

End Semester Examination, 2021

Semester - III

Human Physiology

PAPER - PHY. 302 (U25 & U26)

Full Marks : 40 (20+20)

Time : 2 Hours

UNIT - 25

ENDOCRINOLOGY & REPRODUCTIVE PHYSIOLOGY

1. Answer any two of the following :- 2x2=4

- a) State the principle of the pregnancy test usually performed. 2
- b) What is luteolysis ? 2
- c) State the importance of HRE. 2
- d) Mention the role of seytoli cells. 2

2. Answer any two of the following :- 2x2=4

- a) "cAMP acts as a second messenger"—Justify. 4
- b) Describe the chemistry involved in the movement of the sperm towards the ovum. 4
- c) What is the importance of LH-surge ? 4
- d) Give the classification of hormones with an example of each. 4

3. Answer any one of the following :- 1x8=8

- a) Describe the process of spermatogenesis with a suitable diagram. 6+2
- b) Describe the role of estrogen and progesterone in

the implantation process. What is decidualization ?

6+2

UNIT - 26

HUMAN IMMUNE SYSTEM

- 1. Answer any two from the following :- 2x2=4**
 - a) What is isotypes of antibodies ? 2
 - b) How is agglutination different from precipitation ? 2
 - c) Give the flow chart of the production of monoclonal antibody. 2
 - d) What is autograft and allograft ? 1+1
- 2. Answer any two from the following :- 2x4=8**
 - a) Describe the structure of the MHC that plays an important role in the exogenous pathway of anti-gen presentation. 4
 - b) Give two important application of ELISA. 4
 - c) Write a brief note on graft rejection. 4
 - d) Describe the biological properties of the four sub-types of IgG. 4
- 3. Answer any one from the following :- 1x8=8**
 - a) Describe the two important scientific interventions that led to the discovery of the antibody structure with suitable diagrams. 6+2
 - b) Describe the process of Type-I Hypersensitivity with suitable diagrams. 6+2