



SB-1161

Third Year B. Pharm. Examination

March / April – 2011

PH - 301 : Pharmaceutical Microbiology

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दर्शाविए निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. : <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Name of the Examination : T. Y. B. Pharm.	<div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;">Student's Signature</div>
Name of the Subject : PH - 301 : Pharmaceutical Microbiology	
Subject Code No. : <input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="6"/> <input type="text" value="1"/> Section No. (1, 2,.....) : <input type="text" value="1&2"/>	

- (2) The paper consists of **two** sections.
- (3) Each sections carry **equal** marks.
- (4) Figures to the **right** indicate marks.
- (5) All questions are **compulsory**.
- (6) Draw a neat and labelled diagram wherever **necessary**.
- (7) Both the sections must be written in **separate** answer books.

SECTION - I

- 1 Attempt the following questions : (any **five**) 10
 - (a) Describe Koch's postulates.
 - (b) Discuss in brief endosymbiotic theory.
 - (c) Describe Bacterial cell division in brief.
 - (d) Discuss briefly Haeckel's Kingdom of Protista
 - (e) Discuss life cycle of virus.
 - (f) Explain in brief differential media with suitable example.
 - (g) Discuss sporogenesis.

- 2 Answer the following questions : (any **four**) 16
 - (a) Describe in detail Bacterial Growth Curve.
 - (b) Describe methods for preservation of bacterial cultures.
 - (c) Discuss the cultivation of viruses.
 - (d) Discuss about the Nutritional requirements of bacteria.
 - (e) Discuss briefly special staining techniques.
 - (f) Explain the morphology of spirochetes in detail.

SB-1161]

1

[Contd...

- 3** Write a short note on : (any **three**) **9**
- (a) IgG
 - (b) Applied areas of microbiology
 - (c) Numerical Taxonomy
 - (d) Bacterial cell wall
 - (e) Microbial Spoilage.

SECTION - II

- 4** Define the following : (any **eleven**) **11**
- (a) Protoplast
 - (b) D-value
 - (c) % G+C content
 - (d) Endotoxin
 - (e) Glycocalyx
 - (f) Allergen
 - (g) Lysogeny
 - (h) Facultative anaerobe
 - (i) Magnetosome
 - (j) Terminal sterilization
 - (k) Interferon
 - (l) Sterility assurance level
 - (m) Mycelium
 - (n) Actinomycetes
 - (o) Bioburden.
- 5** Write short note on : (any **three**) **12**
- (a) Moist Heat Sterilization
 - (b) Diagnostic tests for Tuberculosis and typhoid
 - (c) Biological Indicators
 - (d) Plasma protein fractionation
 - (e) Portal of entry for pathogen.
- 6** Answer in detail on following : (any **two**) **12**
- (i) Differentiate between Prokaryotes and Eukaryotes
 - (ii) Describe Physical and Chemical Methods of disinfection
 - (iii) Discuss about Dextran as a Plasma substitute.