

# BSC. PART - II EXAMINATION - 2016

## BOTANY HONOURS PAPER IV

Answer five questions attempting two from each Group in which

Q. No. 1 is compulsory

1. Select the correct answer for each of the following :

- (a) Bacterial cell wall is made up of :  
(i) Chitin (ii) Cellulose (iii) Peptidoglycan (iv) Suberin
- (b) Nucleic acid to TMV is :  
(i) RNA (ii) DNA (iii) Both RNA and DNA (iv) None of these
- (c) Phage mediated transfer of DNA in bacteria  
(i) Conjugation (ii) Transduction (iii) Transformation (iv) Transplantation
- (d) Heating of milk at 65<sup>0</sup> C and its sudden cooling is called :  
(i) Sterilization (ii) Fermentation (iii) Preservation (iv) Pasteurization
- (d) Bacteria in which flagella are present all over the body wall is known as :  
(i) Lophotrichous (ii) Peritrichous (iii) Monotrichous (iv) Atrichous
- (f) Rust of wheat is caused by :  
(i) Puccinia (ii) Ustilago (iii) Pseudomonas (iv) Claviceps
- (g) Diseases which appear constantly after regular intervals in a particular area are:  
(i) Epidemic (ii) Endemic (iii) Sporadic (iv) Pandemic
- (h) Bordeaux mixture is a :  
(i) Fungicide (ii) Herbicide (iii) Biopesticide (iv) Insecticide
- (i) Red rot of sugarcane is caused by :  
(i) Fusarium (ii) Colletotrichum (iii) Xanthomonas (iv) Alternaria
- (j) Spirochaetes are group of Bacteria having one of the following shapes :  
(i) Rod like (ii) Spherical (iii) Curved (iv) Elliptical
- (k) Phytophthora is an example of ..... parasite (Fill up the blank).  
(l) Internal and external alterations in plants due to a disease are known as .....  
(Fill up the blank).
- (m) Rhizobium is an example of ..... nitrogen fixing bacteria (Fill up the blank).
- (n) Penicillin was discovered by :  
(i) Adolf Mayer (ii) Fleming (iii) Bergey (iv) Millardet
- (o) 'Germ theory of diseases' was proposed by :  
(i) Robert Koch (ii) Louis pasteur (iii) Stanely (iv) Anderson

### GROUP - A

- Describe the ultrastructure of bacterial cell.
- Give an account of important methods of sterilization used in Microbiology.
- Write notes on any two of the following :  
(a) Actinomycetes (b) Culture media (c) Bacteriophage (d) Gram stain
- Discuss the role of microbes in food and beverage industries.

### GROUP - B

- What is epidemiology ? Describe the methods of transmission of plant pathogens.
- Give symptoms, etiology, spread and control of covered smut of barley.
- Write notes on any two of the following :  
(a) Ergot of rye (b) Disease symptoms (c) Uredospores and teleutospores of Puccinia
- Write short notes on any two of the following :  
(a) Alternate host (b) Koch's postulates (c) Fungicides  
(d) Disease resistant varieties.