PGIVS-N 1642 A-2R13D A R = 585 401

M.Sc. IVth Semester Degree Examination Biotechnology

(Medical and Nano Biotechnology)

Paper - SCT-4.1

(New)

Time: 3 Hours

Maximum Marks: 80

Instructions to Candidates:

- 1. Section 'A' has all compulsory questions.
- 2. Answer 'B' and 'C' sections as per instructions.

Section - A

Answer the following in brief:

 $(10 \times 2 = 20)$

- 1) Normal Flora
- 2) Tetanus
- 3) Abscesses
- 4) Antiviral drugs
- 5) Nystatin
- 6) Nanoparticles
- 7) Pyrolysis
- 8) Diarrheoa
- 9) Prophylaxis
- 10) Biosensor

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Answer any four of the following:

 $(4 \times 6 = 24)$

- 11) Etiology of Malaria.
- 12) Chemical vapour deposition.
- 13) Application of phages in therapeutics.
- 14) Problems in drug sensitivity and drug resistance.
- 15) Viral immunology and host defences.
- 16) Recent trends in Nanobiotechnology

Section - C

Answer any three of the following:

 $(3 \times 12 = 36)$

- 17) Explain in detail about synthesis of nanostructures by employing chemical and physical methods.
- 18) Describe in detail on epidemiology and pathogenesis of syphilis.
- 19) Explain in detail about the cultivation and replication of viruses
- 20) Explain the mode of infection, infectious process and routes of transmission of microbes in the body.

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	M.Sc. IVth Semester (CBCS) Degree Examination

Biotechnology (Medical and Nano Biotechnology) Paper - HCT 4.2 (New) me miles in about all melgx.

Time: 3 Hours

Maximum Marks: 80

Instructions to Candidates:

- Section A has all compulsory questions.
- Answer B and C sections as per instructions. 2)

Section - A

Answer the following in brief:

 $(10 \times 2 = 20)$

- Immunotherapy 1)
- 2) β - Haemolysis
- 3) Optochin test
- Antiviral drugs 4)
- Drug Resistance 5)
- Nanowires 6)
- Tetanolysin 7)
- Polymyxins 8)
- H and O antigens 9)
- 10) Aspergillosis.

Section - B

- Answer any four of the following:
- 11) Virulence factors
- 12) Amoebiasis
- 13) Wassermann Reaction 14) Bacteriophages as therapeutic agents
- 15) Chemical synthesis of Nano particles
- 16) Photodynamic inactivation of viruses

III. Answer any three of the following:

 $(3 \times 12 = 36)$

- 17) Discuss in detail the structure and pathogeneity of HIV and preventive measures of the disease
- 18) Describe the concept and development of biosensors.
- 19) Explain the mode of action and mechanism of penicillin and streptomycin.
- 20) Give an account of the normal microflora of the human body.

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15) Chemical synthesis of Nano particles