

[Total No. of Questions - 9] [Total No. of Printed Pages - 3]  
(2124)

1687

**B. Pharmacy 3rd Semester Examination**  
**Anatomy Physiology & Health Education (OS)**  
**HBP-209**

**Time : 3 Hours**

**Max. Marks : 80**

*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 :** Answer five questions in all, attempting one question each from Sections A, B, C and D. Section E is compulsory. All questions carry equal marks.

**SECTION - A**

1. (a) Describe the composition of pancreatic juice and functions of its various components. (8)
- (b) Discuss the physiology of liver. (8)
2. (a) Write a note on various respiratory volumes and capacities. (8)
- (b) Describe the physiology of exchange of gases in respiratory system. (8)

**SECTION - B**

3. (a) What is reflex arc? With the help of neat diagram show various components of reflex arc. (8)
- (b) Write a note on cranial meninges. (4)
- (c) Where is hypothalamus located? Explain some of its major functions. (4)

[P.T.O.]

4. (a) Describe the structure and functions of nephron. (8)  
(b) What are the principal differences between somatic nervous system and autonomic nervous system? (4)  
(c) Define an autonomic reflex and give three examples. (4)

### SECTION - C

5. (a) Describe the principal events of spermatogenesis. (4)  
(b) Describe the histology of uterus. (4)  
(c) What are the hormones produced by anterior pituitary gland? What are their main functions? (8)
6. (a) Describe the structure of olfactory receptors. What is the function of basal cell? (8)  
(b) Describe the clinical symptoms of diabetes mellitus and hyperinsulinemia. Distinguish between the types of diabetes mellitus. (8)

### SECTION - D

7. (a) write notes on : (16)  
(i) Chickenpox  
(ii) Measles  
(iii) Influenza  
(iv) Diphtheria
8. (a) Describe various methods of contraception in females. (8)  
(b) Describe in detail about the components of balanced diet. (8)

### SECTION - E

9. Write Short notes on the following:  
(a) Jaundice  
(b) Asthma  
(c) Blood Brain Barrier  
(d) Cell respiration  
(e) Hormones  
(f) Goitre  
(g) Ear ossicles  
(h) Communicable and non communicable diseases. (2×8=16)