

The West Bengal University of Health Sciences
MBBS 1st Professional Examination (New Regulation), March 2021

Subject: Physiology

Paper : II

Full Marks : 100

Time : 3 hours

Attempt all questions. The figures in the margin indicate full marks.

1. a) Name the components of basal ganglia. With a suitable diagram outline their chief connections and functions. Briefly state the features and treatment of Parkinsonism.

2+3+3+5+2

b) Describe the mechanism of action of growth hormone. Enumerate the factors influencing secretion of growth hormone.

10+5

2. a) Define pain. Describe pain pathways. Write briefly endogenous pain control mechanisms.

1+6+3

b) Describe how the countercurrent mechanism in the kidney operates to produce hypertonic or hypotonic urine. Add a note on micturition reflex.

3+5

c) What is menstrual cycle? Explain the ovarian changes taking place during menstrual cycle.

3+7

3. Write a short notes on the following:

5x2

a) Oral contraceptive pills.

b) Acromegaly.

4. Explain the following statements:

5 x 4

a) Older persons show presbyopia.

b) Cryptorchids are usually causes infertility.

c) Lactation is a natural method of contraception.

d) Thyroid dwarfs are usually mentally retarded.

e) Hemi section of spinal cord affects both sides of the body.

5. Choose the correct option of each of the following:

10x1

i) Which of the following is true of the tubular fluid that passes through the lumen of the early distal tubule in the region of the macula densa?

a) It is usually isotonic

b) It is usually hypotonic

c) It is usually hypertonic

d) It is hypertonic in antidiuresis

P.T.O.