the peripancreatic adipose tissue is called		C
	A. caseous necrosis	B. fibrinoid necrosis	
	C. fat necrosis	D. None of these	
94)	Which cation is found in extremely high concentrations in cells that have undergone coagulative necrosis?		C
	A. copper	B. cobalt	
	C. calcium	D. None of these	
95)	Which of the following cell types is LEAST sensitive to anoxia?		B
	A. hepatocytes	B. fibroblasts	
	C. small intestinal absorptive cells	D. None of these	
96)	Reperfusion injury is characterized by the formation of potentially toxic substances which are best classified as		B
	A. hydrogen	B. activated oxygen species	
	C. hydrochloric acid	D. None of these	
97)	Which of the following enzymes is capable of neutralizing H <sub>2</sub> O <sub>2</sub> by reducing it to water?		B
	A. acid phosphatase	B. glutathione peroxidase	
	C. myeloperoxidase	D. None of these	
98)	Carbon tetrachloride, acetaminophen and bromobenzene, three well-known hepatotoxins, form reactive toxic metabolites within the liver cells after they have been metabolized in the		A
	A. smooth endoplasmic reticulum	B. Golgi apparatus	
	C. mitochondria	D. None of these	
99)	Which of the following is typical of apoptosis?		B
	A. new DNA synthesis, as in the mitotic cycle	B. activation of endogenous endonucleases	
	C. reduced cytosolic free calcium	D. None of these	
100)	Which of the following represents an example of metastatic calcification?		A
	A. lung calcification in end-stage renal failure	B. breast carcinoma visible by mammography	
	C. calcific mitral stenosis	D. None of these	
101)	Each of the following are typical structural changes that accompany aging EXCEPT		B
	A. increased amount of lipofuscin in tissues	B. increased amount of water in tissues	
	C. decreased total body fat	D. None of these	

102)	Lipid is secreted into the blood from the liver in the form of		B
	A. chylomicrons	B. lipoproteins	
	C. glycerol	D. None of these	
103)	Which of the following cytoplasmic structures contains fragmented mitochondria?		C
	A. heterophagosomes	B. primary lysosomes	
	C. autophagosomes	D. None of these	
104)	Squamous metaplasia of cigarette smokers is typically seen in the epithelium lining the		C
	A. oral cavity	B. epiglottis	
	C. bronchi	D. None of these	
105)	Metastatic calcification is seen in		C
	A. heart failure	B. hypothyroidism	
	C. hyperparathyroidism	D. None of these	
106)	Increased amounts of calcium in the cytosol of an injured cell reflect a release of calcium from stores in the		C
	A. nucleus	B. rough endoplasmic reticulum	
	C. mitochondria	D. None of these	
107)	Endothelial cells that react most prominently to mediators of inflammation are found in		A
	A. postcapillary venules	B. veins	
	C. muscular arteries	D. None of these	
108)	Which one of the following statements about exudates or transudates is true?		B
	A. transudates result from vessel wall rupture	B. exudates contain more protein than transudates	
	C. fewer PMNs in exudates than transudates	D. None of these	
109)	Slow reacting substances of anaphylaxis are derived from		A
	A. arachidonic acid, via lipoxygenase	B. arachidonic acid, via cyclooxygenase	
	C. anaphylatoxins via the complement system	D. None of these	
110)	Which one of the following preformed substances released from mast cells and platelets increases the permeability of blood vessels?		A
	A. histamine	B. phospholipase	
	C. leukotriene	D. None of these	
111)	Platelet activating factor (PAF) has each of the following actions EXCEPT		B
	A. is a potent mediator of inflammation	B. suppresses arachidonic acid metabolism	
	C. increases vascular permeability	D. None of these	
112)	The activation of Hageman factor may cause each of the following by triggering off plasma enzyme cascades, EXCEPT		C
	A. clotting	B. complement activation	
	C. fibrinolysis	D. None of these	
113)	The membrane attack complex that is formed by activating the complement cascade is		A
	A. capable of lysing cells	B. lipid insoluble	
	C. an activated end-product	D. None of these	
114)	Complement-derived fragment C5a may give rise to each of the following effects, either directly or indirectly, EXCEPT		B
	A. cause the degranulation of mast cells	B. induce fibrinolysis	
	C. mediate vascular permeability	D. None of these	
115)	The coating of particulate material, like a bacterium, with either antibody or fragments of complement is called		C
	A. phagocytosis	B. pavingmenting	
	C. opsonization	D. None of these	
116)	Which one of the following chemotactic factors is specifically associated with bacteria?		C
	A. platelet activating factor	B. eosinophil chemotactic factor	
	C. formol peptides	D. None of these	
117)	Each of the following are accurate statements about thromboxane A <sub>2</sub> , EXCEPT		C
	A. produced by activated platelets	B. causes platelet aggregation	
	C. a product of the lipoxygenase	D. None of these	
118)	Each of the following statements about neutrophils are Correct EXCEPT		C
	A. highly phagocytic when activated	B. contain cytoplasmic granules	
	C. important sources of vasoactive amines	D. None of these	
119)	Myeloperoxidase is the enzyme that		C
	A. with superoxide dismutase destroys superoxide	B. is unique to neutrophils	
	C. forms hypohalous acid from H <sub>2</sub> O <sub>2</sub> and a halide ion	D. None of these	
120)	Each of the following is involved in the mobilization of leukocytes from the blood for ingestion of a bacterium EXCEPT		A

	A. opsonization	B. marginization	
	C. changes in adherence molecules	D. None of these	
121)	The first vacuole to be formed when a particle is engulfed by a leukocyte is called a		B
	A. primary granule	B. phagosome	
	C. phagolysosome	D. None of these	
122)	Each of the following is a characteristic of acute inflammation EXCEPT		B
	A. hyperemia	B. high mitotic rate of infiltrating leukocytes	
	C. endothelial cell contraction	D. None of these	
123)	Multinucleated foreign body giant cells are		C
	A. Formed in the bone marrow	B. Formed in acute inflammation	
	C. Derived from fusion of macrophages	D. None of these	
124)	In which one of the following pairs are both mediators powerful endogenous pyrogens?		B
	A. C3a and C5a	B. TNF and IL-1	
	C. leukotriene B4 and PAF	D. None of these	
125)	The cell type that is present in all granulomas is the		C
	A. neutrophil	B. basophil	
	C. epithelioid histiocyte	D. None of these	
126)	In an acute bacterial infection you would expect the neutrophil count in the blood to be elevated. This is primarily because the neutrophils		C
	A. adhesion molecules are not expressed	B. are replicating in the blood	
	C. are en route from the bone marrow	D. None of these	
127)	Which one of the following is most likely to result in the formation of a granuloma?		A
	A. Mycobacterium tuberculosis complex	B. staphylococci, especially S. aureus	
	C. a virus that can provoke a chronic infection	D. None of these	
128)	A granuloma is		C
	A. a small nodule of granulation tissue	B. a tumor composed of granulocytes	
	C. composed primarily of epithelioid histiocytes and lymphocytes	D. None of these	
129)	Which of the following is LEAST likely to regenerate?		B
	A. cardiac muscle	B. peripheral nerve axon	
	C. hepatocytes	D. None of these	
130)	The newly formed, highly vascularized, connective tissue with a component of acute inflammatory exudation is known as		B
	A. purulent exudate	B. granulation tissue	
	C. angioma	D. None of these	
131)	Healing by first intention is characterized by each of the following EXCEPT		C
	A. well-apposed skin edges	B. epithelial proliferation	
	C. abundant granulation tissue	D. None of these	
132)	Which of the following cells is a lymphocyte?		C
	A. microglial cell	B. Kupffer cell	
	C. natural killer cell	D. None of these	
133)	A biopsy is performed on a patient with a mass lesion that proves to be a neoplasm. Of the following histopathologic findings, the one that best indicates that a neoplasm is malignant is:		B
	A. Pleomorphism	B. Invasion	
	C. Atypia	D. None of these	
134)	The best example of viral oncogenesis in humans is seen with which of the following neoplasms:		C
	A. Hepatic angiosarcoma	B. Small cell anaplastic carcinoma of lung	
	C. Retinoblastoma	D. None of these	
135)	The appearance of granulomas with Langhans giant cells on biopsy of the lung with fever, weight loss, and cough for several months suggests that infection with which of the following infectious agents has occurred:		B
	A. Influenza A virus	B. Mycobacterium tuberculosis	
	C. Cytomegalovirus	D. None of these	
136)	Each of the following is an example of apoptosis except		C
	A. elimination of epithelial cells from the gastrointestinal tract	B. destruction of hepatocytes in chronic hepatitis	
	C. stroke caused by thrombosis of middle cerebral artery	D. None of these	
137)	Which of the following sequelae of ischemia would be considered an irreversible cellular injury?		C



	A. switch to anaerobic glycolysis	B. swelling of endoplasmic reticulum	
	C. rupture of lysosomes	D. None of these	
138)	Paradoxical emboli are best described as emboli:		A
	A. originating in the venous system but embolizing on the arterial side	B. occurring in a patient with thrombocytopenia	
	C. occurring in a bleeding patient	D. None of these	
139)	The presence of giant cells in splenomegalic specimens is indicative of:		A
	A. an unfavorable outcome	B. a favorable outcome	
	C. unassociated with prognostic criterion	D. None of these	
140)	Which of the following is thought to precede exocrine pancreatic atrophy in dogs:		B
	A. endocrine neoplasia	B. lymphocytic pancreatitis	
	C. suppurative pancreatitis	D. None of these	
141)	Severe babesiosis in dogs can result in which of the following		C
	A. anemia	B. hypoalbuminemia	
	C. all of the above	D. None of these	
142)	Salpingitis in pekin ducks has been associated with dual infection with:		C
	A. salmonella and herpesvirus	B. pasteurilla and salmonella	
	C. E.coli and tetratrichomonas	D. None of these	
143)	Avian zinc toxicosis affects which of the following organs:		C
	A. liver	B. kidney	
	C. pancreas	D. Spleen	
144)	Retroviral infection in chickens can result in which of the following:		C
	A. ascites	B. cardiomyopathy	
	C. all of the above	D. None of these	
145)	Thick hyalinized collagen fibres characterize which of the following canine tumors:		C
	A. fibroma	B. fibroadnexal dysplasia	
	C. keloidal fibroma	D. None of these	
146)	The origin of histiocytic sarcomas are most likely:		C
	A. reticuloendothelial	B. B lymphocytes	
	C. myeloid dendritic cells	D. None of these	
147)	Inflammation is a		B
	A. tissue response towards a stimulus	B. Vascularized tissue response towards a stimulus	
	C. avascular response of tissue towards a stimulus	D. None of these	
148)	Cell injury is		B
	A. injury to cell membrane	B. cell unable to maintain homeostasis	
	C. injury to smooth endoplasmic reticulum	D. None of these	
149)	Acute inflammation on skin has a sign of		A
	A. redness and swelling	B. depression	
	C. blackening	D. None of these	
150)	Chronic inflammation		A
	A. has both repair and fighting characteristics	B. don't have repair but fighting characteristic	
	C. Both	D. None of these	
151)	Adaptation is		C
	A. low grade cell injury	B. changed state of cell to changed environment of cell	
	C. establishment of new level of metabolic and functional activity still preserving the cell integrity	D. None of these	
152)	Under more functional demand, cardiac muscles undergo		C
	A. Atrophy	B. Hyperplasia	
	C. Hypertrophy	D. None of these	
153)	The other name of type of necrosis in skeletal muscles is		C
	A. coagulative necrosis	B. caseative necrosis	
	C. Zenkers necrosis	D. None of these	
154)	Cell membrane damage can occur by		C
	A. free radicals	B. Phopholipase	
	C. all of above	D. None of these	
155)	Cell can survive for about 100 days		A

	A. without nucleus	B. without cell membrane	
	C. Both	D. None of these	
156)	H <sub>2</sub> O <sub>2</sub> is precursor of		A
	A. free radicals	B. Enzyme	
	C. Both	D. None of these	
157)	Neoplasms can be classified on the basis of		D
	A. histology	B. aetiology	
	C. behaviour	D. all of above	
158)	Polymorphonuclear neutrophil granulocytes		A
	A. are important cells in bacterial infections	B. play a role in inflammation by releasing histamine	
	C. are important cells in neoplastic conditions	D. play an important role in viral infections	
159)	Frozen tissue section of a lymph node biopsy from the neck of an old dog shows granulomatous inflammation with large areas of necrosis. Which one would be most important to do?		C
	A. cell surface markers for lymphocyte identification	B. chromosomal analysis by karyotyping	
	C. cultures for acid fast bacilli and fungi	D. culture for virus	
160)	Each of the following may contribute to formation of oedema EXCEPT		C
	A. decreased plasma oncotic pressure	B. increased intravascular hydrostatic pressure	
	C. increased serum albumin	D. decreased serum proteins	
161)	The main feature of a wound healing is		C
	A. Lymphocyte accumulation	B. Fibrin deposition	
	C. Granulation tissue formation	D. Tissue destruction	
162)	Each of the following is the Clinical manifestations of right sided heart failure EXCEPT:		C
	A. dependent oedema	B. ascites	
	C. pulmonary oedema	D. nutmeg liver	
163)	The oedema of nephrotic syndrome is best classified as		C
	A. Hypovolemic	B. Obstructive	
	C. Oncotic	D. viraemic	
164)	Which one of the following may be is a malignant neoplasm?		A
	A. Seminoma	B. Papilloma	
	C. Chondroma	D. Hepatoma	
165)	Proto-oncogenes are:		B
	A. DNA sequences in cells that are oncogenes themselves	B. Cellular copies of genes that were first found in oncogenic retroviruses	
	C. DNA viral sequences that are known to infect human cells	D. Bacterial DNA counterparts	
166)	Which of the following findings is most useful for staging of a tumour		C
	A. Presence of necrosis	B. Presence of abnormal mitoses	
	C. Presence of metastases	D. Absence of apoptosis	
167)	Benign tumours arising from the salivary gland epithelium are called		B
	A. Transitional cell epitheliomas	B. Adenomas	
	C. Fibromas	D. adenocarcinoma	
168)	Which of the following finding is most important for grading of tumours?		C
	A. Presence of tumour cells in the vascular spaces	B. Level of invasion	
	C. Microscopic pleomorphism of nuclei and the number of mitoses	D. degree of metastasis	
169)	Which of the following activates Hageman factor in blood clotting?		B
	A. Kinins	B. Negatively charged surfaces	
	C. Complement C5a	D. Positively charged collagen	
170)	Epithelioid cells within granulomas are derived from which of the following?		B
	A. Plasma cells	B. Macrophages	
	C. Lymphocytes	D. Neutrophils	
171)	Biologically active metabolites of arachidonic acid include all of the following EXCEPT:		C
	A. Leukotrienes	B. Thyromboxane A <sub>2</sub>	
	C. Complement	D. Prostaglandins	

172)	Bacterial opsonization is mediated by?		C
	A. histamine	B. prostaglandin	
	C. immunoglobulins	D. tumor Necrosis Factor	
173)	Predominant cell types in typical chronic inflammation are all of the following EXCEPT:		A
	A. Polymorphonuclear leukocytes	B. Macrophages	
	C. T helper lymphocytes	D. NK cells	
174)	Neutrophilia is most frequently seen in association with which of the following?		C
	A. Allergic dermatitis	B. Fungal esophagitis	
	C. Bacterial pneumonia	D. Viral encephalitis	
175)	Chemotactic factors are produced by EXCEPT:		D
	A. Lymphocytes	B. Monocytes	
	C. Endothelial cells	D. Collagen	
176)	A granuloma is		C
	A. a small nodule of granulation tissue	B. a tumour composed of granulocytes	
	C. composed primarily of epithelioid cell, fibroblasts and lymphocytes	D. None of these	
177)	Wound healing by secondary intention takes place:		C
	A. when the wound does not break apart	B. when the wound edges are brought together	
	C. much more slowly than healing by first intention	D. in surgically incised wounds	
178)	Keloid scar during healing:		B
	A. is normal scar and is common	B. caused by the excess deposition of fibrin in the wound and are larger than the wound	
	C. may be prevented by pressure dressing	D. keloid are always harmful to the body	
179)	The following are true about atherosclerosis:		C
	A. it often occurs in the heart chamber	B. foamy macrophages are not seen in the lesion	
	C. smooth muscle cells proliferation in the intima of vessel	D. no deposition of lipid occurs in wall of blood vessel	
180)	The following conditions can give rise to metastatic calcification		B
	A. Coagulative necrosis in the tissue	B. Hyperparathyroidism	
	C. Pulmonary Tuberculosis	D. Liquefactive necrosis	
181)	In an inflammatory disease, the following is least likely that it is not raised in the blood:		D
	A. neutrophils	B. total leukocytes	
	C. C-reactive proteins	D. RBC	
182)	One of these do not cause increase in permeability of vascular tissue:		C
	A. Complement	B. Interleukin-1	
	C. Adrenaline	D. TNF	
183)	After phagocytosis by neutrophils, micro-organisms are killed by:		A
	A. Lysozyme	B. Lymphokines	
	C. Complement System	D. Antibodies	
184)	One of these about Anaphylaxis is false:		A
	A. Occurs 24 Hours After the Initial Stimulus	B. Causes Eosinophilia in blood	
	C. Causes Degranulation of Basophils and Mast Cells	D. Massive vasodilation of blood vessels occur	
185)	One of these is false about Granulation tissue:		D
	A. Is A Feature of Wound Healing	B. Contains Fibroblasts and collagen	
	C. Contains Thin-walled Capillaries	D. occur in Granuloma	
186)	The example of emboli may not include:		D
	A. Air bubbles	B. Amniotic Fluid	
	C. Tumour cells	D. Normal tissue cells	
187)	The following promotes wound healing except:		D
	A. Macrophages	B. Myofibroblast	
	C. Endothelial cells	D. Apocrine Cells	
188)	The TNFa (tumour necrosis factor alpha) is mainly produced by		B
	A. B Lymphocytes	B. Macrophages	
	C. Tumour cells	D. Endothelial cells	
189)	Which one is LEAST likely to regenerate?		A
	A. cardiac muscle	B. renal tubular cells	

	C. hepatocytes	D. fibroblasts	
190)	Healing by first intention occur when/by the following EXCEPT		C
	A. well-apposed skin edges are present	B. epithelial proliferation occurs	
	C. abundant granulation tissue is present	D. few inflammatory cells are present	
191)	All of these are examples of apoptosis except		D
	A. involution of uterus after pregnancy	B. necrosis of hepatocytes in viral hepatitis	
	C. deletion of autoreactive T cells from thymus	D. ischaemic injury to parenchymal cells	
192)	Which of the following sequelae of ischemia would be considered an irreversible cell injury?		C
	A. switch to anaerobic glycolysis	B. swelling of endoplasmic reticulum	
	C. rupture of lysosomes	D. cellular acidosis	
193)	Teratomas are best described as:		B
	A. cancers present at birth	B. cancers composed of a mix of tissues from 3 germ layers	
	C. neoplasms composed of undifferentiated anaplastic cells	D. islands of persistent embryonic tissue that normally regress	
194)	Among the following, the most likely cause to produce edema includes all EXCEPT		C
	A. Cardiac failure	B. Hepatic failure	
	C. Arterial occlusion	D. Lymphatic occlusion	
195)	Which one of the following organs is least likely to have hemorrhagic (red) infarcts:		A
	A. Heart	B. Brain	
	C. Intestine	D. Liver	
196)	Which of the following is least likely to play an important role in oedema formation?		D
	A. Arteriolar dilatation	B. Decreased venous drainage	
	C. Decreased lymphatic drainage	D. Muscle damage near blood vessel	
197)	The most common cause of arterial stenosis is:		C
	A. Mural thrombosis	B. Embolization	
	C. Atherosclerosis	D. Heart failure	
198)	A transudate differs from the exudate primarily in its		C
	A. Interstitial fluid volume	B. Presence of inflammatory mediators	
	C. Proteins level	D. Blood vascular fluid volume	
199)	The examples of endogenous pyrogens are all except		C
	A. IL1	B. TNFalpha	
	C. Endotoxin	D. Prostaglandins	
200)	In the climax phase of fever, all these are present except		A
	A. Peripheral vasoconstriction	B. Parasympathetic stimulation	
	C. Decreased blood pressure	D. Patient has a warmth and red skin	
201)	The benefits of the fever are all of these following except		C
	A. High activity of immune system	B. Increase in antibody production	
	C. Increases the chances of proliferation of microorganisms	D. Causes a decrease in the amount of plasma metal ions	
202)	All are the harmful effects of fever except		D
	A. The metabolism is increased basal metabolism	B. May cause dysfunction of parenchymal organs	
	C. Changes in mental condition of the animal	D. Enhanced function of the digestive tract	
203)	Cell with the following capacity comes under the stable cell category		A
	A. <5 % in mitoses	B. 5-1.5% in mitoses	
	C. GIT cells	D. Lymphoid cells	
204)	The outer most rim in a granuloma is formed by		C
	A. Macrophages	B. Lymphocytes	
	C. Fibrosis	D. Caseous necrosis	
205)	The inner most rim in a granuloma is formed by		A
	A. Macrophages	B. Lymphocytes	
	C. Fibrosis	D. Plasma cells	
206)	The leukocytes can induce tissue injury except by		B
	A. Error in timing of phagocytosis	B. When low level of bacteria are present	
	C. When a larger sized organism to be engulfed	D. When the phagolysosome is ruptured	
207)	Sometimes chronic inflammation occurs when the		A
	A. Low pathogenic organism is not cleared by the neutrophils	B. In cases of Mycobacterium bovis infection	

