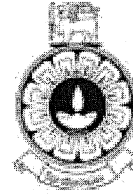


THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. / B.Ed. DEGREE PROGRAMME – LEVEL 04
BOU2103/ BOE4103- PRINCIPLES OF MICROBIOLOGY
OPEN BOOK TEST – 2014/2015
DURATION: ONE (01) HOUR.



Reg. No.

DATE : 01st February 2015

TIME : 2.30 p.m. – 3.30 p.m.

Answer All Questions. Questions should be answered on the question paper itself.

01. Fill in the blanks with suitable phrases/words.

- i. Kingdom Monera includes true bacteria and
- ii. The classification with Domain Bacteria, Archaea and Eubacteria was introduced by the scientist
- iii. The principle of ‘aseptic techniques’ was introduced by the scientist
- iv. Anaerobic organism were first observed by the scientist.....
- v. Use of Solid media for culturing was initially developed by the scientist
- vi. The extracellular, inert state of viruses are known as
- vii. The complete complex of nucleic acid and protein, packaged in the virus particle is called
- viii. Different strains of a number of bacterial species can be distinguished by their sensitivity to susceptible phages by
- ix. Mycoplasma are said to be because they can assume different shapes due to the absence of a cell wall.
- x. Protozoa that move by amoeboid motion are called
- xi. In a typical bacterial growth curve, the regular, genetically determined time interval taken for an organism to double is called its
- xii. In a viral growth curve, the initial period where no increase in the number of plaques is seen is called as an

xiii. Microorganisms with special nutritional needs that require complex substances in artificial media are called as

xiv. Microorganisms that obtain energy by oxidation of simple inorganic substances are referred to as

xv. The available water for the growth of microorganisms is referred to as

(3 x 15 Marks)

02. Differentiate between the following (give two factors each).

a) Virulent phage and Temperate phage

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b) Batch culture and Continuous culture

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c) Photosynthesis by bacteria and photosynthesis by algae

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d) Bacterial colonies and plaques

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(08 x 4 Marks)

03) . Briefly explain the following statements

a) The presence of mycelium on a substrate can not confirm the presence of a Fungus

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.....

b) Leaves are dusted with Carborandum powder prior to inoculation with a Virus.

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c) A cotton wool plug is usually placed on the mouth of a test tube containing a culture of bacteria.

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(04 x 3 marks)

04). Give the Use and Principle of the following

a) Gas pack anaerobic jar

Use.....

Principle.....

.....
.....

b) Autoclave

Use.....

Principle.....

.....
.....

(05 x 2 marks)

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