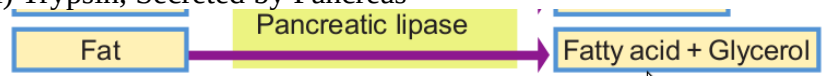
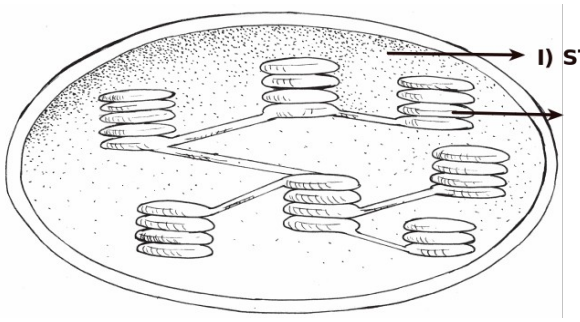
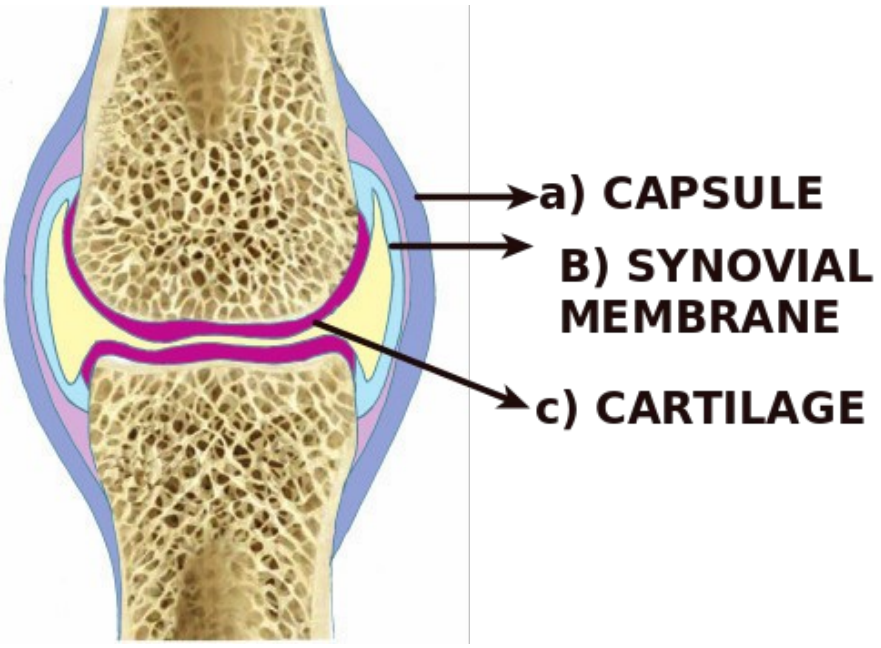
ANNUAL EVALUATION, MARCH-2021-22
ANSWER KEY STD IX
BIOLOGY(ENG MED)

