

ATAL BIHARI VAJPAYEE MEDICAL UNIVERSITY, LUCKNOW
MBBS DEGREE EXAMINATION - 1st PROF PROFESSIONAL
SUPPLEMENTARY EXAM - MARCH 2024
PHYSIOLOGY - PAPER - II

Time: 3 Hrs

Max. Marks: 100 Marks (80 Theory + 20 MCQs)

NOTE:

Attempt all questions.

This question paper consists of two sections: Section A - Multiple Choice Questions and Section B - Theory Questions.

Both sections have different paper codes. Write the correct paper code on the respective sheet.

Write the correct MCQ paper set on the OMR sheet.

Answer MCQs on the provided OMR sheet and theory questions on the provided answer booklet.

SECTION B - THEORY QUESTIONS

PAPER CODE: 2422230002

Q.1 Long Answer Question

(15 Marks)

Define sleep. Describe various phases of sleep. Add a note on sleeping disorders.

(4+5+6)

Q.2 Clinical Case Scenario based Structured Question

(15 Marks)

A middle-aged individual comes with a history of weakness, increased thirst, increased excretion of urine, and increased appetite. He also complains of weight loss and non-healing wounds. On examination, the patient was obese and had a fungal infection in the region of the waist and genitalia.

Investigations revealed: urine contained sugar but no ketone bodies. Fasting blood glucose level - 160 mg/100 ml of blood.

- i) What is the likely diagnosis? (4 marks)
- ii) Explain the physiological basis of the above-mentioned symptoms. (3 marks)
- iii) What does the absence of ketone bodies suggest? What is the role of Glucagon in glucose homeostasis? (4 marks)

Q.3 Short Note Question (Within 500 Words)**(5 x 6 = 30 Marks)**

- i) Factors affecting Glomerular filtration rate.
- ii) Role of ADH in Osmoregulation.
- iii) Functions of Placenta.
- iv) Errors of Refraction.
- v) Circadian rhythm and its regulation.

Q.4 Short Answer Questions (Within 100 Words)**(5 x 4 = 20 Marks)**

- i) Mechanism of heat loss and heat gain.
- ii) Wallerian degeneration.
- iii) Hormonal contraceptives.
- iv) Physiological Actions of Growth Hormone.
- v) Differentiate between Upper motor and Lower motor neuron lesion.
