

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(First Semester)

Branch-BOTANY

MICROBIOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10x1 = 10)

- 1 Bacteria were, for the first time observed by
(i) Anton Von leeuwonhoek (ii) Robert
(iii) W.H.Stanly (iv) Leuis Pasteur
- 2 The genetic material in virus is
(i) DNA only (ii) RNA only
(iii) DNA,RNA and protein (iv) DNA or RNA
- 3 Muramic acid is present in the cell wall of _____
(i) Green algae (ii) Bacteria
(iii) Yeast (iv) *Rhizopus*
- 4 Peritrichous bacteria are those when flagella are
(i) Present at one end (ii) Present at both ends
(iii) Present all over the body (iv) None of these
- 5 The asexual reproduction in *Albugo* occurs by means of
(i) Oidio (ii) Conidia
(iii) Chlamyospores (iv) Budding
- 6 Yeast is used in the industrial production of
(i) Butanol (ii) Citric acid
(iii) Tetracycline (iv) Ethanol
- 7 Tikka disease is caused due to the infection by the species of
(i) *Pseudomonas* (ii) *Xanthomonas*
(iii) *Cercospora* (iv) *Streptomyces*
- 8 Which of the following take part in symbiosis of lichens?
(i) Alga-fungus (ii) Alga-alga
(iii) Fungus-fungus (iv) Alga-gymnosperms
- 9 Food can be easily preserved at low temperature, because the low temperature
(i) The food can easilydigested
(ii) The food can be easily cooked
(iii) The bacterial attack on food is minimized
(iv) All the above
- 10 Food poisoning is caused by the infection of
(i) *Bacillus megatherium* (ii) *Salmonells typhi*
(iii) *E.coli* (iv) *Clostridium botulinum*

Cont..

SECTION - B (35 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 7 = 35)

- 11 a Bring out the general characteristics of virus.
OR
b Describe micro flora of water.
- 12 a Explain critically the nutritional requirements of micro organisms.
OR
b How do you measure the bacterial growth?
- 13 a Describe the asexual reproduction in Yeast.
OR
b Enumerate the economic important of fungi.
- 14 a Expound the casual organism and control measures of bacterial flight of paddy.
OR
b Discuss the thallus structure of lichens.
- 15 a Classify the types of microbial food spoilage with suitable examples.
OR
b Solve the various methods of microbial control.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Summarize the structure and multiplication of T₄ phage.
- 17 Highlight the ultra structure of bacterial cell.
- 18 Outline the life cycle of *Albugo*.
- 19 Discuss the sexual reproduction in lichens.
- 20 Analyse the methods of food preservation.

Z-Z-Z

END