

**U.G. 2nd Semester Examination - 2020****FOOD & NUTRITION****[HONOURS]****Course Code : FNTH/CC-T-03**

Full Marks : 40

Time : 2½ 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.***GROUP-A**1. Answer any **five** from the following questions:

2×5=10

- a) What is juxtaglomerular apparatus?
- b) Name the hormones secreted by placenta.
- c) What is iodine trapping?
- d) What is blind spot?
- e) What is synaptic cleft?
- f) What do you mean by primary taste sensation?
- g) What do you mean by poikilothermia?
- h) What is sperm capacitation?

**GROUP-B**2. Answer any **two** from the following questions:

5×2=10

- a) Briefly describe the mechanism of chemical thermogenesis. 5
- b) Describe the role of Organ of Corti in hearing of a sound. 5
- c) Describe the structure of a spermatozoa with labelled diagram. 5
- d) Briefly describe the synthesis of T3 and T4. 5

**GROUP-C**3. Answer any **two** from the following questions:

10×2=20

- a)
  - i) Why pancreas is known as a mixed gland?
  - ii) Name the cells that secrete pancreatic hormones.
  - iii) Describe the role of insulin in glucose uptake in target cells. 2+2+6=10
- b)
  - i) What is fertilization?
  - ii) How milk secretion is regulated in mammary gland?

iii) Why does milk secretion remain suspended during pregnancy?  $3+5+2=10$

c) i) Discuss the physiological functions of vasopressin.

ii) Write a notes on diabetes insipidus.  $7+3=10$

d) i) Describe the role of hypothalamus in regulation of body temperature.

ii) What is hypothalamo-hypophyseal portal system?  $7+3=10$

\_\_\_\_\_