<table>
<tr><th>QNO</th><th>VALUE POINTS</th><th>SCORE</th><th>TOT</th></tr>
<tr><td>1</td><td>c) Chlorophyll a</td><td>1</td><td>1</td></tr>
<tr><td>2</td><td>Peristalsis</td><td>1</td><td>1</td></tr>
<tr><td>3</td><td>Pulmonary vein, Vein</td><td>½ + ½</td><td>1</td></tr>
<tr><td>4</td><td>i) Lactic acid</td><td>1</td><td>1</td></tr>
<tr><td>5</td><td>b) The light phase takes place in grana</td><td>1</td><td>1</td></tr>
<tr><td>6</td><td>Ribs- 24 bones</td><td>1</td><td>1</td></tr>
<tr><td>7</td><td>a) The plasma membrane invaginates at the centre of the cell.</td><td>1</td><td>1</td></tr>
<tr><td>8</td><td><table><tr><td>Prophase</td><td>Spindle fibres are formed</td></tr><tr><td>Metaphase</td><td>Chromosomes are arranged at the centre of the cell</td></tr><tr><td>Anaphase</td><td>Daughter chromosomes are formed</td></tr><tr><td>Telophase</td><td>Daughter nuclei are formed</td></tr></table></td><td>4 X ½</td><td>2</td></tr>
<tr><td>9</td><td>i) The walls of the alveoli and capillaries are O 2 made up of a single layer of cells
ii) The inner wall of the alveolus is always kept moist
iii) They are surrounded by numerous blood capillaries.(ANY TWO)</td><td>1 + 1</td><td>2</td></tr>
<tr><td>10</td><td>A) X= Hepatic portal vein, Y= Hepatic vein
b) Certain veins do not reach the heart and they carry blood from organ to organ. Such veins are called portal veins</td><td>1
1</td><td>2</td></tr>
<tr><td>11</td><td><table><tr><td>Inspiration</td><td>Expiration</td></tr><tr><td>Volume of the thoracic cavity increases</td><td>intercostal muscles relax</td></tr><tr><td>Diaphragm contracts</td><td>pressure in the thoracic cavity increases</td></tr></table></td><td>1
1</td><td>2</td></tr>
<tr><td>12</td><td>a) i) Trypsin, Secreted by Pancreas
c) 
</td><td>1
1</td><td>2</td></tr>
<tr><td>13</td><td>a) X= Dentine, Y= Pulp
b) Dentine: Living tissue which forms the tooth,
Pulp: Soft connective tissue seen in the pulp cavity. Blood vessels, lymph ducts and nerve fibres are also seen.</td><td>1
1</td><td>2</td></tr>
<tr><td>14</td><td>a) 120 is indicated as Systolic Pressure,80 is indicated as Diastolic Pressure
b) Hypertension is due to Unhealthy habits, such as excess use of salt and fat, smoking, lack of exercise etc</td><td>1
1</td><td>2</td></tr>
<tr><td>15</td><td>i) Light Phase ii) Water</td><td>1 + 1</td><td>2</td></tr>
</table>

16	In males, after meiosis, four sperms having 23 chromosomes are formed from a single germinal cell. But in females, only a single ovum is formed from one germinal cell. Four Polar bodies being sterile get destroyed i n females.	2	2
17	i) Touch(Thigmotropism) ---------iii) Climbers grow towards and around support. ii) chemicals(Chemotropism)-----iv) Pollen tube grows towards the ovary	1 + 1	2
18	i) Contractile vacuole (ii) Ammonia iii) kidneys. (iv) Urea v) Nephridia vi) urea, ammonia, water	6 X ½	3
19	a) Fat b) Sucrose d) Fructose	3 X 1	3
20	X= Apical Meristem, Y = Lateral meristem **Apical Meristem** : Helps to increase the length of root and stem. **Lateral meristem:** Helps to increase the girth of stem and root. Seen only in dicot plants.	1 2	3
21	i) Cytoplasm ii) Mitochondria iii) No need of Oxygen iv) Oxygen required v) Glucose vi) Carbon dioxide, water 28 TP	6 X ½	3
22	a) Villus b) X= Lacteal c) Fatty acid and glycerol are absorbed into the lymph of lacteal.		3
23	a) Heparin is added to prevent clotting of blood b) due to the difference in the diameters of afferent vessel and efferent vessel c) Avoiding urination for a long time prevents the expulsion of bacteria that may be present in the urinary tract and urinary bladder. This causes infection in the inner membrane of the urinary bladder.		3
24	i) Converts protein to peptones partially ii) Destroys germs in the food. Regulates pH suitable for the digestion in stomach. Iii) Mucus	1 1 1	3
25	 a) Chloroplast	3 1	4
26	a) Double circulation b) Systemic circulation, Pulmonary circulation c) Systemic circulation starts from the left ventricle and ends in the right atrium. The circulation which starts from the right ventricle and ends in the left atrium is called pulmonary circulation.	1 1 2	4

27		1 1 1 1	4

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