

PG 3rd Semester Examination, 2010

HUMAN PHYSIOLOGY

PAPER—XIV

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Write the answers to questions of each Unit in separate books

UNIT—27

Answer any two questions

1. (a) What are Antibiotics ?
- (b) Mention the properties of Antibiotics as Chemotherapeutic agent.

(Turn Over)

(2)

- (c) Discuss briefly any two modes of action of antibiotics with example. $2 + 3 + 5$
2. (a) What do you understand by Nutritional Media ?
- (b) What are the nutritional requirements for preparing media ?
- (c) Discuss the role of temperature in microbial culture. $2 + 4 + 4$
3. (a) Describe the structure of HIV along with its genetics.
- (b) Discuss in brief the stages of HIV disease. $4 + 6$
4. Describe the differences between capsule and slime layer. Classify bacteria according to the presence of flagella ? Define mesosome and magnetosome ? $4 + 4 + 1 + 1$

UNIT-28

Answer any *two* questions :

1. What are hypervariable regions of heavy and light chains of an antibody molecule? How was antibody structure determined? Draw and point out the different parts of the Ab molecule. 2 + 4 + 4

2. (a) Elucidate the structure of T-cell receptor complex.

(b) What are the functions of IFN γ and IL-12 in cell mediated immunity? 4 + 6

3. Innate and adaptive immunity act in co-operative and interdependent ways to protect the host. Discuss the collaboration of these two forms of immunity. 10

(4)

4. Write short notes on (any two): 5 x 2

(i) Secondary lymphoid organ

(ii) Monoclonal antibody

(iii) FACS

(iv) Anaphylactic shock.
