

DPP-1408

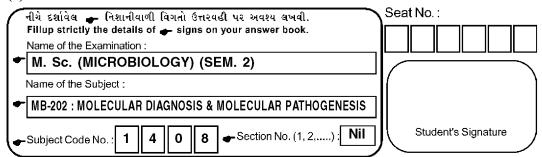
M. Sc. (Microbiology) (Sem. II) Examination April / May - 2016

MB-202 : Molecular Diagnosis & Molecular Pathogenesis

Time: 3 Hours [Total Marks: 70

Instructions:

(1)



- (2) Figures to the right indicate full marks of the question.
- (3) Draw neat and labeled diagrams whenever necessary.
- 1 Answer the following: (any two)

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- (a) Explain signal amplification technique in detail.
- (d) Discuss the strand displacement method of target amplification and give its significance.
- (c) Explain in detail the molecular methods for detection of RNA targets.
- 2 Answer the following: (any two)

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- (a) Justify: Shigella dysenteriae enters colonic mucosa via M cells and infects the intestinal epithelial cells through the basolateral membrane.
- (b) Explain in detail phagocytosis in macrophages.
- (c) Describe the mechanism of EPEC induced A/E pedestal formation.

$\boldsymbol{3}$	nswer	the	following	: ((anv	Two)
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- (a) Describe in detail the genetic factors of host in establishment of a disease.
- (b) Explain in detail the mechanism and function of pore forming toxins.
- (c) Explain the importance of antigenic variation in avoiding antimicrobial immune response.

4 Write Short notes: (any two)

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- (a) Disease escape.
- (b) Evolution of virulence, avirulence and resistance gene.
- (c) Molecular genetics of rice blast.

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