	C. In cases of prolonged exposure to non-degradeable dust particles	D. In auto-immune diseases	
208)	Among the examples given below, the fibrinous inflammation is least likely to be seen in cases of		D
	A. Pleuritis	B. Peritonitis	
	C. Perihepatitis and pericarditis	D. Enteritis	
209)	The catarrhal inflammation is least likely to be seen in		D
	A. Bovine viral diarrhoea	B. Malignant catarrhal fever	
	C. Endometritis	D. Peritonitis	
210)	The purulent inflammation is called when		B
	A. Mycobacterium is the cause of inflammation	B. Staphylococcus is the cause of inflammation	
	C. Autoimmune response is seen	D. Virus is the cause of disease	
211)	On the basis of duration, the inflammation is all except		D
	A. Acute	B. Chronic	
	C. Sub-acute	D. Severe	
212)	The oedema is mostly present and is visible in		D
	A. Per-acute inflammation	B. Chronic inflammation	
	C. Granulomatous inflammation	D. Acute inflammation	
213)	The per-acute inflammation has		C
	A. Abundant oedema	B. All the cardinal signs of inflammation	
	C. Not much exudation	D. Prominent vascular involvement	
214)	In antigen presentation by the macrophages to the lymphocytes		B
	A. Class I Major histocompatibility complex is used	B. Class II Major histocompatibility complex is used	
	C. Class III Major histocompatibility complex is used	D. Class IV Major histocompatibility complex is used	
215)	Eosinophils play an important role in eliminating the parasite and use the following substances to kill the parasite except		D
	A. Major basic protein	B. Eosinophil cationic protein	
	C. Eosinophil derived neurotoxin	D. Leukotrienes	
216)	Fever is induced by all of the followings except		C
	A. IL-1	B. IL-6	
	C. IL-10	D. TNF	
217)	In allergic disease, the significant contribution is made by the		A
	A. Ig E	B. Ig G	
	C. Ig A	D. Ig M	
218)	Neutrophils, participate in inflammatory condition and		B
	A. Are long lived	B. Mostly return to circulation	
	C. Important cells against viral infections	D. Play important role in granulomatous inflammation	
219)	In an inflammatory condition, the leukocyte movement out of the vascular channels occur from		C
	A. Vein	B. Arteriole	
	C. Venule	D. Lymphatics	
220)	During migration of leukocytes from vascular channels, they roll on the endothelial surface helped by		B
	A. Integrin molecules	B. Selectin molecules	
	C. Fibronectin molecules	D. Cadherin molecules	
221)	The movement of the leukocyte occur in phases, the first phase of movement take place in		B
	A. 20-30 minutes	B. 30-40 minutes	
	C. 40-50 minutes	D. 50-60 minutes	
222)	Complement activation in classical pathway can occur by		B
	A. Lectin binding	B. Immunoglobulin binding	
	C. C3 hydrolysis	D. TNF binding	
223)	Increased arteriolar supply of blood to an organ in response to an increased functional demand is called as		C
	A. Congestion	B. Oedema	
	C. Hyperaemia	D. Haemorrhage	
224)	The outflow of blood from the vascular channels is called as		D
	A. Congestion	B. Oedema	
	C. Hyperaemia	D. Haemorrhage	
225)	Generalized oedema in which fluid accumulates especially in subcutaneous tissues is called as		B
	A. Ascites	B. Anasarca	
	C. Hydropericardium	D. Hemopericardium	

226)	A syndrome resulting from a disproportion between the amount/volume of blood and the volume of the circulatory system is called as		B
	A. Syndrome	B. Shock	
	C. Oedema	D. Haemorrhage	
227)	Failure of the nervous system to control diameter of blood vessels results in shock of type		B
	A. Cardiogenic	B. Neurogenic	
	C. Septic	D. None of above	
228)	The injury to endothelial cells of an artery, allows fractions of plasma protein to pass into the		B
	A. Tunica Adventitia	B. Tunica media	
	C. Tunica Muscularis	D. None of the above	
229)	Atherosclerosis is characterized by the accumulation of lipid in larger arteries in the form of elevated, lipid-filled plaques called		A
	A. Atheromas	B. Blastomas	
	C. Lipidoma	D. None of the above	
230)	Formation of a solid mass from the blood constituents, attached to the blood vessel wall or the heart chamber is called thrombus and the process of formation is called		B
	A. Embolism	B. Thrombosis	
	C. Clot	D. Chicken fat clot	
231)	Is a type of infection that may occur after an acute episode; the organism is present but symptoms are not; after time the disease can reappear it is called as		A
	A. Latent infection	B. Acute infection	
	C. Chronic infection	D. None of the above	
232)	Infection that is transmitted from a health care worker to a patient is called as		C
	A. Acute	B. Chronic	
	C. Iatrogenic	D. Noscomial	
233)	Reticulocyte count is the percent of		A
	A. Immature RBCs	B. Immature WBCs	
	C. Immature Neutrophils	D. Immature lymphocytes	
234)	A golden-brown, finely granular, intracellular pigment formed in lysosomes of cells undergoing progressive and prolonged auto-oxidation of unsaturated lipids is called as		C
	A. Hemosiderin	B. Bilirubin	
	C. Lipofuscin	D. None of the above	
235)	When large amounts of ferritin are accumulated as aggregates and become visible histologically is called		A
	A. Haemosiderin	B. Bilirubin	
	C. Lipofuscin	D. None of the above	
236)	Oncogenes were originally discovered from		C
	A. DNA viruses	B. Bacteria	
	C. Retroviruses	D. Fungi	
237)	To lose the anti-cancer effect, both copies of the genes must be altered for		B
	A. Growth promoting genes	B. Growth inhibitory genes	
	C. DNA repair genes	D. None of the above	
238)	Predisposing factors for the development of keloid scars include:		B
	A. secondary wound closure	B. wound infection	
	C. steroid therapy	D. None	
239)	The following statements are true of wound infections:		D
	A. Staphylococcus aureus is the most common organism to infect the surgical wound	B. MRSA wound infection is usually the result of wound contamination by hospital staff	
	C. anaerobic organisms exert their lethal effects by producing endo- and exotoxins	D. all of the above	
240)	Wound healing by secondary intention takes place:		C
	A. when the wound does not break apart	B. when the wound edges are brought together	
	C. much more slowly than healing by first intention	D. None of these	
241)	Options for sterilization include:		A
	A. ethylene oxide	B. deionized water	
	C. washing with water	D. None of these	
242)	Clostridium tetani:		B

	A. causes gas gangrene	B. produces an exotoxin	
	C. is non-motile	D. None of these	
243)	Keloid scars:		A
	A. are distinguished from hypertrophic scars by their extent.	B. are caused by the excess deposition of fibrin in the wound	
	C. may be prevented by pressure dressing	D. None of these	
244)	Infectious agent known to induce hemorrhagic tracheitis in bird is		C
	A. Infectious bronchitis	B. Fowl cholera	
	C. infectious laryngotracheitis	D. None above	
245)	Air sacculitis in young chicks is suggestive of		A
	A. Mycoplasma gallisepticum infection	B. Salmonella gallinarum infection	
	C. Fowl cholera	D. Above all	
246)	Thin shelled deformed eggs with thin albumin are indicative of		B
	A. EDS infection	B. Infectious bronchitis	
	C. Pullorum disease	D. Coccidiosis	
247)	What are finding in birds suffering from sulfonamide toxicity		A
	A. Swollen kidneys	B. ruffled feathers	
	C. pneumonia	D. Above all	
248)	Route of inoculation of embryonating eggs for Newcastle and Avian Influenza viruses is		C
	A. Yolk Sac	B. Chorioallantoic membrane	
	C. Allantoic cavity	D. Above all	
249)	Which one of the following Eimeria spp. is the most pathogenic		C
	A. E. acervulina	B. E. hagani	
	C. E. tenella	D. None of them	
250)	What is the appearance of E. coli colonies on MacConkey's agar		A
	A. Pink	B. Black	
	C. Colorless	D. Above all	
251)	Which of the following salmonella species is host specific		A
	A. S. gallinarum	B. S. typhimurium	
	C. S. typhi	D. None above	
252)	What the usual look of bursa of Fabricius in birds affected with Mareks Disease		B
	A. Normal	B. Atrophied	
	C. Swollen	D. None of them	
253)	Which of the following test can distinguish between Newcastle disease virus and Avian influenza virus		B
	A. Hemagglutination test	B. hemagglutination-inhibition test	
	C. Both of the above mentioned	D. Above all	
254)	Which of the Eimeria spp. is poor in cyst production		C
	A. E. tenella	B. E. acervulina	
	C. E. necatrix	D. None above	
255)	Which of the Eimeria species produces the largest schizonts?		B
	A. E. acervulina	B. E. necatrix	
	C. E. maxima	D. None of them	
256)	Accumulation of smoke and foul gasses in the brooder house may result in		D
	A. respiratory distress	B. Ascites	
	C. increased water and feed intake	D. Both A and B	
257)	Excess ammonia in the poultry house results in		A
	A. respiratory distress	B. enteritis	
	C. ruffled feathers	D. Above all	
258)	Among all four aflatoxins (B1, B2, G1 and G2) the most potent toxin is		C
	A. Aflatoxin G1	B. Aflatoxin G2	
	C. Aflatoxin B1	D. Aflatoxin B2	
259)	Vitamin E supplementation of feed in chicken results in		A
	A. improved spermatogenesis	B. Decrease feed intake	
	C. improved egg production	D. All of them	
260)	Concurrent administration of Ionophore antibiotics and tiamulin may result in		C

	A. Fatty liver in chicken	B. Swollen kidneys	
	C. Lameness	D. None of them	
261)	Dehydration in young chicks is evident by		B
	A. broken wings and ruffled feathers	B. dryness and grooves on the shanks	
	C. Dry tongue	D. All of them	
262)	Partially cooked muscles is a characteristic feature of		B
	A. High protein diet	B. Heat stress	
	C. Calcium deficiency	D. Both b and c	
263)	Heat stress can be partially alleviated by administering		C
	A. Calcium	B. high level of Phosphorus	
	C. Vitamin C	D. High level of Vitamin D	
264)	Vitamin D deficiency may result in		A
	A. Thin and soft shelled eggs	B. Nervous signs	
	C. Thick bone	D.	
265)	Vitamin A deficiency in poultry feeds may result in		B
	A. Enhance epithelial repair	B. visceral urate deposits	
	C. Weak bones	D. Above all	
266)	After I/M injection Gentamicin retained in kidneys for		B
	A. 10 days	B. 30 days	
	C. 3 months	D. 3 months	
267)	Therapeutic dose of gentamicin in poultry is		A
	A. 5-10 mg/kg	B. 10-20 mg/kg	
	C. 20-50 mg/kg	D. 50-100mg/kg	
268)	During 1st week of brooding period of broilers temperature of brooding room should be		C
	A. 100 F	B. 120 F	
	C. 90 F	D. None of them	
269)	Microscopic lesions of mycotoxicosis in chicken in liver		A
	A. Biliary hyperplasia	B. Biliary hypoplasia	
	C. Biliary hypoplasia	D. Biliary anaplasia	
270)	Aflatoxin mostly contaminate		B
	A. Wheat	B. Maize	
	C. Rice	D. All of these	
271)	In Balkan nephropathies ----- toxin was involved		A
	A. Ochratoxin	B. Aflatoxin	
	C. Zearalenone	D. fumonisin	
272)	Ochratoxin is a		A
	A. Nephrotoxic mycotoxin	B. Hepatotoxic mycotoxin	
	C. None of above	D. Nboth a and b	
273)	Infectious Bursal Disease is caused by the virus of		A
	A. Birnaviridae	B. Orthomyxoviridae	
	C. Paramyxoviridae	D. None of these	
274)	Infectious Bursal Disease is a disease of		A
	A. Up to six weeks of age	B. 8-16 Weeks of age	
	C. Birds in production	D. None of these	
275)	Infectious Bursal disease virus remains viable in contaminated houses for		C
	A. Days	B. Weeks	
	C. Months	D. None of these	
276)	Duration of clinical disease of IBD is		B
	A. 18 - 21 days	B. 5-7 Days	
	C. 1-2 Days	D. None of these	
277)	In early stages of IBD, Bursa of Fabricius is		A
	A. swollen oedematous	B. normal	
	C. Smaller in size	D. None of these	
278)	In Gumboro disease kidneys exhibit		A
	A. Swelling	B. Shrinkage	



	C. No change	D. None of these	
279)	Gumboro disease is a clinical disease of		A
	A. Chicken	B. Quails	
	C. Turkeys	D. None of these	
280)	Immunosuppression is a characteristic feature of		C
	A. Fowl typhoid	B. Infectious bronchitis	
	C. IBD	D. None of these	
281)	Inclusion body hepatitis is caused by		D
	A. <i>E. Coli</i>	B. Birna virus	
	C. Paramyxovirus	D. Adenovirus	
282)	Pathognomic feature of Hydropericardium syndrome in chicken is		A
	A. Intranuclear inclusion bodies in hepatocytes	B. swollen liver and spleen	
	C. intracytoplasmic inclusion bodies in spleen	D. None of these	
283)	Hydropericardium syndrome in broiler chicks usually appears at		C
	A. 1 <sup>st</sup> week of age	B. 4 <sup>th</sup> month of age	
	C. 3-4 <sup>th</sup> week of age	D. None of these	
284)	Hydropericardium syndrome in broiler chicks results in		C
	A. Enteritis with swollen liver	B. twisted legs with fluid in hydropericardium	
	C. Swollen liver with fluid in pericardial sac	D. None of these	
285)	Incubation period of infectious bronchitis is		A
	A. less than 24 hours	B. one week	
	C. 3 days	D. None of these	
286)	In young Chicks, Infectious bronchitis appears as an		A
	A. Acute disease	B. Chronic Disease	
	C. Subacute disease	D. None of these	
287)	In laying hens Infectious bronchitis virus causes		B
	A. leg weakness	B. Deformed and weak egg shells	
	C. Purulent pneumonia	D. None of these	
288)	Different strains of IB virus are		B
	A. Antigenically related	B. Antigenically different	
	C. Different strains do not exist	D. None of these	
289)	Hosts for IB virus include		C
	A. Turkeys	B. Pigeons	
	C. Chicken	D. None of these	
290)	IB infection causes high mortality in		B
	A. laying hens	B. Young chicks	
	C. in both of the above	D. None of these	
291)	Laryngotracheitis results in intracytoplasmic inclusion bodies in		A
	A. tracheal epithelial cells	B. endothelial cells of lungs	
	C. Tubular epithelial cells of kidney	D. None of these	
292)	Birds suffering from laryngotracheitis show following clinical sign		D
	A. Blood stained mucus coming from nostrils	B. Difficult breathing	
	C. High mortality	D. Above all	
293)	Causative agent of Laryngotracheitis is a		B
	A. Bacteria	B. Virus	
	C. Fungus	D. None of these None of these	
294)	Laryngotracheitis is a disease of		B
	A. Chicks	B. Growing and adult chicken	
	C. Both of the above	D. None of these	
295)	Which of the following diseases spread rapidly in a flock?		B
	A. Laryngotracheitis	B. Infectious bronchitis	
	C. <i>Mycoplasma gallisepticum</i> infection	D. None of these	
296)	In laying hens IB virus infection results in		B

	A. Thick egg albumin	B. Thin egg albumin	
	C. Egg albumin and yolk mixed	D. None of these	
297)	Breeding hens infected with field IBD virus transfer maternal antibodies to their chicks which may protect them from IBD for		A
	A. 2-4 weeks	B. 2-4 months	
	C. for life	D. None of these	
298)	Newcastle disease virus infects the birds of		A
	A. all ages	B. young chicks	
	C. Adult birds	D. None of these	
299)	Velogenic strains of NDV can cause		A
	A. up to 100 percent mortality in susceptible birds	B. up to 20 percent mortality in susceptible birds	
	C. No mortality in susceptible birds	D. None of these	
300)	Nervous signs are a prominent feature of ND virus infection caused by		C
	A. mesogenic strains	B. lentogenic strains	
	C. velogenic strain	D. None of these	
301)	Following diseases are vertically transmitted to newly hatched chicks		D
	A. Newcastle Disease	B. Infectious Bronchitis	
	C. Gumboro Disease	D. None of these	
302)	Avian Influenza virus is a RNA virus having		C
	A. 6 segments	B. 4 segments	
	C. 8 segments	D. None of these	
303)	Body temperature of poultry is		B
	A. 38 °C	41 °C	
	C. 43 °C	D. None of these	
304)	Infectious Coryza is caused by		B
	A. <i>Haemophilus gallinarum</i>	B. <i>Haemophilus paragallinarum</i>	
	C. <i>Salmonella gallinarum</i>	D. None of these	
305)	La Sota strain of Newcastle Disease virus is classified as a		B
	A. Mesogenic	B. Lentogenic	
	C. Velogenic	D. None of these	
306)	Coccidiosis in the middle part of intestine is caused by		A
	A. <i>Eimeria acervulina</i>	B. <i>Eimeria enella</i>	
	C. <i>Eimeria brunette</i>	D. None of these	
307)	Which one of the following antibiotic is most effective for treatment of CRD?		A
	A. Tylosin	B. Oxytetracycline	
	C. Gentamicin	D. None of these	
308)	Which one of the following antibiotic is most effective for treatment of coccidiosis?		A
	A. Amprolium	B. Zinc Bacitracin	
	C. Neomycin	D. None of these	
309)	Aflatoxins are produced by		A
	A. <i>Aspergillus parasiticus</i>	B. <i>Aspergillus nigar</i>	
	C. <i>Penicillium viridicatum</i>	D. None of these	
310)	In recovery stage of coccidiosis birds become more susceptible to		C
	A. Mycotic Diseases	B. Rickettsial Diseases	
	C. Clostridial Diseases	D. None of these	
311)	Collibacillosis is caused by		C
	A. <i>Salmonella gallinarum</i>	B. <i>Streptococcus aureus</i>	
	C. <i>Escherichia Coli</i>	D. None of these	
312)	Spirochetosis is caused by		B
	A. <i>Argas persicus</i>	B. <i>Borrelia anserina</i>	
	C. <i>Candida albicans</i>	D. None of these	
313)	Bacillary white diarrhea is also called as		B

	A. Collibacillosis	B. Salmonellosis	
	C. Mycoplasmosis	D. None of these	
314)	Infectious Laryngotracheitis is caused by		C
	A. Pox virus	B. Herpes virus	
	C. Corona Virus	D. None of these	
315)	Brooder Pneumonia is caused by		A
	A. <i>Aspergillus fumigatus</i>	B. <i>Penicillium veridatum</i>	
	C. <i>Rizopus nigricus</i>	D. None of these	
316)	Avian influenza is caused by orthomyxo virus of		A
	A. Group A	B. Group B	
	C. Group D	D. None of these	
317)	Most common reservoir of Avian Influenza virus is		C
	A. Insects	B. mammals	
	C. Water fowl	D. None of these	
318)	AI virus causes agglutination of		B
	A. streptococci	B. Red blood Cells	
	C. White Blood Cells	D. None of these	
319)	Antigenic drift and shift are common in		A
	A. Avian influenza virus	B. Newcastle disease virus	
	C. <i>Mycobacterium paratuberculosis</i>	D. None of these	
320)	Migratory birds are important reservoirs of		A
	A. Avian influenza	B. Newcastle disease	
	C. <i>Salmonella</i> spp.	D. None of these	
321)	Currently following type of vaccines are employed to protect the poultry from AI infection		B
	A. Live vaccines	B. Killed vaccines	
	C. Genetically modified vaccines	D. None of these	
322)	Mortality in AI infection in susceptible birds may reach to		A
	A. 100 percent	B. Not more than 20 percent	
	C. No mortality	D. None of these	
323)	Most commonly employed test for determining the antibody titers for AI infection is		B
	A. Agar gel precipitation test	B. Hemagglutination inhibition	
	C. Polymerase chain reaction	D. None of these	
324)	Most commonly employed test for determining the antibody titers for Newcastle disease infection in		B
	A. Agar gel precipitation test	B. Hemagglutination inhibition	
	C. Polymerase chain reaction	D. None of these	
325)	Lesions of avian pox comprise of		A
	A. raised confluent blackish lesions on the comb	B. ulcers on the intestinal mucosa	
	C. pustules on the mucosa of proventriculus	D. None of these	
326)	Pathognomic microscopic lesion of avian pox is		A
	A. intracytoplasmic inclusion bodies in hyperplastic epithelial cells	B. intranuclear inclusion bodies in hyperplastic epithelial cells	
	C. No inclusion bodies in the epithelial cells	D. None of these	
327)	Avian encephalomyelitis infection in adult chicken results in		D
	A. hemorrhages on the spleen	B. ulcers in the intestine	
	C. Nervous disorder	D. None of these	
328)	Clinical disease of Avian encephalomyelitis occurs in		A
	A. chicks up to one week of age	B. chicks of 4 weeks of age	
	C. in old birds	D. None of these	
329)	Avian encephalomyelitis infection in young chicks can be prevented by		B
	A. vaccinating the chicks for AE at hatchery	B. Vaccinating the breeding flocks	
	C. Avoid hatching from the infected breeding flocks	D. None of these	
330)	AE in young chicks is characterized by		A

	A. nervous disorder	B. watery diarrhea	
	C. lesions on the liver	D. None of these	
331)	A recently infected breeding flock vertically transmit virus into eggs for about		A
	A. 2-3 weeks	B. No vertical transmission	
	C. for life	D. None of these	
332)	Newcastle disease virus can be propagated		B
	A. on Nutrient agar	B. Chicken embryo	
	C. In broth	D. None of these	
333)	Characteristic lesions in spirochaetosis in poultry is		A
	A. Spleen enlarged 3-5 times	B. Ruffled feathers	
	C. pneumonia	D. None of these	
334)	Vector for the transmission of spirochaetosis infection is		A
	A. <i>Argus persicus</i>	B. Waterfowl	
	C. round worms	D. None of these	
335)	Spirochetosis is a disease of		B
	A. cold climate	B. tropical areas	
	C. World Wide	D. None of these	
336)	Spirochaetosis can be prevented by		A
	A. Eradicate the ticks	B. Eradicate wild fowls	
	C. Continuous use of antibiotics	D. None of these	
337)	Body temperature of the birds goes high in the following condtion/s		A
	A. Spirochaetosis	B. CRD	
	C. coccidiosis	D. None of these	
338)	Mareks disease is caused by		A
	A. Herpes virus	B. oncornavirus	
	C. clostridium organisms	D. None of these	
339)	Clinical Mareks disease can appear as early as		B
	A. 1 week old birds	B. 8 weeks old birds	
	C. not before 30 weeks of age	D. None of these	
340)	Mareks Disease transmission occurs		B
	A. Vertically	B. horizontally	
	C. by both above mentioned means	D. None of these	
341)	Vaccination for Mareks is performed		A
	A. at one day of age	B. At 3 weeks	
	C. at 7 weeks	D. None of these	
342)	Microscopic lesions in Mareks disease tumors include		A
	A. pleomorphic lymphocytic cells	B. Homogenous population of lymphoblasts	
	C. None of the above	D. None of these	
343)	Lymphoid leucosis is caused by		A
	A. Oncornavirus	B. Herpes virus	
	C. Orthomyxovirus	D. None of these	
344)	Lymphoid Leukosis is observed in birds of age		B
	A. 4 weeks	B. 12 weeks and above	
	C. Not before 25 weeks	D. None of these	
345)	In lymphoid leucosis tumors do not develop in		C
	A. liver	B. Spleen	
	C. iris	D. None of these	
346)	Microscopic lesions in Lymphoid Leukosis tumors include		B
	A. pleomorphic lymphocytic cells	B. Homogenous population of lymphoblasts	
	C. None of the above	D. None of these	
347)	In myeloid leucosis tumor cells are comprised of		B
	A. hepatocytes	B. polymorph leukocytes	
	C. Bone cells	D. None of these	
348)	In lymphoid leucosis clinical cases continue to appear up to		B

