

P P SAVANI UNIVERSITY

First Semester of B. Tech. Examination

January 2022

SEPE1010 Basics of Pharmaceutical Engineering

28.01.2022, Friday

Time: 09:00 a.m. To 11:30 a.m.

Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in same answer sheet.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION - I

Q - 1 Answer the Following: (MCQ/Short Question/Fill in the Blanks) [05]

- (i) The patella is called a _____ bone. [05]
- A. Sutural
 - B. Sesamoid
 - C. Wormian
 - D. None of the above.
- (ii) Which of the following tissue types make up the inside or outside lining of something?
- A. Epithelial
 - B. Connective
 - C. Muscular
 - D. Nervous
- (iii) The skin is an organ
- A. True
 - B. False
- (iv) Which type of cell is found in the brain?
- A. White blood cells
 - B. Neurons
 - C. Epithelial cells
 - D. None
- (v) What is the largest bone in the body?
- A. Scapula
 - B. Femur
 - C. Tarsal
 - D. None

Q - 2 (a) Write a note on structure, location and functions of Muscular tissue. [05]

Q - 2 (b) Write a note on functions of frontal lobe. [05]

OR

Q - 2 (a) Lobes of lungs. [05]

Q - 2 (b) Atrium of the heart. [05]

Q - 3 (a) Draw a neat labelled diagram of Stomach and explain its functions. [05]

Q - 3 (b) Draw a diagram of Female reproductive system with appropriate labeling. [05]

OR

Q - 3 (a) Draw a neat labelled diagram of Lumen excretory system and describe functions of Kidney. [05]

Q - 3 (b) fertilization. [05]

Q - 4 Attempt any one/two. [05]

(i) Hypothalamus.

(ii) Write a note on cell division.

SECTION - II

Q - 1 Answer the Following: (MCQ/Short Question/Fill in the Blanks) [05]

- (i) What does AIDS stand for?
A. Acquired Immune Deficiency Syndrome
B. Antiviral Immune Disorder System
C. Auto Immune Disorder Syndrome
D. None.
- (ii) Which of the following is NOT a type of diabetes?
A. Juvenile diabetes
B. Type 2 diabetes
C. Senior's diabetes
D. None
- (iii) What is the most common cause of anemia?
A. Too little sleep
B. Too much sugar
C. Too little iron in the blood
D. Exposure to X-ray radiation
- (iv) Where do you position the blood pressure cuff?
A. At the level of the heart by centering the bladder over the carotid artery.
B. At the level of the heart by centering the bladder over the brachial artery.
C. At the level of the heart by centering the bladder over the coronary artery.
D. None of the above
- (v) Systolic pressure can be best defined as:
A. Appearance of sound and Upper number when the heart beats
B. Disappearance of sound and Lower number when the heart relaxes
C. Appearance of sound and Lower number when the heart relaxes
D. Disappearance of sound and Upper number when the heart beats

Q - 2 (a) Write a note on Asthma. [05]

Q - 2 (b) Write a note on myocardial infarction. [05]

OR

Q - 2 (a) Type 2 diabetes mellitus. [05]

Q - 2 (b) Hyperthyroidism. [05]

Q - 3 (a) Osteo Arthritis. [05]

Q - 3 (b) Define Schizophrenia. Write the pathophysiology of its in detail. [05]

OR

Q - 3 (a) Epilepsy. [05]

Q - 3 (b) Jaundice. [05]

Q - 4 Attempt any one/two. [05]

(i) Role of homeopathy medicine.

(ii) Define Anemia and write pathophysiology of Thalassemia.
