|  |  |
| --- | --- |
| **1** | **Embryology is the study of:**  a) Fossils b) Tissues c) Development d) Internal gross structure |
| **2** | **The technology used for achieving:**  a) Gene therapy b) Radiotherapy c) Chemotherapy d) Cloning |
| **3** | **Human tissues have 85% water in cells of:**  a) Brain b) Bone c) Blood d) Liver |
| **4** | **Cotton is a pure:**  a) Cellulose b) Polysaccharide c) Cellulase d) Both A & B |
| **5** | **Conjugated histone proteins are:**  a) Structural and Regulatory b) Structural Only  c) Regulatory only d) Terpenoid |
| **6** | **Induced fit model was proposed by:**  a) Email Fisher b) Koshland c) Jenner d) Pasteur |
| **7** | **The Optimum temperature of human body enzyme is:**  a) 27 C0 b) 37 C0 c) 47 C0 d) 57 C0 |
| **8** | **Cell wall is secreted by:**  a) Protoplasm b) Nucleoplasm c) Golgi complex d) Ribosome |
| **9** | **Golgi apparatus is concerned with cell:**  a) Division b)Lysis c) Secretion d) Stroage |
| **10** | **Family includes related:**  a) Species b) Genera c) Families d) Orders |
| **11** | **Lytic cycle completion occurs about:**  a) 15 Min b) 25 Min c) 35 Min d) 05 Min |
| **12** | **Infectious Hepatitis is caused by:**  a) HAV b) HBV c) HCV d) HDV |
| **13** | **Bacterial pathogenicity is dua to:**  a) Cell Wall b)Capsule c)Slime d)Cell envelope all |
| **14** | **Rapied phase of growth of Bacteria is:**  a) Lag b) Log c) Stationary d) Decline |
| **15** | **Cuticular transpiration takes places at:**  a) Morning b) Noon c) Evening d)Night |
| **16** | **Which one contains companion celles:**  a) Xylem b) Phloem c) Endodermis d) Cortex |
| **17** | **Which one is not the layer of wall of heart**:  a)Pericardium b) Epicardium c) Myocardium d) Endocardium |

* **EDUTAINERS**

**Series – III Specialist of Sciences 25/04/17**

**Biology 1st Half 1st Year Time:20mins Marks:17**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( Ch # 1 to 6 & 14 )**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| **a** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **b** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **c** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **d** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

***Head Office: 351-6-CII-Azmat Chowk Green Town Lahore / 0300-8404119/ 0332-8734119***

* **EDUTAINERS**

**Series – III Specialist of Sciences Date:25/04/17**

**Biology 1st Half 1st Year Time:2:40mins Marks:68**

**( Ch # 1 to 6 & 14 )**

**Subjective Type**

**Section I**

**Q. 2. Attempt any EIGHT (8) short questions. (8 × 2=16)**

1. What are pesticides? What are the side effect of using pesticide chemicals?
2. Differentiate between chemotherapy and radiotherapy.
3. What is hydroponic culture technique?
4. Define the term biome with example.
5. How does theory differ from law.
6. What are glycosidic linkages ?
7. Differentiate between saturated and unsaturated fatty acid.
8. What are conjugated molecules?
9. What is Biochemistry? Give its importance.
10. Differentiate Amylose and Amylopectin.
11. Differentiate between apoenzyme and holoenzyme.
12. Define E.coli genome:

**Q. 3. Attempt any EIGHT (8) short questions. (8 × 2=16)**

1. What is enzyme to enzyme chain?
2. How does high temperature affect enzyme activities?
3. What are enzyme inhibitors? Give two example.
4. Define endocytosis?
5. How many types of endoplasmic reticulum are present?
6. Define polysome and ribosomes?
7. What is peroxisome?
8. Give any two important functions of centrioles?
9. What are Thylakoid and Granum?
10. Give biological classification of corn?
11. What are prions?
12. Different between lytic phage and lysogenic phage?

**Q. 4. Attempt any SIX (6) short questions. (6× 2=12)**

1. What is herpes simplex?
2. What is Hepatitis? How is it caused.
3. What do you known about huge bacterium?
4. What are mesomes? Write their role.
5. Give misuse of antibiotics?
6. Give Structure of nostoc?
7. What is pressure potential?
8. What is lenticels?
9. What is stroke?

***Head Office: 351-6-CII-Azmat Chowk Green Town Lahore / 0300-8404119/ 0332-8734119***

**(SECTION-II)**

**Note: Attempt any THREE questions. (8× 3 = 24)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q. 5.** | a) | Discribe primary and secondary structure of protein | (4) |
|  | b) | Explain different functions of human blood. | (4) |
| **Q. 6.** | a) | What is cloning? Discuss in detail. | (4) |
|  | b) | Write a detail note on Endoplasmic reticulum? | (4) |
| **Q. 7.** | a) | Describe the life cycle of bacteriophage. | (4) |
|  | b) | Describe influx of k+  ions hypothesis to explain the opening and closing of stomata. | (4) |
| **Q. 8.** | a) | Describe different physical and chemical methods to control bacteria. | (4) |
|  | b) | Describe acylglycerols in detail. | (4) |
| **Q. 9.** | a) | Give function of lymphatic system. | (4) |
|  | b) | Write down characteristics of cynobacteria. | (4) |
|  |  |  |  |