	A. 10 weeks after appearance of tumors	B. For life	
	C. 20 weeks after appearance of tumors	D. None of these	
349)	In Mareks disease tumors cells give positive reaction for		D
	A. Igg antibodies	B. IGA antibodies	
	C. IGM antibodies	D. None of these	
350)	In Lymphoid leukosis tumors cells give positive reaction for		C
	A. Igg antibodies	B. IGA antibodies	
	C. IGM antibodies	D. None of these	
351)	In Mareks disease tumors cells give positive reaction for		B
	A. B- Cells	B. T- Cells	
	C. Both of above	D. None of these	
352)	In Lymphoid leucosis tumors do not develop in		A
	A. Nerves	B. muscles	
	C. Ovary	D. None of these	
353)	Mareks disease virus is present		A
	A. World Wide	B. In asian countries	
	C. in American countries	D. None of these	
354)	Birds are vaccinated for lymphoid leucosis		C
	A. at one day of age	B. at one weeks of age	
	C. Not vaccinated	D. None of these	
355)	Birds recovered from Mareks disease shed virus in their eggs		B
	A. Yes	B. No	
	C. may or may not shed	D. None of these	
356)	Birds suffering from Lymphoid leukosis shed virus in their eggs		A
	A. Yes	B. No	
	C. may or may not shed	D. None of these	
357)	Lameness and blind ness is observed in flocks suffering from		A
	A. Mareks disease	B. Reticuloendotheliosis	
	C. Myeloid Leukosis	D. None of these	
358)	Birds suffering from lymphoid leucosis can be kept for breeding purposes		A
	A. No	B. Yes	
	C. Yes after treatment	D. None of these	
359)	Birds suffering from Mareks disease can be kept for breeding purposes		B
	A. No	B. Yes	
	C. Not even after treatment	D. None of these	
360)	<i>Mycoplasma gallisepticum</i> is the responsible for		A
	A. respiratory disease	B. enteritis	
	C. nervous derangement	D. None of these	
361)	<i>Mycoplasma synoviae</i> is		B
	A. a nonpathogenic organism	B. causes lameness	
	C. responsible for shell less eggs	D. None of these	
362)	Chronic respiratory disease is caused by		A
	A. concurrent infection of <i>E. coli</i> and MG	B. Concurrent infection of Fowl cholera and <i>E. coli</i>	
	C. caused by infectious bronchitis	D. None of these	
363)	Incubation period of CRD in chicken is		C
	A. 3 days	B. 3 weeks	
	C. Long and protracted	D. None of these	
364)	<i>Mycoplasma gallisepticum</i> infected breeder flock		A
	A. Should not be used for production of chicks	B. should be treated before hatching their eggs	
	C. May be used for production of chicks	D. None of these	
365)	<i>Mycoplasma melagreadis</i> produces disease in		B
	A. chicken	B. Turkeys	
	C. all species of birds	D. None of these	

366)	Serum plate agglutination test for MG gives false positive results if birds are		C
	A. Fed canola meal	B. infected with <i>E. coli</i>	
	C. administered killed vaccines	D. None of these	
367)	Infectious coryza is a disease of		B
	A. Young Chicks	B. growing and laying birds	
	C. male chicken only	D. None of these	
368)	Infectious coryza is transmitted		A
	A. horizontally	B. Vertically	
	C. does not spread	D. None of these	
369)	Infectious coryza		A
	A. reoccurs after treatment	B. solid immunity develops after infection	
	C. causes high mortality	D. None of these	
370)	Infectious coryza can be prevented by		C
	A. Continuous antibiotic treatment	B. using live vaccines	
	C. using killed vaccine	D. None of these	
371)	Incubation period for infectious coryza is		B
	A. long duration (weeks)	B. short duration (18-36 hours)	
	C. Very short duration (3-6 hours)	D. None of these	
372)	Causative agent of Fowl cholera is		A
	A. <i>Pasturella multocida</i>	B. <i>Salmonella typhi</i>	
	C. <i>Pseudomonas auroginosa</i>	D. None of these	
373)	Fowl Cholera is a disease of		B
	A. young chicks of 2 weeks of age	B. Maturing and adult birds	
	C. cull birds	D. None of these	
374)	In chronic fowl cholera characteristic findings are		D
	A. Swelling of Wattles	B. purulent pneumonia	
	C. peritonitis	D. All of the these	
375)	Fowl cholera is spread by		B
	A. aerosol means	B. vertical spread	
	C. Carrier birds	D. None of the these	
376)	In acute fowl cholera mortality is		B
	A. low (below 5%)	B. high ((Above 30%)	
	C. no mortality	D. None of the these	
377)	Necrotic enteritis usually accompany or follow		A
	A. coccidiosis	B. Fowl cholera	
	C. mycoplasma infection	D. None of the these	
378)	Causative agent for necrotic enteritis is		C
	A. <i>E. coli</i>	B. <i>Streptococcus spp.</i>	
	C. <i>Clostridium perfringens</i>	D. None of the these	
379)	In necrotic enteritis duration of the clinical course is		A
	A. very short (few hours)	B. 3-5 Days	
	C. more than a week	D. None of the these	
380)	Birds dying of necrotic enteritis are		B
	A. emaciated	B. Well fed	
	C. males only	D. None of the these	
381)	Ulcerative enteritis is caused by		C
	A. <i>Salmonella typhimurium</i>	B. <i>Mycoplasma iowe</i>	
	C. <i>Clostridium colinum</i>	D. None of the these	
382)	In acute cases of ulceratie enteritis birds may show		A
	A. no clinical signs	B. constipation	
	C. emaciation	D. None of the these	
383)	Gangrenous dermatitis is caused by		B
	A. salmonella spp.	B. clostridium spp.	
	C. klebsella spp.	D. None of the these	

384)	Clinical signs of <i>Clostridium botulinum</i> infection in chicken are characterized by		A
	A. Progressive paralysis	B. Respiratory signs	
	C. Excitement	D. None of the these	
385)	Clostridial organisms produce		B
	A. endotoxins	B. exotoxins	
	C. calcium	D. None of the these	
386)	<i>Staphylococcus aureus</i> is responsible for		A
	A. early chick mortality	B. Necrotic enteritis	
	C. respiratory distress	D. None of the these	
387)	In chicken, <i>Staph. aureus</i> is mainly responsible for		A
	A. Purulent arthritis	B. Enteritis	
	C. Pneumonia	D. None of the these	
388)	Organism contaminating the eggs in the nest is		A
	A. <i>Escherichia coli</i>	B. <i>Mycoplasma gallisepticum</i>	
	C. <i>Pasturella multocida</i>	D. None of the these	
389)	For Biosecurity purposes distance between two breeding farms should be not less than		B
	A. 200 meters	B. 1000 meters	
	C. 5000 meters	D. None of the these	
390)	Aspergillosis (Brooder pneumonia) in young chicks is predisposed by the type of litter		B
	A. rice husk	B. Saw dust	
	C. sand	D. None of the these	
391)	Round worms in the chicken gut can be successfully removed by administration of		C
	A. Oxytetracycline	B. Lincomycin	
	C. Levamisole	D. None of the these	
392)	Coccidiosis can be prevented by dietary administration of		C
	A. Zinc bacitracin	B. chlortetracycline	
	C. Salinomycin	D. None of the these	
393)	Egg drop syndrome virus infection results decreased egg production and		B
	A. Lameness in the laying hens	B. weak shelled eggs	
	C. Watery albumin of eggs	D. None of the these	
394)	EDS virus is propagated in		C
	A. chicken embryo	B. Partridge embryo	
	C. Duck embryo	D. None of the these	
395)	In aflatoxicosis chicken liver show		A
	A. fatty change	B. perihepatitis	
	C. hepatocellular carcinoma	D. None of the these	
396)	Minimum acceptable level of aflatoxins B1 in poultry feed is		C
	A. 100 ppb	B. 300 ppb	
	C. 20 ppb	D. None of the these	
397)	Furazilodone toxicosis in chicken caused		A
	A. Cardiac dilatation	B. atrophy of muscles	
	C. nerve degeneration	D. None of the these	
398)	Copper sulfate toxicity in chicken results in		A
	A. liver damage	B. muscular degeneration	
	C. nervous derangement	D. None of the these	
399)	Acceptable levels of sodium in poultry feeds are		C
	A. 3%	B. 5 %	
	C. less than 1 %	D. None of the these	
400)	Excess of Sodium in poultry feed results in		A
	A. Ascites	B. muscle degeneration	
	C. soft bones	D. None of the these	
401)	Low dietary phosphorus levels result in		B
	A. hyperesthesia	B. Visceral gout	
	C. Blindness	D. None of the these	

402)	Excess dietary Calcium levels result in				A
	A.	Urate deposits in kidneys	B.	liver damage	
	C.	cardiac dilatation	D.	None of the these	
403)	Low calcium levels in feed results in				B
	A.	small size of eggs	B.	weak shell of eggs	
	C.	kidney damage	D.	None of the these	
404)	Collibacillosis is caused by				A
	A.	<i>E. coli</i>		<i>Salmonella</i>	
	C.	<i>Clostridium</i>	D.	None of the these	
405)	Characteristic lesion in <i>E.Coli</i> infection is				A
	A.	Pericarditis & Perihapatitis	B.	Hemorrhagic enteritis	
	C.	Swollen and edematous bursa	D.	None of the these	
406)	Salmonellosis is also called as				A
	A.	Bacillary white diarrhea	B.	White scour	
	C.	Bloody diarrhea	D.	None of the these	
407)	Causative agent of fowl typhoid is				B
	A.	<i>Salmonella pullorum</i>	B.	<i>salmonella gallinarum</i>	
	C.	<i>salmonella typhimurium</i>	D.	None of the these	
408)	Drug of choice for salmonella is				A
	A.	Chloromphenicol	B.	Oxytetracycline	
	C.	Tylosin	D.	None of the these	
409)	Fowl typhoid is caused by				A
	A.	<i>Salmonella</i>	B.	<i>E.Coli</i>	
	C.	<i>Streptococcus</i>	D.	None of the these	
410)	Coccidiosis is a disease of				C
	A.	Broilers	B.	Layers	
	C.	Both above	D.	None of the these	
411)	Increase vitamins ----- reduce the mortality				A
	A.	Vit. A & Vit.K	B.	Vit. C & Vit.K	
	C.	Vit. B & Vit.C	D.	None of the these	
412)	Cecal Coccidiosis is caused by				A
	A.	<i>Eimeria tenella</i>	B.	<i>Eimeria acervulina</i>	
	C.	<i>Eimeria praecox</i>	D.	None of the these	
413)	Coccidiosis is a				A
	A.	protozoal disease	B.	bacterial disease	
	C.	viral disease	D.	None of the these	
414)	Coccidiosis is a				B
	A.	vertically transmitted disease	B.	horizontally transmitted disease	
	C.	None of any one	D.	None of the these	
415)	In Coccidiosis hemorrhages occur in				A
	A.	Intestine	B.	Proventriculus	
	C.	Heart	D.	None of the these	
416)	In recovery stage of Coccidiosis birds are more susceptible to				A
	A.	Clostridial diseases	B.	Fungal Diseases	
	C.	Viral diseases	D.	None of the these	
417)	Renal Coccidiosis is common in				A
	A.	Geese	B.	Ducks	
	C.	Chicken	D.	None of the these	
418)	In chicken ----- species of <i>Eimeria</i> have been described				A
	A.	9	B.	6	
	C.	12	D.	None of the these	
419)	Epitheliogenesis imperfecta lingua bovis is a defect in which tongue is				A



	A. Abnormally smooth	B. Normally smooth	
	C. Abnormally rough	D. All of these	
420)	Death of puppy occurs soon after birth in lethal glossopharyngeal defect, as it cannot suckle because of		B
	A. Malformed web-shaped tongue	B. Malformed small pointed tongue	
	C. Abnormally smooth tongue	D. All of these	
421)	Wolf teeth or Supernumerary teeth is rudimentary in size and is seen inside the cheek of		C
	A. Ram	B. Bull	
	C. Horse	D. Both A&B	
422)	Most frequent congenital anomaly is cleft palate seen in		C
	A. Caprines	B. Equines	
	C. Bovines	D. Both A&C	
423)	Ptylism is hyper secretory phase; seen in		A
	A. Strangle in horse	B. Equines Infectious anemia	
	C. Chocking in Horse	D. All Above	
424)	Ptylism is hyper secretory phase; seen in		B
	A. FMD in calves	B. Vit. A deficiency - in calves	
	C. Neonatal calf diarrhoea	D. All Above	
425)	Adenocarcinoma is malignant tumour of		C
	A. Muscles	B. Bones	
	C. Glands	D. All Above	
426)	Choking is common in		B
	A. Horse	B. Cattle	
	C. Goats	D. Both B&C	
427)	Eaten sharp pieces of bones lodge in thoracic esophagus in		C
	A. Bovines	B. Equines	
	C. Canines and Felines	D. Both A&B	
428)	If choke is not relieved within 3 days leads to death due to local		A
	A. Gangrene	B. Congestion	
	C. Hemorrhages	D. None of these	
429)	Choke may interfere with regurgitation of gas leads to		B
	A. Diarrhoea	B. Typmany	
	C. Constipation	D. None of these	
430)	Functions of rumen, reticulum and omasum are		A
	A. Storage of fodder and bacterial decomposition	B. Storage of fodder	
	C. Bacterial decomposition	D. All Above	
431)	Rumen, reticulum and omasum have		B
	A. No secretory activity	B. Secretory activity	
	C. Hyper secretory activity	D. All Above	
432)	Bloat is accumulation of excessive quantity of gas in		B
	A. Reticulum	B. Rumen	
	C. Omasum	D. None of above	
433)	As a result of interference with normal eructation of gases it leads to		B
	A. Diarrhoea	B. Pathological bloat	
	C. Constipation	D. Both A&B	
434)	Following animals are not equipped with highly sensitive prehensile organs and delicate sense of taste		A
	A. Bovine	B. Equine	
	C. Porcine	D. All Above	
435)	Ingested sharp objects go to reticulum and can move to any direction but majority move to		A
	A. Anteriorly	B. Posteriorly	
	C. None of the above direction	D. None of these	
436)	Important pathological processes seldom occur at		B
	A. Reticulum	B. Omasum and the esophageal groove	
	C. Rumen	D. All Above	
437)	Inflammation of the mucosa of the stomach is called		B
	A. Stomatitis	B. Gastritis	

	C. Gastro-enteritis	D. Both A&C	
438)	Free blood present in acute hemorrhagic gastritis turns to		B
	A. Red	B. Brown	
	C. Bluish	D. Both A&C	
439)	Typhlitis is the inflammation of		A
	A. Cecum	B. Tongue	
	C. Stomach	D. None of these	
440)	Hemorrhagic enteritis is a violent form of		A
	A. Catarrhal enteritis	B. Purulent enteritis	
	C. Fibrinous enteritis	D. None of these	
441)	FMD is Disease of		B
	A. Closed footed animals	B. Cloven footed animals and human beings	
	C. None of the above	D. All of these	
442)	Vesicular lesions are present on oral mucosa covering lips, dorsum of the tongue and palate severely involved in		A
	A. FMD	B. Rinderpest	
	C. Malignant catarrhal fever	D. All of these	
443)	Epithelium of the anterior 2/3 dorsum of the tongue become eroded and blood may ooze out in		C
	A. Rinderpest	B. Malignant catarrhal fever	
	C. FMD	D. None of these	
444)	In younger animals the disease is fatal, high mortality due to acute gastritis and myocarditis (Tiger heart) in		B
	A. Bovine viral diarrhea	B. FMD	
	C. Paratuberculosis	D. All Above	
445)	This disease can deprive whole the world from meat/beef within days		A
	A. Rinderpest	B. Malignant catarrhal fever	
	C. Tuberculosis	D. None of these	
446)	The abomasum is one of the most common sites of lesions because it is the site of predilection of the virus in		B
	A. Malignant catarrhal fever	B. Rinderpest	
	C. Paratuberculosis	D. All Above	
447)	Vesicles are not seen at any stage of the disease		B
	A. Actinomycosis	B. Rinderpest	
	C. Actinobacillosis	D. All Above	
448)	Streaks of congestion along the folds of mucosa produce a characteristic a Zebra-striped appearance in		C
	A. Mucosal disease complex	B. Johne's disease	
	C. Cattle plague	D. Both A&B	
449)	Acute, highly contagious and fatal disease with high mortality 90-98% in sheep, goat, cattle and camel characterized by high fever, focal erosive lesions confined to mucosa of alimentary tract. Point out the disease		C
	A. Malignant catarrhal fever	B. Paratuberculosis	
	C. Cattle plague	D. Both A&B	
450)	Cooked brain appearance and odour resembling the nutrient broth is seen in		A
	A. Malignant catarrhal fever	B. Paratuberculosis	
	C. Johne's disease	D. All Above	
451)	Failure of skin lesions to heal is important, a clinical finding suggestive of		A
	A. Chronic Mucosal disease	B. Johne's disease	
	C. FMD	D. All Above	
452)	Lumpy jaw is seen in		C
	A. Rinderpest	B. Actinobacillosis	
	C. Actinomycosis	D. Both A&B	
453)	Wooden Tongue is the seen in		B
	A. Malignant Catarrhal Fever	B. Actinobacillosis	
	C. Actinomycosis	D. All Above	
454)	Edema and cyanosis of tongue are so striking that the name of the disease is given		A
	A. Blue tongue	B. Actinobacillosis	
	C. Actinomycosis	D. None of these	
455)	Lateral and ventral surface of the tongue are affected in		C

	A. Chronic Mucosal disease	B. Johne's disease	
	C. Blue tongue	D. None of these	
456)	The disease may terminate in Severe Emaciation, Prostration and Muscular Weakness which may last 3 weeks or more, Followed by Pulmonary Edema and Death from Pneumonia.		B
	A. Chronic Mucosal disease	B. Blue tongue	
	C. Johne's disease	D. All Above	
457)	The disease is characterized by severe cyanosis of the distal portion of the tongue which makes it practically black Name the disease		C
	A. FMD	B. Blue tongue	
	C. Black tongue	D. None of these	
458)	In chronic cases of hepatitis, liver cell carcinoma in		A
	A. 10% cases	B. 20% cases	
	C. 15% cases	D. None of these	
459)	Which enzyme is thought to be liver specific and is released with the damage of hepatocytes?		B
	A. AST	B. ALT	
	C. ALP	D. None of these	
460)	In hepatitis patients prothrombin times increased due to		A
	A. Upset of Coagulation mechanism	B. Increased ALT	
	C. Increased AST	D. All Above	
461)	In hepatitis patients ascities develops due to		B
	A. Upset of Coagulation mechanism	B. Portal hypertension	
	C. Increased ALT	D. All Above	
462)	Anthrax is an acute infectious disease caused by the spore-forming bacterium		B
	A. <i>Clostridium perfringens</i>	B. <i>Bacillus anthracis</i>	
	C. <i>Trypanosoma equiperdum</i> .	D. None of these	
463)	Anthrax infection can occur in		A
	A. Cutaneous (skin), inhalation, and gastrointestinal forms	B. Inhalation, and reproductive forms	
	C. Cutaneous, nervous and gastrointestinal forms	D. All Above	
464)	Can anthrax be spread from person-to-person?		B
	A. Yes	B. No	
	C. None of the above	D. All Above	
465)	<i>Bacillus anthracis</i> has following virulence factors		A
	A. Edema, protective antigen, capsule and lethal factor	B. Protective antigen, flagella and lethal factor	
	C. Edema, flagella, and protective antigen	D. All Above	
466)	In anthrax toxemia is due to		C
	A. Lethal toxin	B. Edema toxin	
	C. Edema toxin and lethal toxin	D. Both A&B	
467)	Grossly skin is composed of		A
	A. Three Layers	B. Five Layers	
	C. Seven Layers	D. None of above	
468)	Dermis is separated from epidermis by		B
	A. Thick basement membrane	B. Thin basement membrane	
	C. None of the above	D. All above	
469)	In dermis, papillary layer is composed of		B
	A. Connective tissue and collagen fibers	B. Connective tissue, collagen & elastic fibers	
	C. Collagen & elastic fibers	D. All Above	
470)	Physical barriers of skin include		C
	A. Hair coat and stratum corneum	B. Pigments and stratum corneum	
	C. Hair coat, pigments, stratum corneum	D. None of these	
471)	Hypodermis is rich in elastic fibers and		A
	A. Poor in collagen fibers	B. Rich in collagen fibers	
	C. No collagen fibers	D. All Above	
472)	Of the pox diseases, following have systemic distribution		A
	A. Sheep-pox, goat-pox and lumpy skin disease	B. Goat-pox and lumpy skin disease	
	C. Sheep-pox	D. Lumpy skin disease	
473)	In sheep-pox, after healing when scabs are removed, surface is free of hair or wool remains there with		A

