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DPP-1406

M. Sc. (Sem. II) Examination

April / May - 2016

MB-201 : Microbiology

(Molecular Microbial Physiology & Enzymology)

Time : Hours] [Total Marks : **70**

Instruction :

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **M. Sc. (SEM. 2)**

Name of the Subject :

☛ **MB-201 : MICROBIOLOGY**

☛ Subject Code No. : **1 4 0 6** ☛ Section No. (1, 2,.....) : **Nil**

Seat No. :

Student's Signature

1 Answer the following : (any **two**) 18

(a) Explain southern blot technique and give its importance.

(b) How protein – protein interaction is determined by two hybrid analysis?

(c) Describe DNA mobility shift as a tool for studying microbial physiology.

2 Answer the following : (any **two**) 18

(a) Discuss. Explain two component signaling system.

(b) Discuss biochemistry and physiology of adaptation of extreme thermophilies.

(c) Discuss biochemistry and physiology of adaptation of extreme halophiles.

3 Answer the following : (any **two**) 18

(a) Describe methods for C-terminal sequencing of protein.

(b) How secondary structure of protein is determined?

(c) Discuss mechanism of acid base catalysis.

4 Write notes on the following : (any **two**) **16**

(a) Discuss competitive, non competitive and uncompetitive inhibition of enzyme.

(b) Lineweaver Burk plot v/s Hans Plot.

(c) Derive Michaelis – Menten Equation.
