

Navrachana University
School of Liberal studies and Education, B.Sc+ Program
End semester examination, May-2017
First Year (Semester II)

Course Name: Foundation course in Biology-II;

Course code: BY103

Date: 11/05/2017 Time: 10:30 am – 12:30 pm

Marks: 40

Instructions:

- Write each answer on a new page
- All the Questions are Compulsory
- Please read the questions carefully and answer accordingly
- Draw a neat and labeled diagram wherever necessary

Q-1(a): Choose the correct option for following questions: (5 Marks)

1. Tapeworms live inside intestine of humans and feed on the nutrients of the food they eat. This kind of interaction is an example of...
 (a) Commensalism (b) Ammensalism (c) Parasitism (d) Mutualism
2. Which of the following is **correct** for glucose?
 (a) It is a monosaccharide. (b) It is a reducing sugar.
 (c) It is a monomer of cellulose. (d) All
3. A lichen is a symbiotic association between.....
 (a) Algae and fungi (b) Algae and paramecium (c) Fungi and coral (d) None
4. How many hydrogen bonds are formed when adenine joined with thymine in the DNA?
 (a) 1 (b) 2 (c) 3 (d) bonding cannot occur
5. Maltose is an example of
 (a) Monosaccharide (b) Disaccharide (c) Oligosaccharide (d) Polysaccharide

Q-1(b): Answer the following questions in one or two sentences. (5 Marks)

1. What is the role of rhizobium bacteria living in root nodules of leguminous plants?
2. Give any two examples of ectoparasites.
3. How the chain length affects the melting point of fatty acids?
4. Why sucrose is a non-reducing sugar?
5. What is the full form of DNA?

Q-2: Answer the following questions in brief. (8 Marks)

1. What is competition? How it affects the population in an ecosystem?
2. Explain the kind of interaction between orchid and tree.
3. What is proto-cooperation? Explain with an example.
4. What are the importance of lipids in living organisms?

Q-3: Explain in detail (Any Three) (12 Marks)

1. Ammensalism
2. Watson and Crick model of DNA structure with a suitable diagram.
3. How food chain is maintained in a terrestrial ecosystem?
4. Proteins - Macromolecule of life

Q-4: Answer the following question: (Any two)

(10 marks)

1. Describe using a diagram the interconnections between different organ systems of the human body. Discuss their function in brief.
2. Describe the different levels of organizations in the body using appropriate diagram.
3. What is a disease? How does it affect your body? What can one do to prevent one from getting a disease? Explain using suitable examples.

-----ALL THE BEST-----