	A. Star-shaped lesion	B. Square-shaped lesion	
	C. Triangular-shaped lesion	D. None of above	
474)	In sheep-pox, mortality reaches upto		C
	A. 70 %	B. 100%	
	C. 50%	D. Both A&B	
475)	In lumpy skin disease, cutaneous firm nodules reaches up to (diameter)		C
	A. 10 cm	B. 15 cm	
	C. 5 cm	D. Both A&B	
476)	In pseudo-cowpox, after healing when scabs are removed, raised lesion that heals from the centre and leaves a surface is free of hair or wool remains there with		A
	A. Horse-shoe or circular lesion	B. Square-shaped lesion	
	C. Triangular-shaped lesion	D. Both B&C	
477)	Parapoxvirus which has similar characteristics to		D
	A. Vacciniavirus	B. Smallpoxvirus	
	C. Orthopoxvirus	D. All Above	
478)	Contagious ecthyma infection is more in		A
	A. Young animals	B. Old animals	
	C. None of the above	D. All Above	
479)	In contagious ecthyma excessive & abnormal keratinization in the form of		B
	A. Scabs	B. scales & fissures	
	C. None of the above	D. All Above	
480)	Solar dermatitis is also associated with		A
	A. Squamous cell carcinoma/horn core cancer	B. Haemangiosarcoma	
	C. Fibroma	D. None of Above	
481)	Skin lesions in Intermediate hypersensitivity reactions involves		B
	A. Single/local site	B. Multiple sites	
	C. None of the above	D. All Above	
482)	In flea bite following reaction (s) take place:		C
	A. Type I (Immediate Hypersensitivity reaction-IgE)	B. Type IV (Delayed Hypersensitivity reaction-Lymphocytes)	
	C. Both Type I and type IV	D. None of these	
483)	Dermatophytes invade keratinized tissues by producing Proteolytic enzymes enzymes such as:		C
	A. Keratinase	B. Lipase	
	C. Both above	D. None of above	
484)	The most common and important cutaneous mycosis of bovine and man is		A
	A. <i>Trichophyton verrucosum</i>	B. <i>Demodex folliculorum</i>	
	C. <i>Trichophyton equinum</i>	D. Both B&C	
485)	Highly contagious and most severe type of mange is		B
	A. Chorioptic mange	B. Sarcoptic mange	
	C. Demodectic mange	D. All Above	
486)	The commonest form of mange in cattle and sheep is		A
	A. Chorioptic mange	B. Sarcoptic mange	
	C. Demodectic mange	D. None of these	
487)	Leg mange is also a problem in agricultural animals, the involved is		C
	A. Sarcoptic mange	B. Demodectic mange	
	C. Chorioptic mange	D. None of these	
488)	Congenital hyperplasia of muscles in cattle and dogs may cause dystocia in		C
	A. Anterior presentation	B. Posterior presentation	
	C. Both presentation	D. None of these	
489)	In Monday Morning disease, examination of certain groups muscles revealed that they are swollen and hard as wood, these include:		B
	A. femoral or gluteal	B. Lumber, femoral or gluteal	
	C. Gluteal or lumber	D. None of the above	
490)	In Monday Morning disease, when O <sub>2</sub> immediately is limited, the remaining 4/5 pyruvic acid is converted to		B
	A. Formic acid	B. Lactic acid	
	C. Pyruvic acid	D. Both A&C	

491)	In Monday Morning disease color of Urine is darker to brown shade due to		C
	A. Haematuria	B. Haemoglobinuria	
	C. Myoglobinuria	D. Both A&B	
492)	In azoturia, biochemical changes in affected muscles reveal decreased concentration of		A
	A. Glycogen/Adenosine triphosphatase/Creatine phosphatase	B. Lactate/Glucose	
	C. None of the above	D. All Above	
493)	In azoturia, serum analysis reveals increased concentration of		B
	A. Glycogen/Adenosine triphosphatase/Creatine phosphatase	B. Creatine phosphokinase and AST	
	C. ALT	D. None of Above	
494)	Synonyms Of White Muscle Disease are		D
	A. Enzootic Muscular Dystrophy	B. Stiff Lamb Disease	
	C. Nutritional Muscular Degeneration	D. All of the above	
495)	Selenium is Essential part of enzyme (s)		C
	A. Selenoenzyme	B. Glutathione peroxidase	
	C. Both above	D. None of these	
496)	An antioxidant agent to protect Cellular membranes is		B
	A. Vit. D	B. Vit. E	
	C. Vit. C	D. Vit. A	
497)	Scattered pale or white streaks in cardiac and Skeletal muscles are seen in		B
	A. Azoturia	B. White muscle disease	
	C. Haemoglobinuria	D. Both A&C	
498)	Periosteum remains intact and hold pieces of bone intact in		C
	A. Compound Fracture	B. Impacted Fracture	
	C. Green stick Fracture	D. None of these	
499)	Bone fracture plus injury to outer skin and overlying muscles is seen in		A
	A. Compound Fracture	B. Impacted Fracture	
	C. Green stick Fracture	D. None of these	
500)	Adequate blood supply and stability of bony fragments are of ----- in bone healing		B
	A. Least importance	B. Prime importance	
	C. Secondary importance	D. None of these	
501)	Principal causes of osteodystrophies are the deficiencies or imbalance of		D
	A. Calcium	B. Phosphorus	
	C. Vit. D	D. a-c	
502)	Relative or absolute deficiency of ----- leads to hyper parathyroidism, development of osteoporosis and fibrous osteodystrophy		A
	A. Calcium	B. Phosphorus	
	C. Vit. D	D. All Above	
503)	Primary hyperparathyroidism in animals is		B
	A. Common	B. Rare	
	C. None of the above	D. All Above	
504)	End result of Rickets/osteomalacia may be		A
	A. Fibrous osteodystrophy	B. Osteofibroma	
	C. Osteosarcoma	D. All Above	
505)	Normally Ca : P ratio is 1:20, but in rickets/osteomalacia disturbed ---- ratio is seen:		A
	A. 1:50	B. 1:100	
	C. 1:1	D. Both B&C	
506)	----- is characterized by failure of adequate deposition of Ca (Chiefly Ca. Phosphate) in the bones of growing animals and children.		B
	A. Fibrous osteodystrophy	B. Rickets	
	C. Osteomalacia	D. None of these	
507)	Which disease comes in mind with the lesions enlargement of ends of long bones and costochondral, bow legs and Pot Belly.		C
	A. Fibrous osteodystrophy	B. Osteosarcoma	

	C. Rickets/Osteomalacia	D. Both A&B	
508)	Classic cause of Rickets/osteomalacia is		C
	A. Calcium	B. Phosphorus	
	C. Vit. D	D. Vit. A	
509)	In Fibrous osteodystrophy, fibrous connective tissue undergoes cystic degeneration: probably due to insufficient blood supply		B
	A. Sufficient blood supply	B. Insufficient blood supply	
	C. Excessive blood supply	D. None of these	
510)	In osteopetrosis, bones are enlarged, deformed, heavy and dense with calcium but surprisingly		A
	A. Brittle	B. Soft	
	C. Hard	D. All Above	
511)	Exostoses of 1st and 2nd Phalanx is called as		C
	A. Bone Spavin	B. Splints	
	C. Ring bone	D. Both A&B	
512)	Exostoses formed on distal portion of tarsus is called as		A
	A. Bone Spavin	B. Splints	
	C. Ring bone	D. All Above	
513)	Exostoses at 2 <sup>nd</sup> and 4 <sup>th</sup> metacarpal is called as		A
	A. Splints	B. Bone Spavin	
	C. Ring bone	D. None of these	
514)	Painful peri-arthritis is caused by		C
	A. Bone Spavin	B. Splints	
	C. Ring bone	D. None of these	
515)	It does not lead to lameness because of its location		B
	A. Bone Spavin	B. Splints	
	C. Ring bone	D. None of these	
516)	Of all the malignant tumors of the bones, ----- tumor has the great prevalence (%):		C
	A. Osteofibroma	B. Chondrosarcomas	
	C. Osteosarcomas	D. Both A&B	
517)	Most commonly reported congenital and hereditary anomalies in dogs is		B
	A. Polycystic kidneys	Ectopic ureter	
	C. Renal agenesis	D. None of these	
518)	Acute glomerulonephritis is caused by		A
	A. Streptococci	B. Staphylococci	
	C. None of the above	D. All Above	
519)	The lesions in glomeruli is characteristic under light microscopy, however, not recognizable definitely in gross specimens.		B
	A. Chronic glomerulonephritis	B. Acute glomerulonephritis	
	C. None of the above	D. All Above	
520)	The proliferative epithelial cells may accumulate along the parietal layer of Bowman's capsule to form "Epithelial crescent".		A
	A. Chronic glomerulonephritis	B. Acute glomerulonephritis	
	C. Nephritis	D. All Above	
521)	Glomeruli are initially congested, oedematous and conspicuous.		B
	A. Chronic glomerulonephritis	B. Acute glomerulonephritis	
	C. None of the above	D. All Above	
522)	Severe fibrosis of the interstitium results from ischemia results in tubules atrophy, decrease in size of the kidney and increased in density. At this it is difficult to reconstruct the events in glomeruli and interstitium in		B
	A. Acute glomerulonephritis	B. Chronic glomerulonephritis	
	C. Nephrosis	D. Both A&C	
523)	Nephrotic syndrome is believed to result from increased permeability of the glomeruli to ----- which lost with urine		C
	A. Carbohydrate	B. Fat	
	C. Protein	D. Lipids	
524)	Lesions in basement membrane and podocytes could account for increased permeability that leads loss of proteins in		B
	A. Acute/Chronic glomerulonephritis	B. Nephrotic syndrome	
	C. Nephrosis	D. None of these	

525)	Pyelonephritis develops by ascending infection from	A. Lower urinary tract	B. Upper urinary tract	A
		C. None of the above	D. All Above	
526)	In pyelonephritis specific isolates are	A. <i>Pseudomonas aeruginosa</i>	B. <i>Corynaebacterium renale</i>	B
		C. Staphylococci	D. All Above	
527)	Urine stasis in pyelonephritis can occur as a result of blocking of	A. Tuft Tuft Capillaries	B. Ureters	B
		C. Glomeruli	D. None of these	
528)	Pulpy Kidney Disease is caused by	A. <i>Clostridium perfringens</i> type A	B. <i>Clostridium perfringens</i> type C	C
		C. <i>Clostridium perfringens</i> type D	D. <i>Clostridium perfringens</i> type E	
529)	Because of the dense nature of the walls, the exudative or proliferative changes are less extensive and attract less attention as compared to bladder, renal pelvis, urethra etc.	A. Tuft Tuft Capillaries	B. Ureters	B
		C. Glomeruli	D. All of above	
530)	Cystitis is the inflammation of	A. Cyst	B. Ureters	C
		C. Urinary bladder	D. Nephron	
531)	Cystitis occurs sporadically due to introduction of infection into the bladder when trauma to the bladder has occurred or when there is stagnation of urine.	A. No	B. Yes	B
		C. None of the above but Third option is there	D. Both above	
532)	Formation of stony precipitates anywhere in the urinary passages is called as	A. Cystitis	B. Urolithiasis	B
		C. Solidification	D. None of above	
533)	The female usually escapes uroliths because of larger (wide) and shorter.	A. Kidneys	B. Vagina	C
		C. Urethra	D. None of above	
534)	Calculi in the bladder are often carried out with urine and may lodge in the narrow male urethra usually at the ----- in ruminants.	A. Kidneys	B. Sigmoid flexure	B
		C. Urethra	D. All Above	
535)	The calculi of herbivorous animals contains a predominance of	A. Silicates	B. Oxalate	A
		C. None on the above	D. All Above	
536)	<b>Stone</b> is very hard and heavy, white or light yellow, typically covered with sharp, hard spines which usually damages the urinary epithelium and cause haemorrhages.	A. Silicates	B. Oxalate	B
		C. None on the above	D. All Above	
537)	In carnivorous and omnivorous animals, the chemical composition of uroliths is like those calculi found in human, possible due to	A. Acidic pH of the urine	B. Alkaline pH of the urine	A
		C. Neutral pH of the urine	D. None of these	
538)	Phosphate calculi are most like the calculi of herbivora, being white or grey and consistency is	A. Hard and brittle	B. Often soft and friable	B
		C. None on the above	D. All Above	
539)	Siliceous calculi are rare in	A. Herbivora	B. Omnivora	C
		C. Carnivora	D. None of these	
540)	Stones are small, soft and of variable shape, have a shiny, greasy appearance with yellow colour and become darker on exposure to	A. Acid	B. Air	B
		C. Alkali	D. All Above	
541)	Inadequate intake of water by itself is not a cause of urolithiasis, however, if the diet is high in silicates or other minerals or if predisposing factors exist, dehydration favours calculi formation.			B

	A. No	B. Yes	
	C. None of the above	D. All Above	
542)	Simple urolithiasis has relatively little importance but as it causes obstruction anywhere in the urinary passage may lead to		A
	A. Serious complications	B. No complications	
	C. None of the above	D. All Above	
543)	Bilateral ureteral obstruction of urine due to uroliths causes.		B
	A. Ademona	B. Fatal uraemia	
	C. Adenosarcoma	D. None of these	
544)	Metastasis of Adenosarcoma is frequent and usually in		C
	A. Urinary Bladder	B. Kidneys	
	C. Lungs	D. Liver	
545)	If rupture of urethra occurs due to uroliths it leads to		A
	A. Peritonitis	B. Cystitis	
	C. Nepritis	D. None of these	
546)	This is probably the most common developmental anomaly in animals, seen especially in cattle.		A
	A. Palatoschisis	B. Cleft palate	
	C. Melanosis	D. None of these	
547)	Rhinitis means inflammation of		A
	A. nasal cavity	B. Urither	
	C. Gallbladder	D. Both B&C	
548)	Infectious bovine rhinotracheitis caused by		A
	A. Alphaherpesvirus	B. Adenovirus	
	C. Stephlococus	D. None of these	
549)	Heparin causes		A
	A. Clumping of leukocytes	B. Shrinkage of erythrocytes	
	C. Hemolysis of erythrocytes	D. None of these	
550)	Jugular vein is common site for blood collection		D
	A. In cattle and buffalo	B. In sheep and goat	
	C. In dog and cat	D. Both A & B	
551)	Relative Polycythemia is observed in		A
	A. Dehydration	B. Myeloproliferative disorder	
	C. Renal failure	D. None of these	
552)	Potassium oxalate causes		A
	A. Inhibit amylase activity	B. Shrinkage of erythrocytes	
	C. Hemolysis of RBC	D. All	
553)	Characteristic change in blood picture in polycythemia vera		B
	A. Increase in erythrocyte mass	B. Increase in RBCs, WBCs and thrombocytes	
	C. Increase in only erythrocytes	D. Both A&C	
554)	EDTA more than 2 mg/ ml of blood causes		A
	A. Shrinkage of erythrocytes	B. Haemolysis of erythrocytes	
	C. Shrinkage of leukocytes	D. Destruction of platelets	
555)	Thrombocytopenia is observed in		C
	A. In polycythemia vera	B. In non-regenerative anemia	
	C. Aplastic anemia	D. Aplastic anemia	
556)	Packed cell volume gives information about		C
	A. Degree of anemia	B. Sugar level in blood	
	C. Degree of dehydration	D. Degree of uremia	
557)	Cephalic vein is common site for blood collection		C
	A. In buffalo and cow	B. In mice and rat	
	C. In dog and cat	D. In birds	
558)	Decrease bilirubin concentration is observed in		A
	A. Bone marrow depression anemia	B. Liver diseases	
	C. Kidney damage	D. None of these	
559)	Specific gravity of cerebrospinal fluid		A
	A. 1.003-1.008	B. 1.001-1.00	



	C. 1.009-1.019	D. 1.010-1.012	
560)	Reaction of cerebrospinal fluid is		A
	A. Alkaline in reaction	B. Acidic in reaction	
	C. Normal in reaction	D. All of these	
561)	In purulent exudates		A
	A. Neutrophils predominate	B. Lymphocytes predominate	
	C. Eosinophil's predominate	D. Erythrocytes predominate	
562)	Anemia		D
	A. It is reduction in No. of erythrocytes	B. It is reduction in Hb. Concentration	
	C. It is reduction in number of leukocytes	D. Both A & B	
563)	Increased concentration of Glutamic dehydrogenase		A
	A. Liver diseases	B. Heart diseases	
	C. Cardiac muscle necrosis	D. Smooth muscle necrosis	
564)	Bromo sulfo phthalein (BSP) increases in		D
	A. Parenchymal hepatic disease	B. Biliary tract disease	
	C. Nephritis	D. Both A & B	
565)	Pigments responsible for normal color of urine		D
	A. Urobilinogen	B. Bilirubin	
	C. Urochrome	D. Both A & C	
566)	FOUCHET TEST™ is used to examine urine for		D
	A. Blood	B. Urea	
	C. Glucose	D. None of these	
567)	Glycosuria with hyperglycemia will be observed in dogs when blood glucose level is		B
	A. > 160 mg/dl	B. > 180 mg/dl	
	C. > 120 mg/dl	D. 180 mg/dl	
568)	Isoenzyme of LDH that are specific for brain and heart injury		C
	A. LDH-I & IV	B. LDH-IV & V	
	C. LDH-II & I	D. LDH-II& IV	
569)	All are characteristics of a good biomarker except		D
	A. High sensitivity but low specificity	B. Easily detectable	
	C. Non-significant elevation	D. Both A & C	
570)	For preservation of Urine Specimen, Formaline is added @ of		A
	A. 1 drop per 30 ml	B. 1 drop per 20 ml	
	C. 2 drop per 30 ml	D. 2 drop per 20 ml	
571)	Specific gravity of urine is always inversely proportional to urine volume except		D
	A. Diabetes mellitus	B. Liver Damage	
	C. Nephritis	D. Both A & C	
572)	Presence of transitional epithelial cells in urine indicate		B
	A. Problem in Vagina	B. Problem in urinary bladder	
	C. Problem in Ureter	D. None of these	
573)	Ross test is done for evaluation of		D
	A. Bilirubin in urine	B. Blood in urine	
	C. Sugar in urine	D. None of these	
574)	Which of the following is not a post renal cause of proteinuria		B
	A. Cystitis	B. Nephritis	
	C. Urethritis	D. Vaginitis	
575)	Anemia due to decreased production is seen in		A
	A. Chronic renal failure	B. Chronic renal failure	
	C. Snake venom	D. All of these	
576)	The cells of the chronic inflammation originate from the.		D
	A. Lymph node.	B. Thymus.	
	C. Spleen	D. Bone marrow	

577)	An infiltration of cell in early stages of acute inflammation is		A
	A. Neutrophils	B. Lymphocytes	
	C. Monocytes	D. All of these	
578)	Repair after acute inflammation is delayed except in		A
	A. Advanced age.	B. Protein deficiency	
	C. Iron deficiency	D. Diabetes mellitus	
579)	Extreme generalized edema with marked expansion of the extracellular fluid space within the subcutaneous tissues, visceral organs, and body cavities is called		A
	A. Anasarca.	B. Hyperthecosis.	
	C. Angioedema.	D. All of these	
580)	Cells of adaptive immune system are.		A
	A. B-cells	B. T- Cells	
	C. Neutrophil	D. None of these	
581)	Increased lipids in plasma are observed in		D
	A. In diabetes mellitus	B. Acute pancreatitis	
	C. In bone marrow depression and dehydration	D. Both A & B	
582)	Pathological increase in white blood cells is observed in		
	A. In acute hemorrhage	B. Hemolysis.	
	C. In viral infections	D. All of the Above	
583)	Increase in neutrophils with shift to the left means		B
	A. Increase in the hyper mature neutrophils in circulation.	B. Increase in the immature neutrophils in circulation.	
	C. Decrease in hyper segmented neutrophils in the circulation	D. None of these	
584)	Decrease in neutrophils below the reference limit is observed in		D
	A. Sever septicemia	B. In viral infections	
	C. In heavy metal poisoning	D. Both A & B	
585)	Increase in neutrophils with shift to right means.		A
	A. Increased hyper segmented neutrophils in circulation	B. Increase in immature neutrophils in circulation	
	C. Decrease in hyper segmented neutrophils in circulation	D. None of these	
586)	Increased bilirubin in serum indicates.		C
	A. Increased hemolysis	B. Hepatocellular damage	
	C. Both A & B	D. Iron deficiency anemia	
587)	Increased serum glutamic oxalic acetic transaminase indicates.		D
	A. Skeletal muscle	B. Liver damage.	
	C. Hepatic damage	D. All of the above	
588)	Anisocytosis is		C
	A. Variation in size of erythrocytes	B. Seen in anemia	
	C. All of the above	D. None of the above	
589)	Howell Jolly bodies are		D
	A. Seen following acute blood loss	B. In degenerative anemia	
	C. In regenerative anemia	D. Both A & C	
590)	Basophilic stippling bodies are seen		D
	A. In poisoning due to heavy metals	B. In Defective erythropoiesis	
	C. In acute blood loss	D. Both A & C	
591)	In lymphadenopathy the changes in white blood cells are		B
	A. Acute myeloid leukemia	B. Chronic lymphocytic leukemia	
	C. Monocytic leukemia	D. All of these	
592)	The property of a transudate is		C
	A. Increase in hydrostatic pressure	B. Fluid that does not clot on standing	
	C. Both A & B	D. None of these	
593)	The precursors of macrophages are:		C
	A. Eosinophils	B. Basophils	
	C. Monocytes	D. Neutrophilia	
594)	The common cells of chronic inflammation are.		B

