

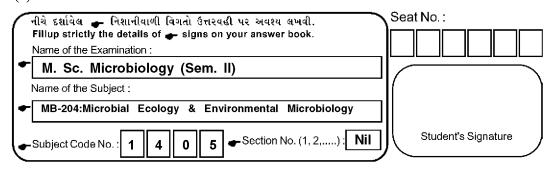
## AC-1405

## M. Sc. Microbiology (Sem. II) Examination April / May - 2015

## MB 204 : Microbial Ecology & Environmental Microbiology

Time: Hours] [Total Marks: 70]

Instructions:
(1)



- (2) Figures to the right indicate full marks of the question.
- (3) Draw neat and labelled diagrams whenever necessary.
- Q.1 Explain any two of the followings.

  a. Justify: Biodiversity at molecular level play important role in domains, kingdom and phyla establishment.
  b. Basic principle and development for nucleic acid probes.
  c. Explain: microbial ecology is the core that links all branches of microbiology.

  Q.2 Explainany two of the followings.

  a. Define & differentiate: Biodegradation and biosorption. Give detail on biodegradation and biosorption of textile effluents.
  - c. Discuss in detail on physical characteristics of wastewater.

Discuss on biotreatment of hospital waste.

Q3. Discuss detail on any two of the following.
a. Discuss bioavailability in relation to sequestration and ageing.
b. What are bioremediation technologies? Write details on *Insitu* groundwater biorestoration.
c. Justify: Many factors are responsible for failure of inoculations.

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- Q.4 Write short notes on any two of the following.

  a. Genes responsible for heavy metal resistance in Cyanobacteria.
  - b. Recent research techniques in Biodeterioration.
  - c. Bioleaching process for Metals.

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