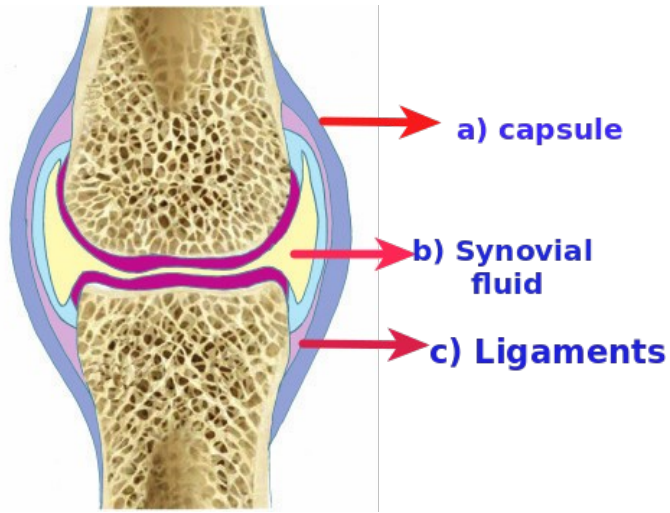


**ANNUAL EVALUATION 2019-2020**  
**BIOLOGY**  
**(ENGLISH MEDIUM) CLASS- 9**

QN	ANSWER	SCORE						
1	C) During Photosynthesis Oxygen is released by the splitting of <b>Water molecule</b>	1						
2	a) Pulmonary artery b) Left Atrium	$\frac{1}{2} + \frac{1}{2} = 1$						
3	Glucose, Amino acid	$\frac{1}{2} + \frac{1}{2} = 1$						
4	Insect- malphigian tubule-Uric Acid	1						
5	b) Paramecium- Cilia	1						
6	Intercalary meristem	1						
7	(i) Amino acids (ii) Blood (iii) simple diffusion. (iv) Lacteal	$\frac{1}{2} \times 4 = 2$						
8	a) Globulin b) Fibrinogen c) Regulates blood pressure d) Plays a major role in the coagulation of blood	$\frac{1}{2} \times 4 = 2$						
9	a) Muscle Fatigue b) Lactic Acid c) This increases acidity in muscles which in turn slows down the action of many enzymes associated with muscle contraction.	$\frac{1}{2} + \frac{1}{2} = 1$ 1						
10	a) Interphase b) Number of cell organelles increases, Quantity of cytoplasm increases, Cell size increases. Genetic material duplicates.	2						
11	Haptotropism, Chemotropism, Phototropism nastic movement	$\frac{1}{2} \times 4 = 2$						
12	a) Rheumatic Arthritis b) Sprain c) Osteoporosis d) Muscular dystrophy	$\frac{1}{2} \times 4 = 2$						
13	They are surrounded by numerous blood capillaries. The inner wall of the alveoli is always kept moist. The walls of the alveoli and capillaries are made up of a single layer of cells.	2						
14	a) make involuntary movements possible. No striations. spindle shaped cells. b) make involuntary movements possible., branched cells, striations are seen.	3						
15	<b>Heart:-</b> Increases blood circulation through out the body. • Cardiac muscles become strong. <b>Lungs:-</b> Exchange of respiratory gases becomes more effective. • Vital capacity increases. <b>Muscles:-</b> More capillaries are formed in muscles. • Increases the efficiency of muscles.	3						
16	<table border="1" style="width: 100%;"> <tr> <td>Glycolysis</td> <td>Krebs cycle</td> </tr> <tr> <td>Glucose is converted to pyruvic acid</td> <td>pyruvic acid is converted to carbon dioxide and water</td> </tr> <tr> <td>2 ATP molecules are produced.</td> <td>Takes place in mitochondria</td> </tr> </table>	Glycolysis	Krebs cycle	Glucose is converted to pyruvic acid	pyruvic acid is converted to carbon dioxide and water	2 ATP molecules are produced.	Takes place in mitochondria	3
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17	a) Cytokinesis b) X=Small vesicles are formed between the							

	daughter nuclei. Y= cell plate c) No cell plate formation in Animal cells.		3	
18	a) Girth is increased in Mango tree is due to the presence of Lateral Meristems. It is absent in monocot plant like coconut tree. b) Animals grow only up to a certain stage. But plant grow through out their life. Animals have no specialised growing regions like meristems as in plants.		1 2	
19	Pivot joints	Movement is possible in all directions	The point where the first vertebra joins with the skull	1
	Ball and socket joint	The spherical end of one bone is fixed in the cup like pit of the other	Shoulder joint	1
	Hinge joint	Movement is possible in one direction only	Elbow and knee joint	1
20	a) A=Metaphase B= Anaphase b) Changes that take place in chromatids. Formation of daughter chromosomes. c) Telophase. Formation of daughter nuclei. Number of daughter nuclei. Number of chromosomes in each daughter nucleus.		3	
21	a) Meiosis b) X= 23 c) Y=Polar bodies d) Through meiosis that the chromosome number is maintained constant even after generations		4	
22	a) The rate of life activities are less in plants when compared to animals. Hence, the quantity of waste materials in plants are also less b) <b>Stomata, Lenticel</b> Expel photosynthetic byproduct oxygen and respiratory byproducts carbon dioxide and water. <b>Hydathodes</b> :-In certain grasses and shrubs, excess water is eliminated through smallpores present at the tip of leaves called hydathodes. <b>Formation of heartwood</b> : Some waste materials get accumulated in the older xylem vessels present at the centre of the tree trunk and play a major role in the formation of heart wood. <b>Abscission of leaves</b> : When leaves are about to fall, plants absorb all useful materials from them. Falling leaves contain mostly waste materials. ( <b>Any three</b> )		4	

23



4

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