

[Total No. of Questions - 7] [Total No. of Printed Pages - 2]
(2124)

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**B. Pharmacy (Ayurveda) 1st Semester Examination
Fundamentals of Physiology (NS)**

BPA-122

Time : 3 Hours

Max. Marks : 70

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Question number 1 is compulsory. Attempt any five questions from the remaining six.

1. (a) State the role of vitamin K in blood coagulation.
 - (b) State the role of calcium in skeletal muscle contraction.
 - (c) Draw a labeled diagram of Oxygen-Hemoglobin dissociation curve.
 - (d) Explain the use of plasma clearance tests.
 - (e) Name the principal compositions of gastric juice.
 - (f) Draw a labeled diagram for components of a reflex arc.
 - (g) List the functions of glucocorticoids.
 - (h) List the names of female contraceptive devices.
 - (i) State the Landsteiner's law for blood groups.
 - (j) Explain the causes of 1st and 2nd heart sounds. (2×10=20)
2. Describe the neural regulation of respiration. (10)

[P.T.O.]

3. Write a comparative account of cardiac, skeletal and smooth muscle properties. (10)
 4. Describe the mechanisms of sodium reabsorption in renal tubular system and explain the role of various diuretics in sodium reabsorption process. (10)
 5. Describe the cochlear mechanisms of hearing. (10)
 6. Describe the functions of thyroid hormones and mention the clinical features of hypothyroid and hyperthyroid states. (10)
 7. Describe the process of spermatogenesis. (10)
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