

## Botany (Hons.) Paper-II

Answer five questions only including Q.No. 1 which is compulsory. The rest four questions are required to be answered, selecting at least two from each Group.

1. Select the most appropriate answer :

- (a) The fungal flagella are made up of fibrils arranged in : **LNMUonline.com**  
(i) 10 + 2                      (ii) 7 + 4                      (iii) 9 + 2                      (iv) 5 + 6
- (b) Little leaf of brinjal is caused by :  
(i) Bacteria                      (ii) Mycoplasma                      (iii) Viruses                      (iv) Fungi
- (c) Muramic acid is found in the cell wall of :  
(i) Algae                      (ii) Fungi                      (iii) Bacteria                      (iv) Virus
- (d) Transformation was discovered by :  
(i) Lederberg and Tatum                      (ii) Griffith  
(iii) Watson and Crick                      (iv) Zinder and Lederberg
- (e) The gram negative bacteria differ from gram positive bacteria in cell wall composition in having :  
(i) Lipids                      (ii) Carbohydrates                      (iii) Proteins                      (iv) None of these
- (f) The main function of primary bodies in mycoplasma is :  
(i) Reproduction                      (ii) Respiration                      (iii) Secretion                      (iv) Food storage
- (g) Bacteriophage is made up of :  
(i) Protein                      (ii) DNA                      (iii) Nucleoprotein                      (iv) Lipid and protein
- (h) Fungi growing on dung are called as :  
(i) Coprophilous                      (ii) Lichens                      (iii) Bacteriophage                      (iv) Predacious
- (i) Sexual reproduction is absent in :  
(i) Phycomycetes                      (ii) Ascomycetes                      (iii) Basidiomycetes                      (iv) Deuteromycetes
- (j) Which of the following is an edible fungus ?  
(i) Aspergillus                      (ii) Alternaria                      (iii) Agaricus                      (iv) Mucor

### **Group-A**

- Describe the characteristic features of different groups of microorganisms.
- Discuss the various modes of reproduction in Cyanobacteria.
- Discuss the important roles of micro-organisms in agriculture.
- Write short notes on any two of the following : (a) PPLO (b) Ultra structure of cyanobacterial cell (c) Role of micro-organisms in industry (d) Conjugation in bacteria

### **Group-B**

- Discuss the salient feature of the life-cycle of Puccinia on wheat. **LNMUonline.com**
- Describe the etiology, symptoms and control of any two of the following diseases :  
(a) Powdery mildew of cucurbits (b) Loose smut of wheat (c) Tundu disease of wheat (d) Little leaf of brinjal.
- Define toxin and describe the role of toxins in pathogenesis.
- Write short notes on any two of the following : (a) Economic importance of fungi (b) Alternaria (c) Saccharomyces (d) Tobacco mosaic virus
- Describe the role of fungal enzymes in disease development.