

C 28079

Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, AUGUST 2003

Microbiology

Paper V__SANITATION MICROBIOLOGY

Time : Three Hours

Maximum : 80 Marks

I. Answer all the following questions :

- 1 Define thermal death time.
- 2 What is the mode of action of dry heat ?
- 3 What is **tyndallization** ?
- 4 What is meant by **plasmolysis** ?
- 5 What are ionising radiations ?
- 6 Name two bacteriological filters ?
- 7 Differentiate between bactericidal and **bacteriostatic** agents.
- 8 Name two **chloramines**.
- 9 Name the test used for evaluation of a disinfectant.
- 10 What are **siderophores** ?
- 11 Name the sources of microbes in air.
- 12 Name two methods for enumeration of air **microflora**.
- 13 Define **coliforms**.
- 14 What is **eutrophication** ?
- 15 What is an activated sludge ?
- 16 Name two iron bacteria.
- 17 Name the factors affecting growth and survival of microbes in food.
- 18 Define water activity.
- 19 Differentiate between **psychrophiles** and **psychrotrophs**.
- 20 Name two **thermophilic** organisms associated with spoilage of canned foods.

(20 x 2 = 40 marks)

II. Write a note on any *five* of the following :

- 1 Effect of radiation on microbes.
- 2 Factors affecting the distribution of air **microflora**.
- 3 Water purification.
- 4 Detection of faecal pollution.
- 5 Spoilage of meat.
- 6 Food-borne infections.
- 7 Microbial warfare.

x 8 = 40 marks)

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EXAMINATION, AUGUST 2003**

Microbiology

Paper IV—IMMUNOLOGY

Time : Three Hours

Maximum : 80 Marks

I. Answer *all* questions. Write very briefly on :

- | | |
|---------------------------------------|-----------------------------------|
| 1 Anti lymphocyte serum. | 2 Super antigens. |
| 3 Epitopes . | 4 IgD . |
| 5 HAT medium. | 6 Guillain-Barre syndrome. |
| 7 Combined immunisation. | 8 SLE . |
| 9 Cutaneous anaphylaxis. | 10 Rose Waler test. |
| 11 Capture ELISA . | 12 SRS-A |
| 13 Transfer factor. | 14 Lazy leucocyte syndrome |
| 15 Bombay blood group. | 16 Rh factor. |
| 17 Natural Killer Cells. | 18 ADCC . |
| 19 Direct immunofluorescence . | 20 Prozone phenomenon. |

(20 x 2 = 40 marks)

II. Answer any *five* questions. Write notes on :

- 1 Adjuvants.
- 2 **Immunodiffusion** in gel.
- 3 **ELISA**.
- 4 T cell differentiation.
- 5 **HLA**.
- 6 Anaphylaxis.
- 7 **Immunosuppressive** agents.

(5 x 8 = 40 marks)