Fdqu.1202

KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Engg) 2018 Admission
II Semester Final Examination- June 2019

General Microbiology(1+1)

Marks: 50
Time: 2 hours

I **Fill up the blanks** **(10x1=10)**

1 _____has described phagocytosis of bacteria.
2 Gram-positive cell walls contain a higher percentage of _____ than those of Gram-negative cells.
3 The DNA of phages becomes integrated into the host genome, where it is known as a _____.
4 _____ is a group of related genes under the control of a single operator sequence
5 _____ is a mutation in which a purine replaces a pyrimidine, or a pyrimidine replaces a purine
6 _____ is an organism that can derive its carbon from carbon dioxide
7 _____ is a medium that allows colonies of a particular organism to be differentiated from others growing in the same culture
8 _____is the synthesis of ATP by the direct transfer of a phosphate group from a phosphorylated organic compound to ADP.
9 _____ is the process of uptake of naked DNA from the environment and its integration into the host genome
10 _____ is the process of bacteriophage-mediated transfer of genetic material between bacteria.

II **Write Short notes on any FIVE of the following** **(5x2=10)**

1 Four examples of microbes used in our day to day activities.
2 Third kingdom Protista.
3 Applied areas of microbiology.
4 Functions of bacterial capsule.
5 Continuous culture.
6 Koch's Postulates.
7 Various antigen antibody reactions.

III **Answer any FIVE of the following.** **(5x4=20)**

1 Contribution of Louis Pasteur.
2 Major characteristics of microorganisms used in classification.
3 Electron microscope.
4 Pour plate method for isolation and enumeration of bacteria.
5 Conjugation.
6 Characteristics of Immune response.
7 Bacterial transcription.

IV **Answer any ONE of the following** **(1x10=10)**

1 Bacterial cell structure with their functions
2 Glycolysis pathway along with account for the ATP yield per glucose molecule

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