Reg. No.	

MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER M.Sc. (MEDICAL MICROBIOLOGY) DEGREE EXAMINATION – AUGUST 2020 SUBJECT: MYCOLOGY + MOLECULAR TECHNIQUES (MIC 702)

Monday, August 03, 2020

Time: 14:00 - 16:30 Hrs.

Maximum Marks: 50

- Answer ALL the questions.
- ∠ Draw diagrams wherever necessary.
- 1. Describe the pathogenesis and laboratory diagnosis of Histoplasmosis.

(5+5 = 10 marks)

2. What is DNA sequencing? With the help of neat labelled diagram explain different methods of DNA sequencing. Add a note on application of DNA sequencing.

(3+5+2 = 10 marks)

- 3. Write short notes on:
- 3A. Dermatophytes
- 3B. Pneumocystis jiroveci
- 3C. Eumycetoma
- 3D. Mycotoxins
- 3E. Explain the different stages in a PCR cycle.
- 3F. What is flow cytometry? How is it used in cell cycle analysis and DNA content analysis?

 $(5 \text{ marks} \times 6 = 30 \text{ marks})$