

ATAL BIHARI VAJPAYEE MEDICAL UNIVERSITY, LUCKNOW
MBBS DEGREE EXAMINATION - 1st PROF PROFESSIONAL REGULAR
EXAM - AUGUST 2024
PHYSIOLOGY -PAPER- I

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: 2411230002

Long Answer Question

15 MARKS

1. Define Blood pressure. (3 marks)
2. Enumerate factors affecting blood pressure. (5 marks)
3. Explain the long-term mechanisms for the regulation of Blood pressure. (7 marks)

Clinical Case Scenario based Structured Question

15 MARKS

A 32-year-old female, 28 weeks in her third pregnancy, visits the Obstetrics OPD with complaints of dizziness, palpitation, breathlessness on exertion, and easy fatigability. On examination, she appears pale, malnourished with spoon-

shaped nails, and pitting edema is present over her ankles. Investigations show:
Hb: 8 gm%, RBC Count: 3.4 Millions/Cu.mm.

- a) What are the likely findings on the Blood smear? (3 marks)
- b) Which additional investigations would you like to perform and why? (4 marks)
- c) Explain the physiological basis of anemia in pregnancy. (3 marks)
- d) Describe the factors affecting erythropoiesis. (5 marks)

Short Note Question (Within 500 Words)

5 x 6 = 30 MARKS

- a) Enterohepatic circulation of bile salts.
- b) Passive Transport Mechanisms.
- c) Differences between skeletal and smooth muscle contraction.
- d) Non-respiratory functions of the lungs.
- e) Role of pancreatic secretions in the digestion of food.

Short Answer Questions (Within 100 Words)

5 x 4 = 20 MARKS

- a) Significance of saltatory conduction.
- b) Intrinsic pathway of Blood coagulation.
- c) Stages of Deglutition.
- d) Frank-Starling Law of the heart.
- e) Define cardiac output. What are the different methods to measure it?
