

V.P. & R.P.T.P. Science College  
Internal test (September-2013)  
USO3CMIC01

Time: 1.00 to 2.30 pm  
Monday, 30<sup>th</sup> Sep' 2013

Maximum Marks: 30

N.B. (1) Attempt All Questions. (2) Marks are indicated on the right.

Q.1. Select the right Answer:

(06)

1) Pebrine disease of silk worm was first investigated by :

- a) Louis Pasteur                      c) Edwin Kleb
- b) Paul Ehrlich                      d) Emil Von Behring

2) The process of phagocytosis was discovered by:

- a) Robert Koch                      c) John Tyndall
- b) Elie Metchnikoff                      d) Joseph Lister

3) The component which imparts color to the dye molecule is:

- a) Auxochrome                      c) Chromophore
- b) Fluorochrome                      d) None of these

4) The chemical responsible for Acid fastness in bacteria is:

- a) Polypeptide                      c) Mycolic acid
- b) Gycogen                      d) Polyphosphate

5) A sheath is present around the cells of genera:

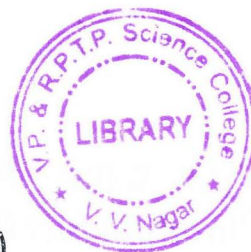
- a) *Escherichia coli*                      c) *Sphaerotilus natans*
- b) *Bacillus anthracis*                      d) none of these

6) Calcium Dipicolinate is present in large amount in:

- a) Endospore                      c) Mesosome
- b) Capsule                      d) Ribosome



P.T.O



**Q.2. Answer in short: (Any Three)**

**(06)**

- 1) Explain the terms 'Attenuation' & 'Pure Culture'.
- 2) List one contribution each of, S. Winogradsky & Paul Ehrlich in the development of Microbiology.
- 3) What is the necessity of staining in microbiology?
- 4) What is Vital staining? Name two types of vital staining.
- 5) Name any two cytoplasmic inclusions in bacterial cells & give its significance.
- 6) Write two functions of cytoplasmic membrane in bacterial cells.

**Q.3. Explain the germ theory of Fermentation.**

**(06)**

**OR**

**Q.3. Explain the germ theory of Disease.**

**(06)**

**Q.4. What is gram staining? Explain the role of mordant & decoloriser in this procedure.**

**(06)**

**OR**

**Q.4. (a) Write on: Chemistry of Dye.**

**(03)**

**(b) Draw a neatly labeled diagram of a typical bacterial cell. (03)**

**Q.5. With the help of a neatly labeled diagram, Explain the Structure of Bacterial Cell Wall.**

**(06)**

**OR**

**Q.5. Explain with the help of a neatly labeled diagram the structure of bacterial flagella.**

**(06)**

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