

(Q2): Put true (T) or false (F) (20 marks, 1 mark for each)



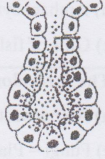

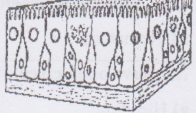
61	The microfilaments are made of actin protein.
62	The membranous organelles participate indirectly in cellular metabolism.
63	Both glycolipids and glycoproteins together form what is called cell coat
64	In the liver, SER are responsible for neutralizing toxins.
65	Golgi receives newly made proteins and lipids from mitochondria
66	According to the kind of secretion, glands are classified into serous, mucous and waxy.
67	The neuroglia are the structural and functional units of the nervous system.
68	White fibrocartilage is present in the intervertebral discs.
69	White adipose tissue contains primarily many small lipid droplets.
70	Cardiac muscles contract spontaneously.
71	The 2 <sup>nd</sup> pair of wings in insects is mesothoracic.
72	In the invertebrates the blood flows backward in the ventral blood vessel.
73	Micronuclei in Paramecium are responsible for metabolic and developmental functions.
74	Oligochaeta are characterized by the presence of parapodia.
75	All Platyhelminthes are hermaphrodite, triploblastic and acoelomate animals.
76	TSH is secreted from anterior lobe of pituitary gland.
77	The highest level of testosterone is at 30 years old.
78	Type 2 diabetes mellitus usually develops after age 40.
79	Estrogen is known as the hormone of pregnancy.
80	Spermiogenesis is the series of changes resulting in transformation of spermatids into sperms.

With Our best wishes

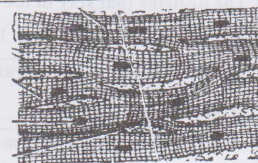
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48	It is Playing the major role in the development of female secondary sex characteristics at puberty.	a) LH	b) Estrogen	c) Progesterone	d) FSH
49	..... helps in maintaining immune system health and it has antiaging properties.	a) Thyroxin	b) Melatonin	c) Growth hormone	d) Adrenaline
50	Glucose hemostasis is regulating by .....	a) Thyroxin	b) Insulin	c) Glucagon	d) Both (b & c)
51	Prolactin secreted from ..... which induces milk production.	a) Anterior pituitary	b) Posterior pituitary	c) Adrenal cortex	d) Thyroid gland
52	Which of the following about Testosterone is <b>INCORRECT</b> ?	a) Peptide hormone	b) Has protein anabolic action	c) Increases red blood cells	d) Increasing libido
53	Which one of the following hormones increased at stressful situations?	a) Cortisol	b) Thyroxin	c) Adrenaline	d) Both (a & c)
54	Increasing secretion of growth hormone over normal range after puberty leading to.....	a) Goiter	b) Tetany	c) Gigantism	d) Acromegaly
55	Daughter cells resulting from ..... are diploid and genetically identical.	a) Miosis	b) Mitosis	c) Both (a & b)	d) None of them
56	Sperm can penetrate ovum to fertilize it by the help of .....	a) Nucleus	b) Acrosome	c) Middle piece	d) Tail
57	Twins with higher risk of complications during pregnancy are .....	a) Dichorionic twins	b) Fraternal twins	c) Monoamniotic twins (MoMo)	d) Monochorionic twins
58	Mammals eggs belong to ..... type.	a) Isolecithal	b) Centrolecithal	c) Telolecithal	d) None of them
59	Gametogenesis occurs in .....	a) Testis	b) Ovary	c) gonads	d) All pervious choices are correct
60	.....is repeated mitotic divisions occurs during embryonic development.	a) Blastula	b) Gastrulation	c) Cleavage	d) Organogenesis

34	Tunicates belong to phylum .....			
	a) Mollusca	b) Echinodermata	c) Vertebrata	d) Chordata
35	..... classify animals according to their way of living, their habitat and their body parts			
	a) Ray	b) Aristotle	c) Linnaeus	d) Whittaker
36	Arthropods are characterized by the presence of			
	a) Lateral nerve cord	b) Dorsal nerve cord		
	c) Bilateral nerve cord	d) Ventral nerve cord		
37	..... are characterized by the presence of gastrovascular cavity often divided with septa.			
	a) Arthropoda	b) Nematoda	c) Cnidaria	d) Chordata
38	Flame cells of Planaria have the same function as			
	a) Archaeocytes of sponge	b) Nematocytes of Cnidarians		
	c) Gills of fishes	d) Nephridia of Annelida		
39	The three domain system includes			
	a) Archaeobacteria – Eubacteria – Protista	b) Archaea – Bacteria – Eukarya		
	c) Fungi – Plantae – Animalia	d) Monera – Protista – Apicomplexa		
40	..... are multicellular organisms with no tissue			
	a) Eumetazoa	b) Protozoa	c) Parazoa	d) Mesozoa
41	Apicomplexa are .....			
	a) Ectoparasites	b) Endoparasites	c) Free living	d) Autotroph
42	..... are pseudocoelomate, unsegmented, triploblastic animals with bilateral symmetry			
	a) Trematoda	b) Cestoda	c) Nematoda	d) Turbellaria
43	..... have open circulatory system and have no chaeta			
	a) Hirudina	b) Oligochaeta	c) Polychaeta	d) Chordata
44	Discs of the vertebral column are derived from the .....			
	a) Nerve cord	b) Spinal cord	c) Notochord	d) Pharyngeal pouches
45	Insects are .....			
	a) Cephalopoda	b) Gastropoda	c) Octapoda	d) Hexapoda
46	Which one of the following hormones has anti-inflammatory actions?			
	a) Glucagon	b) Thyroxin	c) Aldosterone	d) Cortisol
47	Cretinism disorder which characterized by Reduction of metabolic and growth rates results from .....			
	a) Decrease in GH secretion before puberty	b) Increase in GH secretion after puberty		
	c) Decrease in Thyroxin secretion in children	d) Increase in Thyroxin secretion in adults		