	A. Eosinophil	B. Lymphocytes	
	C. Polymorph nuclear leukocytes	D. None of these	
595)	The hematoma is infiltrated by new capillaries, fibroblasts, and collagen is		B
	A. Embolization	B. Organization of hematoma	
	C. Thrombosis	D. All of the above	
596)	The movement of erythrocytes through the blood vessel wall is called.		B
	A. Phagocytosis.	B. Diapedesis	
	C. Pavement	D. Pinocytosis	
597)	Aplastic anemia occurs due to all except		B
	A. Chloramphenicol	B. Antimetabolites	
	C. DDT	D. Organophosphates	
598)	Which of following is Liver specific enzyme		A
	A. ALT	B. AST	
	C. LDH	D. All	
599)	In lymphadenopathy the changes in white blood cells is.		B
	A. Acute myeloid leukemia	B. Chronic lymphocytic leukemia	
	C. Monocytic leukemia	D. All	
600)	The property of a transudate is.		C
	A. Increase in hydrostatic pressure	B. Fluid that does not clot on standing	
	C. Both a & b	D. None of these	
601)	The precursors of macrophages are:		C
	a. Eosinophils.		
	b. Basophils.		
	c. Monocytes.		
	A. Eosinophils	B. Basophils	
	C. Monocytes	D. All of these	
602)	The common cells of chronic inflammation are.		B
	A. Eisonophil leukocytes	B. Lymphocytes	
	C. Polymorphonuclear leukocytes	D. All of these	
603)	The hematoma is infiltrated by new capillaries, fibroblasts, and collagen is		B
	A. Embolization	B. Organization of hematoma	
	C. Thrombosis	D. None of these	
604)	The movement of erythrocytes through the blood vessel wall is called.		B
	A. Phagocytosis	B. Diapedesis	
	C. Pavement	D. All of these	
605)	The cells of the chronic inflammation originate from the.		D
	A. Lymph node.	B. Thymus	
	C. Spleen	D. Bone marrow	
606)	An infiltration of cell in early stages of acute inflammation is.		A
	A. Neutrophils	B. Lymphocytes	
	C. Monocytes	D. All of these	
607)	Repair after acute inflammation is delayed except in.		A
	A. Advanced age	B. Protein deficiency	
	C. Iron defeciency	D. Diabetes mellitus	
608)	Extreme generalized edema with marked expansion of the extracellllular fluid space within the subcutaneous tissues, visceral organs, and body cavities is called.		A
	A. Anasarca	B. Hyperthecosis	
	C. Angioedema	D. All of these	
609)	Cells of adaptive immune system are		A
	A. B-cells	B. T- Cells	
	C. Neutrophil	D. All of these	
610)	Increased lipids in plasma are observed in		D
	A. In diabetes mellitus	B. acute pancreatitis	
	C. In bone marrow depression and dehydration	D. Both A and B	
611)	Decreased white blood cells are observed in		C
	A. Only in viral diseases	B. In dehydration	

	C. In viral diseases	D. None	
612)	Pathological increase in white blood cells is observed in		D
	A. In acute hemorrhage	B. Hemolysis	
	C. In viral infections	D. All of these	
613)	Increase in neutrophils with shift to the left means.		B
	A. Increase in the hyper mature neutrophils in circulation	B. Increase in the immature neutrophills in circulation	
	C. Decrease in hyper segmented neutrophils in the circulation	D. All	
614)	Decrease in neutrophils below the reference limit is observed in		D
	A. Sever septicemia	B. In viral infections	
	C. In heavy metal poisoning	D. Both A and B	
615)	Increase in neutrophils with shift to right means.		A
	A. Increased hyper segmented neutrophils in circulation	B. Increase in immature neutrophils in circulation	
	C. Decrease in hyper segmented neutrophils in circulation	D. None	
616)	Megaloblasts are. Immature leukocytes		D
	A. Rubriblast	B. Precursor of platelets	
	C. Immature erythrocytes	D. Both A and C	
617)	Increased bilirubin in serum indicates		D
	A. Increased hemolysis	B. Hepatocellular damage	
	C. Bone marrow depression	D. Both A and B	
618)	Increased serum glutamic oxalo acetic transaminase indicates.		D
	A. Skeletal muscle	B. Liver damage	
	C. Hepatic damage	D. ALL	
619)	Increased serum alkaline phosphatase.		B
	A. Osteomyelitis.	B. Liver necrosis.	
	C. Increased hemolysis	D. All	
620)	Increased lactic dehydrogenase in serum is observed in		
	A. Hemolysis.	B. Nephritis	
	C. Necrosis of hepatocytes	D. All of these	
621)	Disseminated intra vascular coagulation is a complication of		D
	A. Amniotic fluid embolism	B. Shock	
	C. Myocardial infarction	D. Both A and B	
622)	Lab findings suggesting hemolytic anemia include		D
	A. Increased serum LDH	B. Low reticulocyte count	
	C. Bone marrow erythroid hyperplasia	D. Both A and C	
623)	Characteristic features of iron deficiency anemia include.		D
	A. Hypochromic macrocytic anemia	B. Low serum ferritin	
	C. Raised ESR	D. Both A and B	
624)	Laboratory findings in iron deficiency anemia include		C
	A. Decreased MCV	B. Decrease in the levels of cell bond transferring receptors	
	C. Decrease in serum iron level	D. Both A and C	
625)	Aplastic anemia may occur due to		D
	A. Chloramphenicol	B. Antimetabolites	
	C. DDT	D. Both A and C	
626)	Increased intravascular hemolysis leads to		D
	A. Hemoglobinemia.	B. Increased serum haptoglobin level	
	C. Jaundice	D. Both A and C	
627)	Increased SGPT is observed in		D
	A. MI	B. Hepatic necrosis	
	C. Necrosis of skeletal muscles	D. Both B and C	
628)	Autoimmune hemolytic anemia		D
	A. Cold agglutination type is the most common form	B. Moderate splenomegaly is characteristic of warm antibody type	
	C. Warm antibody type may be secondary to drugs reactions, autoimmune disorders & carcinomas	D. Both B and C	

629)	Pancytopenia.		D
	A. Is always associated with aplastic anemia.	B. Means reduction in all three cell lines in peripheral blood.	
	C. May be the first indication of an evolving aplastic anemia	D. Both B and C	
630)	Myeloproliferative disorders leads to		D
	A. Chronic myeloid leukemia.	B. Polycythemia Vera	
	C. Primary myelodysplastic syndrome	D. Both A and B	
631)	Sickle cell anemia.		B
	A. The affected babies show the manifestations of the disease at birth	B. May cause aplastic crisis	
	C. All	D. None	
632)	Myeloproliferative disorders leads to		D
	A. Chronic myeloid leukemia	B. Polycythemia Vera	
	C. Primary myelodysplastic syndrome	D. Both A and B	
633)	Regarding polycythemia vera.		D
	A. Belongs to group of myeloproliferative disorders	B. Hemoglobin is more than 14 gm but less than 18 gm in males	
	C. Is associated with risk of terminating in acute myeloid leukemia	D. Both A and C	
634)	Acute renal failure (ARF) occurs in the following diseases.		A
	A. Acute pyelonephritis	B. chronic tubular necrosis	
	C. Non streptococcal glomerulonephritis	D. All	
635)	In chronic glumerulonephritis.		D
	A. The kidneys are asymmetrically contracted	B. Progresses to uremia in decades	
	C. Is associated with atrophy of tubules and interstitial fibrosis	D. Both B and C	
636)	Hematuria is the predominant feature in the following disease.		A
	A. IgA nephropathy	B. glomerulonephritis	
	C. Type I membranoproliferative glomerulonephritis	D. None	
637)	Increased urination is observed in.		C
	A. Central diabetes insipidus	B. Hypercalcemia	
	C. Both	D. None	
638)	Predisposing factors for acute pyelonephritis		A
	A. Immunosuppression	B. Heavy metals	
	C. Diabetes insipidus	D. all	
639)	In chronic renal failure.		B
	A. Serum phosphate level is decreased	B. Serum creatinine is more than 2mg %.	
	C. Both	D. None	
640)	The predisposing factors of renal calculi.		D
	A. Altered urinary solutes and colloids	B. Prolonged immobilization	
	C. Hyperthyroidism	D. Both A and B	
641)	Increased concentration of Glutamic dehydrogenase.		A
	A. Liver diseases	B. Heart diseases	
	C. Cardiac muscle necrosis	D. all	
642)	Bromo sulfo phthalein (BSP) increases in		A
	A. Parenchymal hepatic disease.	B. Nephritis	
	C. Cardiac muscle necrosis	D. All	
643)	Increased cholesterol in blood is observed in.		A
	A. Obstructive jaundice	B. Diabetes insipidus	
	C. Hypoadrenocorticism	D. None	
644)	Decrease concentration of albumin is observed in.		D
	A. Chronic diffuse liver disease like cirrhosis	B. Glumerulonephritis	
	C. Sever burn	D. All	
645)	Decrease A/G ratio is observed in		A
	A. Chronic inflammation	B. In new born animals	

	C. All	D. None	
646)	Decrease prothrombin concentration in blood is observed in.		D
	A. Inability to synthesis prothrombin from Vit. A	B. Hepatic damage	
	C. Bile duct obstruction	D. All	
647)	Decreased Urea level is observed		A
	A. In renal damage	B. Chronic inflammation	
	C. Hepatitis	D. All	
648)	Increased level of Uric acid in blood is observed in.		
	A. Hepatic cell necrosis	B. In renal tubular necrosis	
	C. Increased intake of protein	D. Both A and B	
649)	Red bone marrow is:		B
	A. Responsible for production of erythrocytes and granulocytes	B. Responsible for production of erythrocytes, granulocytes and thrombocytes	
	C. Responsible for the production of only erythrocytes	D. All	
650)	Yellow bone marrow consists of		A
	A. Reticular cells	B. Erythroid stem cells	
	C. Myeloid stem cells	D. All of these	
<b>Verbal Reasoning (651 – 750)</b>			
651)	We do not mean to be disrespectful when we refuse to follow the advice of our ----- leader		A
	A. Venerable	B. Dynamic	
	C. Famous	D. Gracious	
652)	I fail to understand why there is such a ----- atmosphere: we have lost a battle, not a war.		C
	A. Funereal	B. Blatant	
	C. Giddy	D. Sanguine	
653)	When he recited the passage by -----, he revealed that he was reproducing ----- without understanding their meaning.		D
	A. Sounds – meaning	B. Sounds – pronunciation	
	C. Effects – cause	D. Rote – sounds	
654)	I could not wish for more ----- occasion on which to announce my plans for enlarging our establishment.		B
	A. Ominous	B. Propitious	
	C. Magnificent	D. Pronounced	
655)	When I first began to study words in families, I was unaware that protagonist was the opposite of antagonist, that ----- was the opposite of zenith.		A
	A. Apex	B. Rood	
	C. Solstice	D. Nadir	
656)	We ask for ----- from others, yet we are never merciful ourselves.		D
	A. Clemency	B. Culpability	
	C. Sincerity	D. Selectivity	
657)	Yawn: Boredom		A
	A. Wince: Pain	B. Sigh: Hope	
	C. Blink: Nausea	D. Smile: Hatred	
658)	Loyalty: Traitor		A
	A. Truthfulness: Liar	B. Longevity: Crone	
	C. Hope: Optimist	D. None of these	
659)	Graceful: Movement		A
	A. Articulate: Speech	B. Fastidious: Grime	
	C. Servile: Rebellion	D. None of these	
660)	Entrepreneur: Labourer		A
	A. Profits: Wages	B. Arbitrator: Capitalist	
	C. Mediator: Conflict	D. None of these	
661)	Pomposity: Boastful		A
	A. Conceit: arrogant	B. Forgetfulness: youthful	
	C. Silence: nature	D. Courage: cowardly	
662)	Revelation: Prophet		A
	A. Bust: sculptor	B. Guitar: singer	
	C. Canvas: painter	D. Awl: carpenter	
663)	Elm: Tree		A

	A. Whale: mammal	B. Cart: horse	
	C. Cloud: rain	D. Painting: artist	
664)	Ungainly: elegance		C
	A. Suitable: propriety	B. Stately: majesty	
	C. Perfunctory: attention	D. None of these	
665)	Caravan: Procession.		A
	A. Wedding: ceremony	B. Merchant: commerce	
	C. Menagerie: animal	D. None of these	
666)	Acclamation:		D
	A. Appointment	B. Possession of something old	
	C. Harmony of feeling	D. Enthusiastic approval	
667)	Accentuate:		B
	A. Agree	B. Emphasize	
	C. To speed up	D. Act strongly	
668)	Alienate:		A
	A. Estrange	B. Sicken	
	C. To join with	D. Banish from country	
669)	Itinerary:		B
	A. Proposal	B. Travel plant	
	C. Foreign regulation	D. None of these	
670)	Interpolate:		A
	A. Insert	B. Reverse	
	C. Explain	D. None of these	
671)	Pomposity: Boastful		A
	A. Conceit: arrogant	B. Forgetfulness: youthful	
	C. Silence: nature	D. Courage: cowardly	
672)	Revelation: Prophet		A
	A. Bust: sculptor	B. Guitar: singer	
	C. Canvas: painter	D. Awl: carpenter	
673)	Elm: Tree		A
	A. Whale: mammal	B. Cart: horse	
	C. Cloud: rain	D. Painting: artist	
674)	Ungainly: elegance		C
	A. Suitable: propriety	B. Stately: majesty	
	C. Perfunctory: attention	D. None of these	
675)	Caravan: Procession		A
	A. Wedding: ceremony	B. Merchant: commerce	
	C. Menagerie: animal	D. None of these	
676)	Acclamation		D
	A. Appointment	B. Possession of something old	
	C. Harmony of feeling	D. Enthusiastic approval	
677)	Accentuate		B
	A. Agree	B. Emphasize	
	C. To speed up	D. Act strongly	
678)	Alienate		A
	A. Estrange	B. Sicken	
	C. To join with	D. Banish from country	
679)	Itinerary		B
	A. Proposal	B. Travel plant	
	C. Foreign regulation	D. None of these	
680)	Interpolate		A
	A. Insert	B. Reverse	
	C. Explain	D. None of these	
681)	In many cases, the formerly ----- origins of disease have now been identified though modern scientific techniques.		B
	A. Insightful	B. Mysterious	
	C. Cruel	D. Notable	

682)	Freeing embedded fossils from rock has become less ----- for paleontologists, who now have tiny vibrating drills capable of working with great speed and delicacy.		C
	A. Exploratory	B. Conclusive	
	C. Tedious	D. Respect	
683)	Many people find Ustad Salamat Ali's music not only entertaining but also ----- listening to it helps them to relax and to -- ----- the tensions they feel at the end of a tiring day.		B
	A. Soothing – heighten	B. Therapeutic – alleviate	
	C. Sweet – underscore	D. Exhausting – relieve	
684)	Famous educationist Farrukh Khan makes a career of expending the limits of tuition jobs by starting ICON, making hitherto - impossible takes ----- through the new teaching methodology designed by his academy.		B
	A. Famous	B. Feasible	
	C. Fantastic	D. Captivating	
685)	Anomalous		B
	A. Cryptic	B. Congruous	
	C. Ominous	D. Chronicle	
686)	Disperse		D
	A. Covetous	B. Bugle	
	C. Proliferation	D. Muster	
687)	Propagate		A
	A. Uproot	B. Approbation	
	C. Surf	D. saturate	
688)	Likely: Probability		D
	A. Sailor: mutineer	B. Bright: radiance	
	C. Funereal: eulogy	D. Defying: enemy	
689)	Sophist: truth		A
	A. Quack: medicine	B. Director: plan	
	C. Alarmist: legend	D. Actor: shoot	
690)	Bulldozer: excavate		B
	A. Weaver: loom	B. Jack: lift	
	C. Knife: fork	D. Hammer: bend	
691)	Fauzia presents herself as a bold journalist by asking people in politics the kinds of ----- questions that other reporters do not ask.		A
	A. Controversial	B. Circumnutating	
	C. Abnormal	D. Irrelevant	
692)	Ozone in the Earth's atmosphere ----- living organisms from damaging ultraviolet radiation.		A
	A. Protects	B. Warms	
	C. Reflects	D. absorbs	
693)	Despite his illness, Inzamam was ----- in winning his team.		D
	A. Disappointing	B. Useless	
	C. Vigorous	D. Instrumental	
694)	Salma's home looked as though it had been ----- from a rag bin; her expensive burner was her sole ---- of luxury.		B
	A. Clean – expensive	B. Salvaged - sign	
	C. Computerized – cost	D. Modernized – symbol	
695)	It was difficult to imagine Jameela ----- women, as a psychiatrist; listing wile others talked was not her style.		C
	A. A cheering	B. A smile	
	C. A talkative	D. An aggressive	
696)	A rumor that the corporation was close to the ----- caused panic among its creditors and stockholders.		B
	A. New venture	B. Bankruptcy	
	C. Dividend declaration	D. Annual board meeting	
697)	A bus driver on Murree roads should have ----- trouble ahead when the road ---- in to a blind path.		D
	A. Expected – transformed	B. Seen – collapsed	
	C. Interrogated – grew	D. Anticipated – dwindled	
698)	The softness of the early morning light ---- the room, making it larger and cozier at once.		B
	A. Scattered	B. Transformed	
	C. Transgenic	D. Classifying	



699)	The Shahid's ----- personality made it difficult for his classmates to accept him, Javed ingratiated himself with his sweetness and modesty.			C
	A. Susceptible	B. Dashing		
	C. Pretentious	D. Pleasing		
700)	He demanded ----- obedience from his roommates and was always telling them they must be compliant subject.			A
	A. Marginal	B. Complete		
	C. Formal	D. Partial		
701)	The ----- of the Fokker crash near Multan airport could have been avoided if more safety ----- had been taken.			A
	A. Tragedy – precautions	B. Incident - preserves		
	C. Fiasco – inspectors	D. Crew – measures		
702)	Though many people thought him a tedious old man, he had a ----- spirit that delighted his friends.			B
	A. Perverse	B. Youthful		
	C. Juvenile	D. Meek		
703)	For his diligent work in chemistry, Professor Jahangir was lauded at the banquet as ----- of the year.			C
	A. Teacher	B. Astrologer		
	C. Scientist	D. Administrator		
704)	Freeing embedded fossils from rock has become less ---- for paleontologists, who now have tiny vibrating drills capable of working with great speed and delicacy.			C
	A. Exploratory	B. Conclusive		
	C. Tedious	D. Respected		
705)	An editorial praised the generosity of an anonymous ---- who had donated over a million rupees and several priceless books to the college.			B
	A. Donor	B. Benefactor		
	C. Promoter	D. Rich		
706)	Muslim's alchemists tried to attain wealth by ----- copper and other base metals into gold.			D
	A. Placing	B. Coin aging		
	C. Melting	D. Transforming		
707)	The final edition of the Live and Cheating consists of six volumes; however, only a small ----- of its full volume has ever been published.			C
	A. Edition	B. Volume		
	C. Fraction	D. Chapter		
708)	The author monotonously numerates the ---- points of scientific development, while omitting the details that might ----- the reader's interest.			B
	A. Week – sell to	B. Trivial - boost		
	C. Stylistic – irritate	D. Essential – limit		
709)	The benefits of the cooperative program are ----- with both companies acquiring new production techniques.			D
	A. Challenging	B. Exclusive		
	C. Normal	D. Mutual		
710)	As ----- as she is original, Tahira has created songs for theaters, classical concerts and Pakistani movies.			A
	A. Versatile	B. Old fashioned		
	C. Sophisticated	D. solo		
711)	Because its chief accountant altered figures and completely fabricated others, the company's financial records were entirely -----			B
	A. Hidden	B. Spurious		
	C. Transparent	D. Taxable		
712)	Some of the sculptures formerly ---- the Hindu artist are now thought to have been created by one of his Muslim students			D
	A. Denied by	B. Attributed by		
	C. Adapted by	D. Submitted by		
713)	The whale shark is found in equatorial deep waters around the world, it is ----- encountered by divers;			A
	A. Rarely	B. Successfully		
	C. Anxiously	D. Constantly		
714)	Until its defeat by Ireland, Pakistan team won most of its test matches by innings and had achieved an ----- series of win.			B
	A. Defeated	B. Unbroken		
	C. Difficult	D. Aggressive		
715)	Maria forced herself to eat every piece on her plate, although she found the food practically;			C

	A. Delicious	B. Spicy	
	C. Inedible	D. Nourishing	
716)	Unprecedented turmoil in the usually thriving nation has made the formally ----- investors leery of any further involvement.		D
	A. Pessimistic	B. Cautious	
	C. Reticent	D. Sanguine	
717)	Although officials claimed that its hull was ----- the Titanic sank after hitting an iceberg.		B
	A. Iron made	B. Impenetrable	
	C. Prominent	D. Oval	
718)	In this historical arena, a single wall still stood in mute ----- to nature's force.		D
	A. Evidence	B. Tribute	
	C. Memory	D. Testimony	
719)	Our ----- objections finally got us thrown out of the examination hall.		D
	A. Silent	B. Modest	
	C. Wary	D. Vocal	
720)	Over the wall of the sirens, you could still hear the hoarse ----- of his voice		C
	A. Harshness	B. Rhythm	
	C. Sound	D. Whisper	
721)	The myths of any society serve to explain their values; by examining a people's favourite -----		A
	A. Stories	B. Rituals	
	C. Legends	D. Pastimes	
722)	Rib cage: Lungs		A
	A. Skull: Brain	B. Appendix: Organ	
	C. Sock: Foot	D. Hair: Scalp	
723)	Dominant interests often benefit most from ----- of governmental interference in business since they can take care of themselves if left alone.		B
	A. Improvisation	B. Elimination	
	C. Authorization	D. Intensification	
724)	Kagan maintains that an infant's reactions to its first stressful experiences are part of a natural process of development, not harbingers of childhood unhappiness or ----- signs of adolescent anxiety.		C
	A. Typical	B. Monotonous	
	C. Prophetic	D. Virtual	
725)	An investigation that is ----- can occasionally yield new facts, even notable ones, but typically the appearance of such facts is the result of a search in a definite direction.		B
	A. Timely	B. Unguided	
	C. Consistent	D. Uncomplicated	
726)	It comes as no surprise that societies have codes of behavior; the character of the codes, on the other hand, can often be -----		B
	A. Predictable	B. Unexpected	
	C. Admirable	D. Explicit	
727)	A misconception frequently held by novice writers is that sentence structure mirrors thought: the more convoluted the structure, the more ----- the ideas.		A
	A. Complicated	B. Engaged	
	C. Inconsequential	D. Essential	
728)	Newspapers report that the former executive has been trying to keep a low profile since his ----- exit from the company.		C
	A. Fortuitous	B. Long-awaited	
	C. Indecorous	D. Mysterious	
729)	Scientist: Laboratory		A
	A. Teacher: Classroom	B. Dentist: Drill	
	C. Lawyer: Client	D. Actor: Playwright	
730)	Brittle: Fracture		B
	A. Rain: Umbrella	B. Flammable: burn	
	C. Perpetual: stop	D. Ice: cold	
731)	Gymnasium: exercise		C
	A. Diseases: diagnosis	B. Birthday: celebrate	
	C. Store: shop	D. Army: discharge	

