

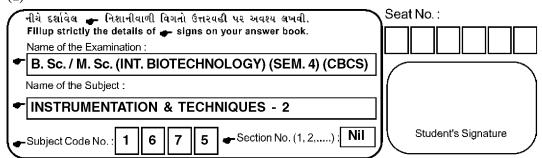
DMM-1675

B. Sc. / M. Sc. (Int. Biotechnology) (Sem. IV) (CBCS) Examination April / May - 2016 Instrumentation & Techniques - II (Core - I) (Course - I)

Time: 2 Hours] [Total Marks: 50

Instructions:

(1)



- (2) Figures to the right indicate full marks.
- (3) Draw neat and labelled diagrams wherever necessary.
- 1 Answer following in short:

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- (1) State the principle of thermal conductivity detector.
- (2) Define electrophoresis.
- (3) Differentiate between isocratic and binary system in HPLC,
- (4) What do you meant by WCOT and SCOT?
- 2 Attempt any two of following:

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- (1) Give an account of detectors used in gas chromatography.
- (2) Write a detailed note on paper chromatography.
- (3) Give a brief note on HPLC.
- **3** Attempt any two of following:

14

- (1) Write a detailed note on DNA sequencing gels.
- (2) Give an account of southern blotting for DNA.
- (3) Discuss the important features of SDS-PAGE for proteins.

4 Answer any two of following:

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14

- (1) Discuss the principle and applications of flame emission spectroscopy.
- (2) List out the applications of mass spectroscopy.
- (3) Discuss the principle of atomic absorption spectroscopy and give the applications of IR spectroscopy.