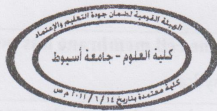
26	This figure refers to.....	<p>a) areolar connective tissue      b) adipose connective tissue</p> <p>c) fibrous connective tissue      d) reticular connective tissue</p>	
27	This figure refers to.....	<p>a) osteoclast cell      b) osteocyte</p> <p>c) osteoblast      d) osteogenic cell</p>	
28	This figure refers to.....gland	<p>a) merocrine      b) apocrine</p> <p>c) holocrine      d) endocrine</p>	
29	This figure refers to..... neuron	<p>a) unipolar      b) multipolar</p> <p>c) bipolar      d) pseudo- unipolar</p>	
30	This figure refers to.....	<p>a) simple squamous epithelium      b) transitional epithelium</p> <p>c) pseudostratified ciliated columnar epithelium      d) skeletal muscle</p>	
31	Order is a .....	<p>a) Group of related species</p> <p>b) Group of related families</p> <p>c) Group of related organism</p> <p>d) taxonomic group of any ranking</p>	
32	Molluscs are ..... animals	<p>a) Deuterostome      b) Astomata      c) Protostome      d) None of the previous</p>	
33	In sponges, sperms and eggs derived from .....	<p>a) Choanocytes      b) Archaeocytes      c) Pinacocytes      d) Sclerocytes</p>	

13	The ..... molecules make the cell membrane less permeable and decrease flexibility. a) cholesterol                      b) carbohydrate                      c) lipid                      d) glycoproteins
14	Lysosomes contain ..... to breakdown waste materials. a) glycoproteins                      b) ATP energy                      c) digestive enzymes                      d) all of them
15	..... is the movement of molecules against their concentration gradient. a) passive transport                      b) facilitated diffusion                      c) simple diffusion                      d) active transport
16	There is no connective tissue in the central nervous system; instead, there are the..... a) fibers                      b) neuroglia                      c) matrix                      d) plasma
17	No centrioles are in the cytoplasm of the ..... cells. a) nerve                      b) mast                      c) plasma                      d) muscle
18	..... acts as a reservoir for calcium. a) Cartilage                      b) blood                      c) Bone                      d) lymph
19	..... is a firm, rigid, flexible and dense type of connective tissue with poor blood supply. a) Bone                      b) Blood                      c) Cartilage                      d) Lymph
20	..... cells produce histamine and heparin. a) Plasma                      b) Adipose                      c) Reticular                      d) Mast
21	The ..... tissue is formed of cells, fibers and matrix. a) epithelial                      b) muscular                      c) nervous                      d) connective
22	The cytoplasm of muscle fibers is known as..... a) sarcoplasm                      b) axoplasm                      c) sarcolemma                      d) axolemma
23	..... tissue covers a surface or lines a cavity or forms glands. a) Epithelial                      b) muscular                      c) nervous                      d) connective
24	In ..... epithelium, the superficial cells may change temporarily into squamous cells. a) simple                      b) transitional                      c) columnar                      d) cuboidal
25	This figure refers to..... a) smooth muscle                      b) cardiac muscle c) skeletal muscle                      d) fibrous connective tissue





Assiut University  
Faculty of Science  
Zoology Department



Final exam  
General Zoology  
20/1/2025  
(6) pages



Time: 2 hours  
Level: First  
Course Code: 100Z  
Marks: 50

(Q1): Choose the best single correct answer (30 marks, half mark for each)

1	The DNA in prokaryotic cells is .....	a) linear	b) circular	c) cluster	d) patch
2	Before cell division, the centrioles ..... Themselves	a) duplicate	b) triplicate	c) divide	d) migrate
3	On the outside of the cell membrane, .....attached to some proteins and lipid	a) cholesterol	b) receptors	c) channels	d) chain of sugar
4	The cell membrane is made of mix of proteins and .....	a) carbohydrates	b) glycoproteins	c) lipids	d) lipoproteins
5	The transport in which larger materials are enter or exit from the cells is called .....	a) diffusion	b) massive transport	c) passive transport	d) passive transport
6	The lipid gives the cell membranes their .....	a) conductivity	b) permeability	c) movement	d) flexibility
7	Glycoproteins make as ..... on the cell membrane	a) pores	b) receptors	c) skeleton	d) fibers
8	The nucleus is surrounded by two membranes, together known as .....	a) nuclear membranes	b) nuclear body	c) nuclear envelope	d) nucleolus
9	The ribosomes are formed in:	a) nucleolus	b) nucleus	c) cytoplasm	d) endoplasm
10	The proteins that stay in the cytosol are made by:	a) bound ribosomes	b) free ribosomes	c) RER	d) SER
11	The ..... membrane of mitochondria forms folds which are called cristae:	a) inner	b) outer	c) ATP	d) intermediate
12	The tales of phospholipid molecules are known as:	a) hydrophilic	b) lipophilic	c) hydrophobic	d) lipophobic