732)	Compass: navigation					C
	A. Clock: dial	B. Physician: disease				
	C. Camera: Photography	D. Pilot: flight				
733)	Peel: apple					D
	A. Skin: hair	B. Shoe: leather				
	C. Hull: ship	D. Shell: lobster				
734)	Finger: ring					A
	A. Neck: neckless	B. Bandage: wound				
	C. Bracelet: wrist	D. Glove: hand				
735)	Adult: child					D
	A. Tree: bush	B. Sheep: lamb				
	C. Cow: calf	D. Buck: fawn				
736)	Pepper: season					A
	A. Sugar: sweeten	B. Celery: plant				
	C. Accent: cook	D. Salt: taste				
737)	Beef: jerky					C
	A. Corn: flake	B. Venison: deer				
	C. Grape: raisin	D. Flesh: bone				
738)	Author: novel					D
	A. Composer: piano	B. Artist: easel				
	C. Painter: color	D. Sculptor: statue				
739)	Spectator: sport					B
	A. Jury: trial	B. Witness: crime				
	C. Soloist: music	D. Fan: grandstand				
740)	Walk: amble					B
	A. Work: labor	B. Go: come				
	C. Paly: rest	D. Run: fast				
741)	Frown: groan					D
	A. Stroll: amble	B. Clown: crone				
	C. Strained: wit	D. Grin: guffaw				
742)	Binoculars: see					C
	A. Spectacle: notice	B. Skeptic: idea				
	C. Ear trumpet: hear	D. Camera: aperture				
743)	Horse: steed					D
	A. Offspring: spawn	B. Compass: bore				
	C. Dampness: mildew	D. Girl: damsel				
744)	Parrot: ape					A
	A. Curve: arc	B. Wood: tree				
	C. Crane: boar	D. Alarm: fire				
745)	Evade: question					C
	A. Shrink: malingerers	B. Elicit: response				
	C. Parry: blow	D. Knowledge: thrust				
746)	Riddle: sphinx					C
	A. Luxury: limousine	B. Love: loathe				
	C. Fire: Prometheus	D. Scylla: ore				
747)	Discredited: reputation					C
	A. Choleric: heat	B. Stronghold: facility				
	C. Stilted: simplicity	D. Apprehensive: shyness				
748)	Sheep: flock					B
	A. Pigs: sty	B. Fish: school				
	C. Horse: stall	D. Buffalo: pond				
749)	Diffident: arrogance					B
	A. Confident: ambiguous	B. Brazen: Modesty				
	C. Benevolent: humanity	D. Momentum: inertia				
750)	Disperse: assemble					A
	A. Anarchy: order	B. Atmosphere: clouds				

	C. Book: title	D. Table: legs	
<b>Quantitative Reasoning (751 – 850)</b>			
751)	What is the probability that a two digit number selected at random will be a multiple of 3 and not a multiple of 5?		B
	A. 2/15	B. 4/15	
	C. 1/15	D. 4/90	
752)	How many odd numbers of three digits each can be formed from the digits 2, 4, 6 and 7 if repetition of digits is permitted?		D
	A. 6	B. 27	
	C. 24	D. 16	
753)	Suzuki comes in 5 models, 8 colors and 3 sizes. How many Suzuki must the local dealer have on hand in order to have one of each kind available?		B
	A. 24	B. 120	
	C. 16	D. 39	
754)	Saima bought two black pencils and three red pencils for Rs. 23. After a week, she bought three black pencils and two red pencils for Rs. 16. If price of pencils remained the same for both transactions, how much she paid for one black pencil?		A
	A. 2	B. 3	
	C. 4	D. 5	
755)	Twice the age of son is 4 years more than the age of his father. What is the age of the son if father is of 40?		A
	A. 22	B. 20	
	C. 18	D. 16	
756)	A rectangular lot 50 feet by 100 feet is surrounded by a concrete wall 5 feet wide. Find the number of square feet in the surface of the wall.		A
	A. 1600	B. 5250	
	C. 5500	D. 6100	
757)	Of the following, which value of x produces the greatest value of f(x)?		D
	A. -2	B. -1	
	C. 2	D. 3	
758)	Two spinning machines A and B can together produce 300,000 meters of cloth in 10 hours. If machine B alone can produce the same amount of cloth in 15 hours, how much cloth can machine A produce alone in 10 hours?		B
	A. 200,000 meters	B. 100,000 meters	
	C. 150,000 meters	D. 50,000 meters	
759)	The average of x, y, z and 40 is 10. What is the average of x, y and z?		B
	A. 10	B. 0	
	C. 2	D. 15	
760)	Out of the 44 boys in a class, 9 are of the age of 10. 15 at the age of 9 and the rest are at the age of 8. Find the average of the entire class.		B
	A. 7.85	B. 8.75	
	C. 12.2	D. 14.35	
761)	Mr. Kashif got an average of 50 in 6 tests. What should he get in the next test to attain the average of 60?		A
	A. 120	B. 60	
	C. 100	D. 70	
762)	A and B can do a job in 6 days. If A do the job alone, he takes 10 days. What will be the time required by B to complete the job alone?		C
	A. 8	B. 6	
	C. 15	D. 3	
763)	The population of 8 villages is 900, 750, 1100, 1050, 835, 1250, 555 and 630. Find the population of ninth village if the average population of nine villages is 900.		C
	A. 1200	B. 1065	
	C. 1030	D. 1800	
764)	How many miles are there between two cities if the distance is represented by a 2.4 inch line on a map having a scale of 1 inch to 8 miles		A
	A. 19.2	B. 12.8	
	C. 8.5	D. 38	
765)	What is the probability of getting all six in a single throw of three unbiased dice?		D
	A. 1/6	B. 125/216	
	C. 1/216	D. 1/36	
766)	A number is selected at random from first thirty natural numbers. What is the chance that it is a multiple of either 3 or 13?		B

	A. 17/30	B. 2/5	
	C. 11/30	D. 4/15	
767)	How many different 4 person teams can be made from a group of 9 players?		C
	A. 3024	B. 1512	
	C. 126	D. 254	
768)	How many odd numbers of three digits each can be performed from the digits 2, 4, 6 and 7 if repetition of digits is permitted?		D
	A. 6	B. 27	
	C. 24	D. 16	
769)	In all Pakistan weightlifting competition in Multan, double of first lift of Mr. Sahiwal was 150kg more than his second lift and the sum of two lifts was 375kg. What was the weight of his first lift?		C
	A. 300	B. 350	
	C. 175	D. 100	
770)	A rectangle is 16cm long and 10cm wide. If the length is reduced by K cm and its width is increased also by K cm to make it a square, then its area changes by?		D
	A. 69	B. 56	
	C. 18	D. 9	
771)	If the average of 5 and K is equal to the average of 2, 6 and K. what is the value of K?		C
	A. 2	B. 8	
	C. 1	D. 3	
772)	How much the speed of a train be increased if the driver wishes to reduce the time to reach to a certain station in 20% less time?		B
	A. 10%	B. 25%	
	C. 5%	D. 50%	
773)	What is the probability of not coming a number greater than 2 when a die is thrown?		C
	A. 0.1	B. 0.2	
	C. 0.3	D. 0.4	
774)	If 4 men and 7 boys can do a work in 29 days, then 12 men and 8 boys will do the same work in;		D
	A. 29 days	B. 17 days	
	C. 21 days	D. 7 days	
775)	A man spent 10% of his money. After spending 60% of the remainder, he has Rs. 72 left. How much had he in the start?		D
	A. 300	B. 50	
	C. 400	D. 200	
776)	What is the largest of 13 consecutive integers whose sum is 0?		C
	A. -13	B. -6	
	C. 6	D. 9	
777)	A boy scored 90 marks for his math test. This was 205 more than what he had scored for the geography test. How much did he score in geography?		B
	A. 100	B. 75	
	C. 50	D. 72	
778)	What is the next number in the geometric progression 4, 12, 36?		D
	A. 200	B. 172	
	C. 480	D. 108	
779)	The average of five numbers is 26. After one of the numbers is removed, the average of the remaining number is 25. What number has been removed?		D
	A. 31	B. 25	
	C. 26	D. 30	
780)	What is the remainder when $6^3$ is divided by 8?		A
	A. 0	B. 1	
	C. 2	D. 3	
781)	Of the following, the one that is not a meaning of $2/3$ is		B
	A. 3 of the 9 equal parts of 2	B. 2 of the 3 equal parts of 3	
	C. 2 divided by 3	D. A ratio of 2 to 3	
782)	If the average weight of boys who are Shan's age and height is 120lbs, and if Shan weighs is 110% of the average, then Shan weighs		B
	A. 140lbs	B. 132lbs	

	C. 114.5lbs	D. 120lbs	
783)	During a half-price sale, Mr. Kamran bought a notebook for the usual price and a second notebook for one-half the usual price. If he paid 15.60 for the 2 notebooks, what was the usual price of a notebook?		D
	A. 7.50	B. 20.80	
	C. 8.60	D. 10.40	
784)	If $x - 2$ is less than $y$ then;		C
	A. $x$ and $y$ are positive	B. $y$ is less than $x + 2$	
	C. $y + 2$ is greater than $x$	D. $x$ and $y$ are equal	
785)	If it is now June, what month will be 100 months from now?		B
	A. January	B. April	
	C. October	D. December	
786)	A number is selected at random from first thirty natural numbers. What is the chance that it is a multiple of either 3 or 13?		B
	A. $17/30$	B. $2/5$	
	C. $11/30$	D. $4/15$	
787)	What is the probability of getting all six in a single throw of three unbiased dice?		D
	A. $1/6$	B. $125/216$	
	C. $1/36$	D. $1/216$	
788)	What is the probability that a two-digit number selected at random will be a multiple of 3 not a multiple of 5?		B
	A. $2/15$	B. $4/15$	
	C. $1/15$	D. $4/90$	
789)	When two dice are thrown simultaneously, what is the probability that the sum of the two numbers that turn up is less than 11?		B
	A. $5/6$	B. $11/12$	
	C. $1/6$	D. $1/12$	
790)	When 4 dice are thrown, what is the probability that the same number appears on each of them?		C
	A. $1/36$	B. $1/18$	
	C. $1/216$	D. $1/5$	
791)	How many different 4 person teams can be made from a group of 9 players?		D
	A. 3024	B. 1512	
	C. 254	D. 126	
792)	How many odd numbers of three digits each can be formed from the digits 2, 4, 6 and 7 if repetition of digits is permitted?		D
	A. 6	B. 27	
	C. 24	D. 16	
793)	If $2x + 5y = 18$ and $x = 4$ then what is the value of $y$ ?		A
	A. 2	B. 3	
	C. 4	D. 5	
794)	The value of $x^2 + 5x + 6$ at $x = 2$ is?		B
	A. 2	B. 20	
	C. 40	D. 10	
795)	One positive number is $2/3$ of the other and their product is 24. What is the sum of the two?		D
	A. 6	B. 18	
	C. 36	D. 10	
796)	If $x + 2y = 11$ and $2x + 3y = 17$ then $y$ is?		B
	A. 6	B. 5	
	C. 4	D. 3	
797)	A rectangular lot 50 feet by 100 feet is surrounded by a concrete walk 5 feet wide. Find the number of square feet in the surface of the walk?		A
	A. 1600	B. 5250	
	C. 5500	D. 6100	
798)	One-sixth of a day is what part of the time between 3 pm Monday and 3 pm Thursday of the same week?		C
	A. $1/10$	B. $1/18$	
	C. $1/15$	D. $1/12$	
799)	If you have 50 green, 50 orange and 50 yellow jellybeans, how many bags can fill for Halloween each containing 2 green, 3 orange and 4 yellow jellybeans?		A
	A. 12	B. 13	
	C. 16	D. 17	

800)	Which of the following is the sum of two consecutive prime numbers?		B
	A. 66	B. 52	
	C. 41	D. 29	
801)	If Myra had bowling scores of $b + 6$ , $b - 2$ , $b + 4$ and $b - 5$ , what must she score in the next game to get an overall average of $b + 2$ ?		A
	A. $b + 7$	B. $b - 3$	
	C. $b + 3$	D. $b - 7$	
802)	A clock gain 8 minutes every $x$ hour. How many hours will the clock gain in 3 days?		B
	A. $576/x$	B. $48/5x$	
	C. $24/x$	D. $576/5x$	
803)	How many integers between 28 and 98 are exactly divisible by 7?		A
	A. 9	B. 11	
	C. 12	D. 8	
804)	If $(p - 3)(p + 5) > (p - 3)(p + 8)$ , what is the best description of $p$ ?		D
	A. $p = 3$	B. $-8 < p < -5$	
	C. $p = \{ \}$	D. $p < 3$	
805)	If $(36)(?) = 21$ , then ? equals		C
	A. $21/43$	B. $1/42$	
	C. $1/12$	D. $1/11$	
806)	If a machine can place a cap on a bottle of soda every 0.8 seconds, how many bottles can be capped in 2 hours?		B
	A. 8000	B. 9000	
	C. 300	D. 900	
807)	If 7 apples cost $y$ cents, how many apples will $x$ dollars buy?		D
	A. $x/7y$	B. $7x/y$	
	C. $7x/100y$	D. $700x/y$	
808)	Subhan is twice as old as Bukhari, who is 3 years older than Shakir, if Shakir is $4a$ years old, Subhan's age is;		D
	A. $8a$	B. $22a$	
	C. $14a$	D. $8a + 6$	
809)	The average height of five men is 68 inches. If one man is 70 inches tall and three others have an average of 67 inches, the height of the fifth man in inches is;		B
	A. 68	B. 69	
	C. 70	D. 71	
810)	If $p$ is a negative integer and $p^2 + 11p = t$ , the value of $t$ could be		C
	A. 12	B. 18	
	C. -18	D. 11	
811)	A businessman started a business with a capital of Rs. 80,000/- His first-year accumulated profit was 10% and second-year profit was 20%. What was the total amount of after second year?		A
	A. 105600	B. 201200	
	C. 50000	D. 100050	
812)	In the rectangular solid, $AD = 6$ , $DC = 8$ and $BC = 1/2CD$ . What is the volume of the solid?		C
	A. 18	B. 208	
	C. 192	D. 302	
813)	If $x/9 = 2/3$ , then $x = ?$		B
	A. $8/3$	B. 6	
	C. 3	D. $27/2$	
814)	Multan traffic authority requires that an applicant for a driver's license answer at least 80% of the questions on a written test correctly. If the test has 60 questions on it, at least how many of these questions must be answered correctly?		D
	A. 20	B. 44	
	C. 46	D. 48	
815)	If $x/y = -1$ then $x + y = ?$		A
	A. 0	B. 1	
	C. $y$	D. $2x$	
816)	If it takes 4 days for 3 machines to do a certain job, how many days are required to complete the job by two machines?		A
	A. 6 days	B. 5 and half days	
	C. 5 days	D. 4 and half days	

817)	Yesterday, Sagher earned Rs. 100 less than Bilal and today Sagher earned Rs. 75 more than Bilal. Which of the following must be true about Sagher's total earnings for the two days compared to Bilal?	D
	A. Sagher earned $\frac{3}{4}$ of what Bilal earned	B. Sagher earned \$17.50 more than Bilal
	C. Sagher earned \$2.50 more than Bilal	D. Sagher earned \$25 less than Bilal
818)	If $p^2 + 5 = 22$ , then $p^2 - 5 = ?$	A
	A. 12	B. 17
	C. 391	D. 44
819)	If r, s and t are integers greater than 1, where $rs = 15$ and $st = 33$ , which of the following must be true?	A
	A. $t > r > s$	B. $s > t > r$
	C. $r > t > s$	D. $s > r > t$
820)	A total of 60 drawing notebooks were sold. If 20% of the first 20 sold were in color, 40% of the next 30 sold were in color and 80% of the last 10 sold were in color. What % of the 60 notebooks were in color?	B
	A. 30%	B. 40%
	C. 60%	D. 20%
821)	The positive difference between k and $\frac{1}{8}$ is same as the positive difference between $\frac{1}{2}$ and $\frac{1}{3}$ . Which of the following could be the value of k?	B
	A. $\frac{1}{7}$	B. $\frac{7}{24}$
	C. $\frac{23}{24}$	D. $\frac{1}{6}$
822)	How many polythene bags, each holding 8 ounces, are needed to hold 3 quarter of vegetable oil? (1 quarter = 32 fluid ounces)	B
	A. 8	B. 12
	C. 14	D. 16
823)	If $(2n - 4)(9 - 5) = 16$ , then $n = ?$	A
	A. 1	B. 4
	C. 7	D. 6
824)	In a screening process of 5600 candidates, 20% of the candidates were disqualified in first test. In the second test 40% of the first test qualifiers were disqualified. How many candidates qualified the test?	A
	A. 2688	B. 1344
	C. 3600	D. 5000
825)	A class of 30 girls and 40 boys sponsored a mango party. If 60% of the girls and 25% of the boys went on the party, what % of the class went on the party?	D
	A. 30%	B. 35%
	C. 50%	D. 40%
826)	If $x = yz$ , which of the following must be equal to $xy$ ?	C
	A. $yx$	B. $yz^2$
	C. $y^2z$	D. $x/y$
827)	Which of the following operation has same effect as multiplying by 0.5?	A
	A. Multiplying by $\frac{1}{2}$	B. Multiplying by 2
	C. Dividing by $\frac{1}{2}$	D. Dividing by 3
828)	The average of a, b, s and t is 6 and the average of s and t is 3. What is the average of a and b?	C
	A. 3	B. 18
	C. 9	D. 12
829)	If x is a positive number, then 50% of $10x$ equals;	D
	A. $2x$	B. $4x$
	C. $20x$	D. $5x$
830)	What is the least of three consecutive integers whose sum is 18?	D
	A. 2	B. 3
	C. 4	D. 5
831)	If $\frac{5}{6n} = 60$ , then $\frac{1}{6n} = ?$	C
	A. 8	B. 10
	C. 12	D. 50
832)	Which is the greatest?	C
	A. $\frac{4}{9}$	B. $\frac{5}{11}$
	C. $\frac{8}{15}$	D. $\frac{9}{17}$
833)	For how many integer values of g is $6 < 3g < 12$ ?	D
	A. Four	B. Three
	C. Two	D. One



834)	The average of four consecutive even integers is T. the second of these integers can be represented in terms of T as;	A
	A. $T - 1$	B. $T + 1$
	C. $T + 2$	D. $4T - 8$
835)	The total number of eighths in $3\frac{3}{4}$ is;	C
	A. 15	B. 54
	C. 30	D. 24
836)	In the figure, the area of circle $O = 9\pi$ , what is the area of ABCD?	D
	A. 24	B. 30
	C. 35	D. 36
837)	If 12 pounds of fudge are placed in boxes that each hold 8 ounces, how many boxes will be filled? (1 pound = 16 ounces)	D
	A. $1\frac{1}{2}$	B. 96
	C. 6	D. 24
838)	If 8 is 4% of k, then k is 4% of;	A
	A. 5000	B. 4000
	C. 800	D. 80
839)	If in the class of 33, 3 are honor students, what part of the class are not honor students?	C
	A. $\frac{89}{100}$	B. $\frac{9}{10}$
	C. $\frac{10}{11}$	D. $\frac{9}{10}$
840)	If $3y = 7$ , the value of $6y - 3$ is ?	C
	A. 39	B. 13
	C. 11	D. 10
841)	If a is 20% of b and b is 75% of c, then a is what % of c?	A
	A. 15	B. 55
	C. 95	D. 40
842)	Ayesha and Bisma together have \$20. Bisma and Adnan together have \$16. Ayesha and Adnan together have \$24. What is the smallest number of dollars that any girl has alone?	B
	A. 4	B. 6
	C. 10	D. 24
843)	The average of the first 35 positive integers is;	C
	A. $16\frac{1}{2}$	B. $17\frac{34}{35}$
	C. 18	D. $18\frac{1}{5}$
844)	In triangle PQR, QS and SR are angle bisectors and angle $P = 80^\circ$ , how many degrees are there in angle QSR?	D
	A. 115	B. 120
	C. 125	D. 130
845)	If $2^m = 4x$ and $2^w = 8x$ , what is m in terms of w?	A
	A. $w - 1$	B. $w + 1$
	C. $2w - 1$	D. $2w + 1$
846)	How many miles are there between two cities if the distance is represented by a 2.4-inch line on a map having a scale of 1 inch to 8 miles?	A
	A. 19.2	B. 12.8
	C. 8.5	D. 38
847)	How many cents will r books cost if t books cost m dollars?	A
	A. $100mr/t$	B. $mr/100t$
	C. $100t/mr$	D. $m/100t$
848)	If 10 tractors are needed to plow a field in 4 hours, how many tractors are needed to plow in the field in 5 hours?	D
	A. 32	B. 4
	C. 16	D. 8
849)	If apples cost 3 for 37 cents, find the cost of $1\frac{3}{4}$ dozen apples.	C
	A. 111 cents	B. 159 cents
	C. 259 cents	D. 211 cents
850)	If it takes 10 minutes to walk $\frac{3}{7}$ miles, how many minutes will it take to walk the rest of the miles?	B
	A. $2\frac{1}{3}$	B. $13\frac{1}{3}$
	C. $4\frac{2}{7}$	D. 30

#### Analytical Reasoning (850 – 1000)

Nine students—O, P, Q, R, S, T, U, V, and W—are the only student who can serve on three commissions designated A, B, and C, and each student must serve on exactly one of the commissions. Commission A must have exactly one more member than does commission B. It is

possible that there are no members of commission C. Neither O nor P nor Q can serve on commission A. Neither R nor S nor T can serve on commission B. Neither U nor V nor W can serve on commission C.		
851)	If U and O are the only students serving on commission B, how many of the nine student must serve on commission C?	B
	A. 3	B. 4
	C. 5	D. 6
852)	Of the nine student, the greatest number that can serve together on commission C is	D
	A. 9	B. 8
	C. 7	D. 6
853)	If W is the only student serving on commission B, which of the following must serve on commission A?	D
	A. R and V	B. S and T
	C. S and U	D. U and V
854)	If none of the nine student serves on commission C, which of the following must be a student who serves on commission A?	C
	A. O	B. P
	C. R	D. U
855)	If U, V, and Q are the only students serving on commission B, the complete membership of commission C must be	A
	A. O and P	B. O and R
	C. P and S	D. P and T
856)	Which of the following groups could constitute the membership of commission C?	B
	A. P and U	B. Q and T
	C. P, Q, and R	D. R, S, and T
<p>Researchers are testing numerous petrol samples for the presence of three chemicals— U, V, and W. Each sample contains one or more of the chemicals, U, V, and W but no other chemicals. The practical available to the researchers and the result the practical produce are as follows; If the sample contains U but not V, practical R gives a positive result. Practical R gives a negative result otherwise. If the sample contains U or V or both, or if the sample has already been subjected to practical R, practical S gives a positive result. Practical S gives a negative result otherwise. If the sample contains W and has already been subjected to practical S, practical H gives a positive result. Practical H gives a negative result otherwise.</p>		
857)	If a sample is subjected to practical S and the result is negative, then of the three chemicals, the sample must contain	B
	A. U only	B. W only
	C. U and V only	D. U and W only
858)	Which of the following practical, if performed as specified, will give a result that in itself does NOT tell researchers anything about the chemical content of a sample?	A
	A. R performed first	B. S performed first
	C. H performed first	D. R performed after S
859)	If a sample is subjected to the three practical in the order R, S, and H, and if only practical S is positive, which of the following could be the sample's chemical content?	C
	A. U only	B. V only
	C. W only	D. U and W only
860)	If researchers know that, of two samples, one contains U only and one contains V only, but they need to determine which sample contains which chemical, they do so with the least amount of testing if they subject.	C
	A. Either sample to practical R	B. Either sample to practical S
	C. Either sample to practical H	D. Both samples to practical R
<p>A doctor has prescribed a meal program for a patient. Choosing from meals F, G, H, I, J, K, L, and M, the patient must take a routine of exactly five different meals each day. In any day routine, except the first, exactly three of the meals must be ones that were included in the routine done on the previous day, and any permissible routine must also satisfy the following conditions: If F is in a routine, L cannot be done in that routine. If G is in a routine, J must be one of the meals done after G in that routine. If H is in a routine, L must be one of the meals done after H in that routine. The fifth meal of any routine must be either I or K.</p>		
861)	Which of the following could be the routine for the first day of the program?	C
	A. F, H, L, I, K	B. G, I, H, L, K
	C. J, K, H, L, I	D. K, G, I, J, M
862)	If one day's routine is F, G, M, J, K, each of the following could be the next day's routine EXCEPT	D
	A. G, H, L, J, K	B. G, J, L, M, I
	C. M, H, L, J, K	D. M, J, I, F, K
863)	Which of the following is true of any permissible routine?	D
	A. F cannot be done third	B. G cannot be done third
	C. J cannot be done third	D. H cannot be done fourth
864)	If the patient chooses H and M for the first day's routine, which of the following could be the other three meals chosen?	D
	A. F, J, K	B. G, I, L

	C. G, J, L	D. J, I, L	
865)	If H is the third meal in a routine, which of the following CANNOT be the second meal in that routine?		A
	A. G	B. I	
	C. J	D. M	
<p>Four girls—L, M, N, and O—and four boys—V, W, X, and Y—are the eight adults to be seated at a rectangular bench. Three of the adults are to sit on one side of the bench, three are to sit on the other side of the bench, one is to sit at the head of the bench, and one is to sit at the foot of the bench. The following restrictions on seating arrangements must be observed:</p> <p>Adults of the same sex cannot sit next to each other on the same side of the bench.</p> <p>The adult seated at the foot of the bench cannot be the same sex as the adult seated at the head of the bench.</p> <p>X cannot be seated on the same side of the bench as N.</p> <p>Y cannot be seated on the same side of the bench as O.</p>			
866)	If Y is seated at the head of the bench and N is seated in the middle seat on one side of the bench, which of the following must be true?		A
	A. O is seated at the foot of the bench.	B. V is seated at the foot of the bench.	
	C. L is seated on the same side of the bench as N	D. W is seated on the opposite side of the bench from N.	
867)	If O is to be seated at the head of the bench, each of the following could be seated at the foot of the bench EXCEPT		C
	A. M	B. V	
	C. W	D. X	
868)	If W is seated at the foot of the bench, Y is seated in an end seat on one side of the bench, and N is seated in an end seat on the other side of the bench, where must X be seated?		B
	A. At the head of the bench	B. In the middle seat on the same side of the bench as Y	
	C. In an end seat on the same side of the bench as Y	D. In the middle seat on the same side of the bench as N	
869)	If X is seated at the head of the bench, V is seated in the middle seat on one side of the bench, and N is seated in the middle seat on the other side of the bench, which of the following can be true?		B
	A. L is seated at the foot of the bench	B. M is seated on the same side of the bench as N.	
	C. O is seated on the same side of the bench as N.	D. W is seated on the same side of the bench as V.	
870)	If X is seated at the foot of the bench, Y is seated in the middle seat on one side of the bench, and N is seated in the middle seat on the other side of the bench, which of the following must be seated at the head of the bench?		D
	A. L	B. M	
	C. O	D. W	
<p>Six duty workers—Ali, Bilal, Ghulam, Jamal, Muneer, and Tanveer—are planning to perform a duty program consisting entirely of three shifts. Each shift requires two fire men, one gas expert, and a driver. Each worker must perform duty of in at least one shift, and each worker can perform duty of, at most, one role in a shift. No worker can perform duty of the same type of role (fire man, gas expert, or driver) in two successive shifts.</p> <p>Ali can perform duty of fire man only and must perform duty of in the first shift.</p> <p>Bilal can perform duty of fire man or driver.</p> <p>Ghulam can perform duty of fire man or gas expert.</p> <p>Jamal can perform duty of gas expert only.</p> <p>Muneer can perform duty of fire man or driver.</p> <p>Tanveer can perform duty of driver only.</p>			
871)	Any of the following duty workers could perform duty of in the second shift EXCEPT		A
	A. Ali	B. Bilal	
	C. Ghulam	D. Jamal	
872)	If Ghulam can perform duty of gas expert in the first shift, which of the following must be true?		D
	A. Bilal can perform duty of driver in the first shift.	B. Ghulam can perform duty of gas expert in the second shift.	
	C. Ghulam can perform duty of gas expert in the third shift.	D. Jamal can perform duty of gas expert in the second shift	
873)	If Ali, Bilal, Ghulam, and Jamal perform duty of in the first shift, which of the following could be the group of duty workers playing in the second shift?		D
	A. Ali, Bilal, Ghulam, and Muneer	B. Ali, Ghulam, Muneer, and Tanveer	
	C. Bilal, Ghulam, Jamal, and Muneer	D. Bilal, Ghulam, Muneer, and Tanveer	
874)	Which of the following groups of duty workers includes all those, and only those, who CANNOT be scheduled to perform duty of in all three shifts, no matter what schedule is devised?		B
	A. Ali, Bilal, and Ghulam	B. Ali, Jamal, and Tanveer	
	C. Bilal, Ghulam, and Muneer	D. Bilal, Jamal, and Muneer	

875)	Unavailability of which of the following duty workers would still permit scheduling the five remaining players so that the proposed program could be performed?		D
	A. Bilal	B. Ghulam	
	C. Jamal	D. Tanveer	
<p>A map representing cities F, G, H, I, J, and K. is to be drawn. Neighboring cities cannot be the same color on the map. The only cities neighboring to each other are as follows:  F, G, I and J are each neighboring to H.  I is neighboring to J.  F and G are each neighboring to K.</p>			
876)	Which of the following is a pair of cities that must be different in color from each other?.		C
	A. F and I	B. G and I	
	C. G and K	D. I and K	
877)	If I is the same color as K, then it must be true that		D
	A. F is the same color as J	B. G is the same color as I	
	C. I is the same color as J	D. H is a different color from any other city	
878)	Which of the following is a pair of cities that can be the same color as each other?		A
	A. F and G	B. G and H	
	C. H and I	D. H and J	
879)	Which of the following cities can be the same color as H?		D
	A. F	B. G	
	C. I	D. K	
880)	If the fewest possible colors are Used and one of the cities is the only one of a certain color that city could be.		D
	A. H, but not any of the other cities	B. K, but not any of the other cities	
	C. F or G, but not any of the other cities	D. H or I or J, but not any of the other cities	
<p>An engineer is planning to build a housing complex on an empty blocks of land. Exactly seven different designs of houses—F, G, H, I, J, K, and L—will be built in the complex. The complex will contain several blocks, and the engineer plans to put houses of at least three different designs on each block. The engineer will build the complex according to the following rules: Any block that has design L on it must also have design J on it. Any block adjacent to one that has on it both design H and design K must have on it design I and design L. No block adjacent to one that has on it both design R and design L can have on it either design I or design J No block can have on it both design H and design F.</p>			
881)	Which of the following can be the complete selection of house designs on a block?		D
	A. F, G, H	B. F, H, K	
	C. G, T, L	D. H, J, L	
882)	Which of the following house designs must be on a block that is adjacent to one that has on it only designs H, I, J, K, and L?		D
	A. F	B. R	
	C. H	D. J	
883)	Which of the following can be the complete selection of house designs for a block that is adjacent to exactly one block, if that one block has on it designs H, I, J, and K only?		A
	A. H, I, J, and K	B. G, H, K, and L	
	C. I, K, and L	D. H, I, and K	
<p>In a display of products available from a textile manufacturer, exactly eight dresses are to be displayed on eight stands that are lined up in a straight line and numbered consecutively 1 through 8 from left to right. There are three Green dresses, two Blue dresses, two White dresses, and one Tan dress. The dresses must be displayed according to the following conditions: At least one of the Blue dresses must be next to a White dress. The Tan dress cannot be next to a White dress. The three Green dresses cannot be placed on three consecutive stands. Stand 5 must hold a Green dress. Either stand 1 or stand 8 or both must hold a White dress.</p>			
884)	If a Green dress is placed on stand 4, another Green dress could be placed on any of the following stands EXCEPT		B
	A. 1	B. 3	
	C. 5	D. 7	
885)	If Blue dresses are on stands 1 and 2, which of the following must be true?		C
	A. A Green dress is on stand 3.	B. The Tan dress is on stand 4	
	C. A Green dress is on stand 4	D. A White dress is on stand 6	
886)	If stand 2 holds an Tan dress, which of the following must be true?		D
	A. Stand 1 holds a Green dress.	B. Stand 3 holds a Blue dress.	
	C. Stand 6 holds a Blue dress.	D. Stand 7 holds a White dress	
887)	If stands 1 and 3 hold Green dresses, any of the following could be true EXCEPT:		D
	A. Stand 2 holds a White dress.	B. Stand 4 holds a Tan dress	
	C. Stand 6 holds a Blue dress.	D. Stand 7 holds a White dress	

A professor of chemistry must divide eight practical tasks---A, B, C, D, E, F, G, H--- into two groups of four acts each, one group scheduled to perform, one task at a time, in instrument 1 and the other group scheduled to perform, also one task at a time, in instrument 2. All acts take equally long to perform, and every task that takes place in one of the instruments must be scheduled for the same time slot as a task that takes place in the other instrument. The schedule must also conform to the following conditions: Task A must perform in one of the instruments while task C perform in the other instrument. Task B must perform in one of the instruments while task D perform in the other instrument. Task E must perform in the same instrument as Task A Task F must perform in the same instrument as Task D Task G must be the second task that perform in instrument 2.

888)	Which of the following, without regard to the order in which they will be performed, could be the group of acts to be scheduled for performance in instrument 1?	D
	A. A, B, C, and F	B. A, B, D, and E
	C. B, C, D, and F	D. C, D, F, and H
889)	If task F performs in instrument 1, which of the following acts must perform in instrument 2?	B
	A. A	B. B
	C. C	D. D
890)	If the order, from first to last, of practical tasks in instrument 2 is D, G, F, C, which of the following is an acceptable order of acts in instrument 1, also from first to last?	D
	A. A, E, B, H	B. B, H, A, E
	C. B, H, E, A	D. H, B, A, E
891)	If task A must perform between task G and task E in instrument 2, which of the following must be the first task in instrument 1?	C
	A. B	B. D
	C. F	D. H
892)	If task F must take place in instrument 1 immediately after task A and immediately before task E, which task must be the third task in instrument 2?	C
	A. B	B. D
	C. F	D. H

Students at the Institute of Business Administration must complete a total of twelve courses selected from three different general areas—marketing, finance, and human resources—in order to graduate. The students must meet the following course distribution requirements: At least six of the required twelve courses must be from finance. At least five of the required twelve courses must be from marketing and human resources, with at least one, but no more than three, selected from marketing.

893)	The minimum number of human resources courses required to fulfill the course distribution requirements is.	B
	A. 1	B. 2
	C. 3	D. 4
894)	If a student has completed six finance courses and one human resources course, the possible groups of courses to fulfill the course distribution requirements must include at least.	D
	A. two marketing courses	B. three marketing courses
	C. one finance course	D. one human resources course

Two boys singers, F and G; two Girls singers, H and I; two boys comedians, J and K; and two girls comedians, L and M, are the eight actors who are to perform in a club on a certain night. Each actor is to perform alone and only once that night. The actors may perform in any order that conforms to the following restrictions: The performances by singers and the performances by comedians must exchange throughout the night. The first performance that night must be by a girl actor and the second performance by a boy actor. The final performance must, be by a boy singer.

895)	Which of the following could be the last of the actors to perform?	B
	A. H	B. G
	C. J	D. I
896)	Which of the following could be the first of the actors to perform?	C
	A. F	B. H
	C. M	D. I
897)	If H is to perform fourth, which of the following must perform, sixth?	D
	A. F	B. G
	C. M	D. I
898)	If M is to perform seventh, which of the following must perform first?	A
	A. L	B. H
	C. G	D. J
899)	If F is to perform eighth, which of the following must perform second?	B
	A. H	G
	C. J	I

900)	If J is to perform third, K must perform.				D
	A.	first or fifth	B.	second or fifth	
	C.	fourth or seventh	D.	fifth or seventh	
901)	If L, is to perform third, I fourth, and K fifth, which of the following must perform sixth?				B
	A.	F	B.	H	
	C.	G	D.	J	
At the start of a two-week hiking trip, eight girls— Fozia, Hina, Juwaria, Kiren, Milaka, Samina, Tamina, and Raheela—will divide into a Lake Group and a Mountain Group of four members each. After following different trails for one week, the groups will meet and the girls will again divide into a Lake Group and a Mountain Group of four members each, which will again follow different trails for a week. The groups must be formed with the following restrictions: For the first week, Tamina cannot be in the same group as Raheela. For the second week, both Tamina and Raheela must be in the Lake Group. For each of the two weeks, if Fozia is in the Mountain Group, Kiren must also be in the Mountain Group. For each of the two weeks, Juwaria must be in the same group as Milaka.					
902)	Which of the following could be the members of the Lake Group for the first week?				A
	A.	Fozia, Hina, Kiren, and Raheela	B.	Fozia, Kiren, Milaka, and Samina	
	C.	Hina, Juwaria, Samina, and Tamina	D.	Hina, Kiren, Tamina, and Raheela	
903)	If Milaka is in the Lake Group for the second week, which of the following must be the members of the Mountain Group for that week?				B
	A.	Fozia, Hina, Juwaria, and Samina	B.	Fozia, Hina, Kiren, and Samina	
	C.	Hina, Juwaria, Kiren, and Samina	D.	Hina, Juwaria, Samina, and Raheela	
904)	If, for each week, Samina is in a different group from Tamina, Samina must be in a group with which of the following for exactly one week?				E
	A.	Fozia	B.	Hina	
	C.	Kiren	D.	Milaka	
905)	If Juwaria is in the Mountain Group for the first week, which of the following must be in the Lake Group for that week?				A
	A.	Fozia	B.	Hina	
	C.	Milaka	D.	Samina	
906)	If exactly two girls change groups at the end of the first week, those two girls could be which of the following?				D
	A.	Hina and Kiren	B.	Hina and Samina	
	C.	Kiren and Samina	D.	Kiren and Raheela	
A Human Resources Manager is scheduling a single interview with each of seven candidates: Fahid, Ghalib, Junaid, Mohsin, Naveed, Pervaiz, and Tanveer. Each interview is to be 30 minutes in length, and the interviews are to be scheduled back-to-back, starting at 9 a.m., according to the following conditions: Ghalib's interview must be scheduled to begin at either 9 a.m. or 10:30 a.m. Pervaiz's interview must be scheduled either as the next interview after Ghalib's interview or as the next interview after Naveed' interview. Naveed's interview must be scheduled to occur sometime after Mohsin's interview and sometime before Fahid's interview. Junaid's interview must be scheduled to begin exactly one hour after Tanveer's interview is scheduled to begin.					
907)	Which of the following people can be scheduled for the interview that begins at 9 a.m.?				C
	A.	Fahid	B.	Junaid	
	C.	Mohsin	D.	Naveed	
908)	The earliest time that Junaid's interview can be schedule to begin is.				B
	A.	9:30 a.m.	B.	10 a.m.	
	C.	10:30 a.m.	D.	11 a.m.	
909)	If Naveed's interview is scheduled to begin at '9:30 a.m., who must be scheduled for the interview that begins at 11a.m.?				D
	A.	Fahid	B.	Junaid	
	C.	Mohsin	D.	Pervaiz	
910)	If the interview schedule shows Tanveer's interview as the next after Pervaiz's and Pervaiz's interview as the next after Naveed', how long after Ghalib's interview is scheduled to begin must Junaid's interview be schedule to begin?				D
	A.	30 minutes	B.	1 hour	
	C.	90 minutes	D.	2 hours	
911)	If Tanveer is scheduled for the interview that begins at 9 a.m., Fahid's interview must be scheduled to begin at.				D
	A.	9:30 a.m.	B.	10:30 a.m.	
	C.	11 a.m	D.	11:30a.m	
A book society holds two discussion sessions each summer. The discussion leader of the society is selecting two Sets of books—Set 1 and Set 2—for the sessions. She is choosing from seven books—F, G, H, I, J, K, and L. Set 1 will contain four of the books and Set 2 will contain the other three books. The leader must select the books for each Set according to the following restrictions: F cannot be in the same Set as G. If J is in Set 2, L must also be in Set 2. If L is in Set 1, I must also be in Set 1.					

912)	If F and L are in Set 2, any of the following books can also be in Set 2 EXCEPT	A
	A. G	B. H
	C. I	D. J
913)	If L is in Set 1, which of the following must be true?	B
	A. F is in Set 1.	B. H is in Set 2.
	C. J is in Set 2.	D. G is in the same Set as H.
914)	If J is in Set 2, which of the following must be true?	C
	A. F is in Set 2.	B. G is in Set 2.
	C. I is in Set 1.	D. K is in the same Set as L.
Six doggies—R, V, W, X, Y, Z—must each be scheduled for examination by a veterinarian. The doggies are to be examined one at a time in six consecutive time slots on the same day according to the following conditions: W cannot be examined immediately before or immediately after X. V must be examined immediately before Z. R must be examined fourth.		
915)	Which of the following is an acceptable examination schedule for the doggies, in order from first examined to last examine?	D
	A. V, Y, X, R, W, Z	B. V, Z, Y, R, X, W
	C. W, Y, X, V, Z, R	D. X, Y, W, R, V, Z
916)	If V is examined second, which of the following must be true?	C
	A. R is examined at some time before X.	B. W is examined at some time before Y.
	C. Y is examined at some time after R	D. W is examined sixth.
917)	X can be examined in any of the following time slots EXCEPT	B
	A. First	B. Second
	C. Third	D. Fifth
918)	If V is examined first, Y must be examined.	D
	A. immediately before R	B. immediately before X
	C. at some time before W	D. at some time after R
919)	If X is examined sixth, which of the following is a complete and accurate list of the time slots any one of which could be the time slot in which W is examined?	C
	A. First	B. First, second
	C. First, third	D. First, second, third
920)	If Z is examined at some time before W is examined, V can be examined.	A
	A. immediately after X	B. immediately after Y
	C. immediately before Y	D. at some time after W
921)	If both W and Y are examined at some time after R is examined, X must be examined.	D
	A. First	B. Second
	C. Third	D. first or else third
To gain full course credit for him tour of a foreign city. Zeeshan must visit exactly seven famous places of interest—a foreign office, a river, the hill, a library, a mosque, a club, and a theater. Any tour plan that Zeeshan devises will allow him to keep to him timetable and is thus acceptable, except that he must plan his tour to conform with the following conditions: The foreign office must be one of the first three places visited. The hill must be visited immediately before the river. The library can be neither the first nor the last place visited. The mosque must be either the first or the last place visited. The club must be one of the last three places visited.		
922)	If, on him tour. Zeeshan visits the theater, the library, and the foreign office, one directly after the other in the order given, he must visit the river;	D
	A. Second	B. Third
	C. Fourth	D. Fifth
923)	If, Zeeshan begins him tour at the hill, which of the following could be the fourth place of interest he visits on the tour?	C
	A. The foreign office	B. The river
	C. The library	D. The mosque
924)	If Zeeshan is to visit the club sixth, he could visit the hill in any of the following positions on him tour EXCEPT;	D
	A. First	B. Second
	C. Third	D. Fourth
925)	If Zeeshan visits exactly one place of interest between him visits to the foreign office and the club, that place must be either he;	D
	A. river or the hill	B. river or the theater
	C. hill or the mosque	D. library or the mosque
The administrator of a commercial designing Firm is scheduling exactly six tasks—J, K, L, M, N, and O—for a particular week, Monday through Saturday. Each task can be completed in one full day, and exactly one task will be 'scheduled for each day. The tasks must be scheduled according to the following conditions: J must be completed sometime before L is completed. M must be completed on the day immediately before or the day immediately after the day on which O is completed. N must be completed on Thursday.		

926)	Any of the following could be completed on Saturday EXCEPT;		A
	A. J	B. K	
	C. L	D. M	
927)	If K is completed on Wednesday, which of the following could be true?		D
	A. J is completed on Tuesday	B. L is completed on Monday	
	C. L is completed on Friday	D. M is completed on Monday	
928)	If O is completed on Monday, which of the following must be true?		D
	A. J is completed sometime before K	B. J is completed sometime before N.	
	C. K is completed sometime before L	D. N is completed sometime before K	
929)	If J is completed on Tuesday, which of the following must be true?		A
	A. K is completed on Monday	B. L is completed on Thursday	
	C. L is completed on Saturday	D. M is completed on Wednesday	
930)	If M is completed on Tuesday, any of the following could be true EXCEPT:		C
	A. J is completed on Monday	B. K is completed on Saturday	
	C. L is completed on Wednesday	D. L is completed on Friday	
931)	If K is completed on Friday, which of the following must be true?		C
	A. J is completed on Monday	B. J is completed on Wednesday	
	C. L is completed on Saturday	D. M is completed on Monday	
Retail Store identify individual product by means of a four-symbol identification code running left to right. The symbols used are the four digits 6, 7, 8, and 9 and the four letters L, M, N, and O. Each code consists of two letters and two digits. The two letters must be next to each other, and the two digits must be next to each other, Of the two digits, the left digit must be less than the right digit. The two letters must be dissimilar letters.			
932)	Which of the following could be the third symbol in a code in which the fourth symbol is 3?		D
	A. L	B. M	
	C. O	D. 6	
933)	Which of the following must be true of any code in which the letter L occurs?		D
	A. The letter M also occurs in that code	B. The letter N also occurs in that code	
	C. The letter O also occurs in that code	D. The letter L occurs in that code exactly once	
934)	If the first symbol in a code is 7, any one of the following symbols could occur in one of the remaining three positions EXCEPT the;		A
	A. digit 6	B. digit 8	
	C. digit 9	D. letter N	
Exactly six different essays will appear in a coming issue of a magazine. Three of the essays— G, I, and J— are by the writer K, and the other three essays—M, N, and P—are by the writer Y. Each essay will appear exactly once in the issue, and a essay must appear on each of the pages 3, 6, 9, 12, 15, and 18. The order in which the essays appear in the issue will be governed by the following conditions: The essays on pages 3, 9, and 15 must all be by the same writer. I must precede P. M must precede J.			
935)	Which of the following is an acceptable order, from first to last, in which the essays can appear in the magazine?		D
	A. I, P, M, G, N, J	B. J, N, I, P, G, M	
	C. M, I, G, J, N, P	D. M, I, P, G, N, J	
936)	J could appear on any of the following pages EXCEPT;		A
	A. 3	B. 6	
	C. 9	D. 12	
937)	If N appears on page 6, which of the following essays must appear on page 12?		D
	A. G	B. I	
	C. J	D. M	
938)	If an essay by K appears on page 3, which of the following is a pair of essays either of which could appear on page 18?		D
	A. G and J	B. G and M	
	C. J and P	D. M and N	
939)	If G and N appear on pages 15 and 18, respectively, which of the following is a pair of essays that must appear on pages 3 and 6, respectively?		B
	A. I and J	B. I and M	
	C. I and P	D. J and M	
940)	If P appears on page 6, G must appear on which of the following pages?		B
	A. 3	B. 9	
	C. 12	D. 15	



941)	If I appears on page 12, which of the following is a complete and accurate list of all the essays any one of which could appear on page 9?		A
	A. M	B. P	
	C. M, N	D. N, P	
Three desk shelves—I, II, and III—are being stocked with seven types of articles. Bred, Biscuits, Pizzas, Snakes, Cake, Sweet, and Sandwich are to be placed in the shelves so that the goods belonging to any given type are all together in one shelf and no shelf contains more than three types of goods. The arrangement of the types of goods is subject to the following further constraints: Bred and Cake must be in a shelf together. Neither Biscuits nor Snakes can be in the same shelf as Pizzas. Neither Biscuits nor Snakes can be in the same shelf as Sweet. The Sweet must be in either shelf I or shelf II. Each type of goods must be in some shelf or other.			
942)	If Pizzas are in I and Sweet is in II, which of the following must be true?		D
	A. Bred are in I.	B. Bred are in U.	
	C. Bred are in III	D. Biscuits are in II	
943)	If Pizzas are in II and Sweet is in I. any of the following can be true EXCEPT:		B
	A. Bred are in II.	B. Bred are in III	
	C. Cakes are in I.	D. Cakes are in II.	
944)	If Bred, Cake, and Sandwich are in I, which of the following must be true?		D
	A. Biscuits are in II.	B. Pizzas are in I.	
	C. Pizzas are in III.	D. Snakes are in II.	
945)	If Cake is in II, which of the following is acceptable?		A
	A. Bred are in I and sandwich are in II.	B. Biscuits are in I and Snakes are in II.	
	C. Biscuits are in I and Snakes are in III.	D. Snakes are in I and Sandwich are in II	
A organizer must group nine paintings— P, Q, R, S, T, U, V, W, and X—in twelve stands numbered consecutively from 1-12. The paintings must be in three groups, each group representing a different color. The groups must be separated from each other by at least one unused wall stand. Three of the paintings are from the Green color, two from the Blue color, and four from the White color. Unused wail stands cannot occur within groups. Q and S are paintings from different colors. S, T, and U are all paintings from the same color. Stand number 5 is always empty. P and V are Green-color paintings. W is a Blue-color painting.			
946)	If stand 4 is to remain empty, which of the following is true?		C
	A. Stand number 10 must be empty.	B. A White-color painting must be hung in stand 12	
	C. A Green-color painting must be hung in stand 3	D. A Blue-color painting must be hung in stand 1	
947)	If the paintings are hung in white, blue and green order by color, the unused wall stands could be;		D
	A. 1, 5, and 10	B. 1,6, and 10	
	C. 4, 7, and 8	D. 5, 8, and 12	
948)	Which of the following is a stand that CANNOT be occupied by a Blue-color painting?		A
	A. Stand 1	B. Stand 6	
	C. Stands	D. Stand 11	
949)	If S hangs in stand 11, which of the following is a possible arrangement for stands 8 and 9?		D
	A. P in 8 and V in 9	B. T in 8 and Q in 9	
	C. W in 8 and Q in 9	D. 8 unused and R in 9	
950)	If the White-color paintings are hung in stands 1- 4, which of the following CANNOT be true?		D
	A. Stand 8 is unused.	B. Stand 9 is unused.	
	C. P is hung in stand 6.	D. V is hung in stand 12.	
951)	If the first five paintings, in numerical order of stands, are P, X, V, W, Q, which of the following must be true?		A
	A. Either stand 1 or stand 4 is unused	B. Either stand 7 or stand 12 is unused	
	C. R hangs in stand 11.	D. Two unused stands separate the Green-color and Blue-color paintings	
Exactly seven boys—F, G, H, I, J, K, and L—are to be divided into two study teams, team 1 and team 2. Team 1 must have three members, and team 2 must have four members. The boys are being assigned to teams according to the following conditions: F cannot be in the same team as H. If G is in team 1, I must be in team 1. If J is in team 1, H must be in team 2. K must be in team 2.			
952)	If F is in team 2, which of the following must also be in team 2?		D
	A. G	B. H	
	C. I	D. J	
953)	If J is in team 1, which of the following must also be in team 1?		A
	A. F	B. G	
	C. H	D. I	
954)	If H and L are both in team 1, which of the following must be true?		B
	A. G is in the same team as I.	G is in the same team as J.	

	C. I is in the same team as F.	J is in the same team as H	
955)	If J is in the same team as H, any of the following is a pair of boys who could be in a team together EXCEPT;		B
	A. F and G	B. G and L	
	C. H and L	D. I and L	
956)	If I is in the same team as L, which of the following must be true?		D
	A. F is in team 1	B. G is in team 1.	
	C. H is in team 1	D. J is in team 2	
957)	If G is in team 1, which of the following must be true?		D
	A. F is in team 1.	B. H is in team 1.	
	C. H is in team 2.	D. L is in team 1	
<p>Researchers are testing numerous petrol samples for the presence of three chemicals— U, V, and W. Each sample contains one or more of the chemicals, U, V, and W but no other chemicals. The practical available to the researchers and the result the practical produce are as follows; If the sample contains U but not V, practical R gives a positive result. Practical R gives a negative result otherwise. If the sample contains U or V or both, or if the sample has already been subjected to practical R, practical S gives a positive result. Practical S gives a negative result otherwise. If the sample contains W and has already been subjected to practical S, practical H gives a positive result. Practical H gives a negative result otherwise.</p>			
958)	If a sample is subjected to practical S and the result is negative, then of the three chemicals, the sample must contain		B
	A. U only	B. W only	
	C. U and V only	D. U and W only	
959)	Which of the following practical, if performed as specified, will give a result that in itself does NOT tell researchers anything about the chemical content of a sample?		A
	A. R performed first	B. S performed first	
	C. H performed first	D. R performed after S	
960)	If a sample is subjected to the three practical in the order R, S, and H, and if only practical S is positive, which of the following could be the sample's chemical content?		C
	A. U only	B. V only	
	C. W only	D. U and W only	
961)	If researchers know that, of two samples, one contains U only and one contains V only, but they need to determine which sample contains which chemical, they do so with the least amount of testing if they subject.		C
	A. Either sample to practical R	B. Either sample to practical S	
	C. Either sample to practical H	D. Both samples to practical R	
<p>A Electrical Engineer is experimenting with varying arrangements of exactly six units that are electrical bulbs—T, U, V, W, X, and Y—in a loop containing eight positions, each capable of containing one bulb. In each arrangement, each bulb is at one of the eight positions and two positions are empty. In devising arrangements, the Electrical Engineer must obey the following restrictions: T must be directly adjacent to U. X must be directly adjacent to Y. W must be directly adjacent to Y on one side and to an empty position on the other. A signal can be transferred from one bulb directly to another when the two bulbs are directly adjacent to each other, and only then. A signal can be transferred either way around the loop, from one bulb to another, until it reaches an empty position. A signal cannot be transferred across an empty position.</p>			
962)	If a signal can be transferred, either directly or indirectly, from U to V, it must be true that a signal can be transferred, either directly or indirectly, from;		A
	A. T to V	B. T to W	
	C. U to W	D. U to X	
963)	If V is directly adjacent to X, any of the following could be true EXCEPT:		C
	A. T is directly adjacent to V	B. U is directly adjacent to V	
	C. U is directly adjacent to X	D. T is directly adjacent to an empty position.	
964)	If X is directly adjacent to an empty position, which of the following is the greatest number of bulbs, including starting and ending bulbs, that can be used in the transfer of a single signal?		B
	A. Two	B. Three	
	C. Four	D. Five	
965)	If there is one bulb that is directly adjacent to both empty positions, that bulb must be (A) U (B) V (C) W (D)X		B
	A. U	B. W	
	C. V	D. X	
966)	If a signal can be transferred from T to Y, any of the following bulbs could be directly adjacent to an empty position EXCEPT;		D
	A. T	B. U	
	C. W	D. V	

In a cable assembly plant, cables are manufactured by twisting plastic-coated copper wires together. There are copper wires of exactly six different solid colors—pink, brown, tan, gray, purple, and blue. Copper wires must be manufactured into single cables according to the following

rules: Each cable must contain at least three copper wires and copper wires of at least three different colors. At most two copper wires in a single cable can be blue. At most two copper wires in a single cable can be purple. There can be at most one copper wire of each of the other colors in a single cable. If one copper wire is pink, then one copper wire must be brown. If one copper wire is tan, then no copper wire can be gray.		
967)	Which of the following could be the complete set of copper wires in an acceptable cable?	B
	A. A gray copper wire, a purple copper wire, and a tan copper wire	B. A tan copper wire, a blue copper wire, and a purple copper wire
	C. A pink copper wire, a blue copper wire, and a gray copper wire	D. A brown copper wire and exactly two blue copper wires
968)	The maximum number of copper wires that can be used in an acceptable cable is;	B
	A. 8	B. 7
	C. 6	D. 5
969)	If exactly one blue copper wire and exactly one purple copper wire are used in an manufactured cable, which of the following must be true?	A
	A. The cable contains no more than five copper wires	B. The cable contains exactly six copper wires
	C. The cable contains a brown copper wire	D. The cable does not contain a pink copper wire
970)	If a purple copper wire and a tan copper wire must be among the copper wires chosen for a particular cable, any of the following pairs of copper wires could complete the cable EXCEPT a;	D
	A. blue copper wire and a second purple copper wire	B. brown copper wire and a second purple copper wire
	C. brown copper wire and a blue copper wire	D. pink copper wire and a brown copper wire
971)	If a manufactured cable consists of exactly five copper wires, each a different color, it could be true that a color NOT used is;	C
	A. Blue	B. Purple
	C. Gray	D. Pink
972)	If there is an additional requirement that tan must be used if brown is used, which of the following must be true?	C
	A. No cable contains fewer than six copper wires	B. No cable contains more than five copper wires
	C. Gray is never used if pink is used.	D. Pink is always used if tan is used
A student is planning his class schedule for the First and second semesters. He must take exactly three courses each semester. By the end of the second semester, the student must complete at least three courses in Area FINANCE, at least one course in Area MARKETING, and at least one course in Area SOCIAL SCIENCE. The only courses available to the student are: Area FINANCE: F102, F201, F202, F203 Area MARKETING: M101, M102, M103, M201 Area SOCIAL SCIENCE: S101, S102, S202 The selection of courses is subject to the following restrictions; A student can take no more than two courses with the same letter designation per semester. Courses with a number designation in the 200's are offered only in the second semester; courses with a number designation in the 100's are offered in both the First and second semesters. No course taken in the First semester can be repeated in the second semester.		
973)	Which of the following is a course that the student must take?	A
	A. F102	B. M101
	C. S101	D. M102
974)	Which of the following is a possible schedule for the second semester?	C
	A. F102, M101 and F202	B. F102, M101 and M102
	C. F201, F202 and S102	D. M101, M102 and M201
975)	If the student takes M101 and M102 in the First, his second schedule must include;	D
	A. F203	B. F201 and F202
	C. M201	D. exactly one course from Area MARKETING
A journal published three times a year contains exactly three articles, each of a different type, in each issue. Exactly five types of articles are printed in the journal: finance, I.T, marketing, business, and sale force. No article is of more than one type. In choosing articles to publish during the year, the editor adheres to the following conditions: At least one article of each type must be published each year. The fall issue of each year always contains marketing. No issue can include both an I.T and marketing. No two consecutive issues can each contain sale force. At least two issues each year must contain finance.		
976)	If, a sale force publish in the spring issue of a particular year, which of the following lists the articles that must publish in the fall issue of the year, not necessarily in the order given?	B
	A. A finance, an I.T, and a business	B. A finance, a marketing, and a business
	C. A finance, a marketing, and a sale force	D. A finance, a business, and a sale force
977)	If, two article types publish three times each in a particular year's issues, those types must be?	C
	A. a finance and an I.T	B. a finance and a marketing
	C. a finance and a business	D. a marketing and a sale force
978)	If a particular year's winter issue of the journal contains Marketing, then the spring issue that year could contain which of the following?	C
	A. Finance, Marketing, Business	B. I.T, Marketing, Business

	C. I.T, Business, sale force	D. Finance, Business, sale force	
979)	If, during a particular year, two issues each contain a sale force and two issues each contain an Marketing, then the winter issue of that year must include;		D
	A. A Finance	B. An I.T	
	C. A Marketing	D. A Business	
980)	If four of the five types of articles publish twice during a particular year and if one type publish only once, then the type that publish only once must be either;		D
	A. A Finance or an I.T	B. An I.T or Marketing	
	C. Marketing or a Business	D. A Marketing or a sale force	
981)	If for a particular year the editor Decides to make the spring issue of the journal a special issue devoted entirely to three sale forces, but continues adhering to the conditions on the choice of articles, then which of the following lists the articles, not necessarily in the order given, that must publish in the winter issue of the year?		B
	A. A Finance, an I.T, and Marketing	B. A Finance, an I.T, and a Business	
	C. A Finance, Marketing, and a Business	D. An I.T, Marketing, and a Business	
A conference organizer must select exactly three speakers to respond to special issue to be presented by an invited speaker. The three speakers will be selected from seven volunteers, of whom four—Irfan, Kamran, Liaquat, and Mohsin—are known to be positively to the speaker's theoretical point of view. The other three—Shabir, Tahir, and Usman—are known to be negatively to the speaker's theoretical point of view. In selecting the three speakers, the conference organizer must observe the following restrictions: At least one positively speaker and at least one negatively speaker must be among those selected. If Irfan is selected, Tahir cannot be selected. If either Liaquat or Mohsin is selected, the other must also be selected. If either Kamran or Usman is selected, the other must also be selected.			
982)	Which of the following could be the group of speakers selected?		C
	A. Irfan, Liaquat, and Mohsin	B. Irfan, Shabir, and Tahir	
	C. Kamran, Shabir, and Usman	D. Liaquat, Shabir, and Tahir	
983)	If Irfan is selected as a speaker, which of the following must also be among those selected		D
	A. Liaquat	B. Mohsin	
	C. Shabir	D. Tahir	
984)	Which of the following is a pair of volunteers that can be selected together as speakers?		D
	A. Irfan and Liaquat	B. Irfan and Shabir	
	C. Kamran and Liaquat	D. Mohsin and Shabir	
985)	The group of speakers selected must include either;		D
	A. Irfan or Shabir	B. Kamran or Shabir	
	C. Kamran or Tahir	D. Liaquat or Mohsin	
A Doctor is making up an assignment duty for three nurse teams. Each team will be assigned to exactly one of three Shifts of the hospital: Shift 1, Shift 2, or Shift 3. Each team will consist of two of the following nurses: Ghalia, Hina, Irfana, Kiran, Lubna, and Minahel. Each nurse will be on exactly one team. Irfana, Lubna, and Minahel have each completed a special emergency-training program; Ghalia, Hina, and Kiran have not. Ghalia, Hina, and Irfana each have at least three years of job experience; Kiran, Lubna, and Minahel do not. The Doctor must observe the following restrictions in making up the assignment duty: Each team must include at least one nurse who has completed the special emergency-training program. Each team must include at least one nurse who has at least three years of job experience. Ghalia must be assigned either to Shift 1 or to Shift 2.			
986)	Which of the following must be true?		D
	A. Ghalia will be Kiran's partner	B. Ghalia will be Lubna's partner	
	C. Hina will be Lubna's partner	D. Irfana will be Kiran's partner	
987)	Which of the following is a complete and accurate list of the nurses whom the duty officer can assign to be Minahel's partner?		D
	A. Ghalia	B. Hina	
	C. Lubna	D. Ghalia and Hina	
988)	If Hina is assigned to Shift 2, which of the following must be true?		B
	A. Kiran is assigned to Shift 1	B. Kiran is assigned to Shift 3	
	C. Lubna is assigned to Shift 1	D. Minahel is assigned to Shift 2	
989)	The duty officer CANNOT make acceptable nurses that assigns;		A
	A. Hina to Shift 1 and Minahel to Shift 3	B. Irfana to Shift 1 and Lubna to Shift 2	
	C. Kiran to Shift 1 and Ghalia to Shift 2	D. Ghalia to Shift 2 and Hina to Shift 3	
990)	If Lubna is assigned to Shift 3, which of the following must be true?		D
	A. Hina is assigned to Shift 1	B. Irfana is assigned to Shift 2	
	C. Minahel is assigned to Shift 1	D. Ghalia is Lubna's partner	

The relative solidity of five materials — G, H, I, K, and L — is to be determined. One material is more hard than another if drawing an edge of the first material across a surface of the second material produces a graze; other-wise, the first material is either equally hard or not as hard as the second. The following results have so far. been obtained: G grazes H. I grazes K. H does not graze L.		
991)	Which of the following could be the five materials in order from the most solid to the lowest solid if no two of them are equally hard?	A
	A. G, I, L, K, H	B. G, L, K, H, I
	C. I, G, H, K, L	D. I, H, K, L, G
992)	If H grazes K, which of the following must be true?	D
	A. G is more solid than I	B. G is more solid than L
	C. I is more solid than G.	D. I is more solid than L
993)	If K grazes L, any of the following pairs of materials could be the same solidity as each other EXCEPT;	D
	A. G and I	B. G and K
	C. G and L	D. H and L
Seven musical persons—R, S, T, U, V, W, and X— must sit on a single two-sided long-playing record. For a given side, any choice of persons and any sequence of persons will be acceptable so long as the following conditions are met: X must be first or last on a side; R must be sit on the same side as V, either immediately before V or immediately after V. S cannot be sit on the same side as U. W can be sit on the same side as R, but neither immediately before nor immediately after R. Side 1 cannot begin with U. Each side must have at least two persons. Each person must sit on the record exactly one time,		
994)	If side 2 begins with U, which of the following persons must sit on side 1?	B
	A. R	B. S
	C. T	D. V
995)	If side 1 has exactly three persons and the first is W, which of the following could be the other two persons on side 1?	D
	A. R followed by S	B. S followed by U
	C. T followed by R	D. U followed by X
996)	If S and T are the only persons on side 1, which of the following is a possible order of the persons for side 2?	D
	A. R, V, W, X, U	B. U, R, W, V, X
	C. V, R, W, U, X	D. X, R, V, W, U
997)	If side 2 contains exactly, four persons, beginning with V and ending with U, which of the following must be true?	C
	A. R appears on side 1.	B. S appears on side 2.
	C. T appears on side 2.	D. W is the first person on side 1
998)	If W, R, and X are among the persons on side 1, which of the following must be true?	D
	A. S appears on side 1	B. U appears on side 2
	C. T is the first person on side 2	D. Side 2 has exactly three persons
999)	If S, T, and X are all of the persons that sit on side 1, and side 2 begins with V, which of the following must be true?	A
	A. The second person on side 2 is U	B. The third person on side 2 is R
	C. The third person on side 2 is W	D. The last person on side 2 is R
1000)	If S and T are the only persons on side 2, which of the following is a possible order of the persons for side 2?	D
	A. U, R, W, V, X	B. X, R, V, W, U
	C. V, R, W, U, X	D. X, V, W, U, R