

**GUJARAT NATIONAL LAW UNIVERSITY
GANDHINAGAR****Course: Pharmaceutical Science
Semester-IV (Batch: 2015-20)****End Semester Examination: April-May 2017****Date: 10th May, 2017****Duration: 2 hours****Max. Marks: 40****Instructions:**

- Read the questions properly and write the answers in the given answer book.
- The respective marks for each question are indicated in-line.
- Do not write any thing on the question paper.
- Indicate correct question numbers in front of the answers.
- No questions or clarifications can be sought during the exam period, answer as it is, giving reason, if any.

Part-A	Marks
Q.1 Write the correct option in the following questions:	(8x0.25 =02)
<ol style="list-style-type: none">1. What is plasma volume expander?<ol style="list-style-type: none">(a) They are used where reduced blood volume is the main cause of shock(b) Used to extract extra blood sugar(c) Used to decrease oxygen carrying capacity of blood.2. Insulin is recreated by?<ol style="list-style-type: none">(a) B- cells(b) T- cells(c) Endocrine cell3. Which of the following is not an adverse effect of insulin?<ol style="list-style-type: none">(a) Hypoglycemia(b) Mental confusion(c) Jaundice4. Which of the following is not an example of hemostatic?<ol style="list-style-type: none">(a) Thrombin(b) Oxidized cells(c) Folic acid5. Which of the following is not an examples of hematinic?<ol style="list-style-type: none">(a) Ferrous sulphate(b) Folic acid(c) Fibrinogens6. Which of the following technique is useful to manage low platelets?<ol style="list-style-type: none">(a) Use soft tooth brush(b) Avoid ibuprofen (Advil) & aspirin (ASA)(c) Treatment with anti-oxidants7. Which of the following is not a type of external beam radiation therapy?<ol style="list-style-type: none">(a) Anger therapy(b) Brachy therapy(c) Rudament Therapy	

8. Which of the following drugs are not useful for cancer treatment.
- (a) Sulphonamides
 - (b) Antibiotics agents
 - (c) Antineurotic agents
- Q.2 Answer any two of the following questions: (2x3=06)
- (a) Explain the classification of hypoglycemic agents.
 - (b) What is the role of plasma volume expanders in blood clot? Explain its types.
 - (c) What are the drugs used in the treatment of chemotherapy and explain its side effects.
 - (d) Explain the sign and symptoms of low platelets and how to manage them.

- Q.3 What is hematinics and homeostatics? Explain the factors leading to haemopoietics. (04)

Part-B

- Q.4 Answer any three of the following: (3x4=12)
- (a) Preclinical studies in animals are essential before undertaking clinical trials. Explain the different kinds of toxicity studies done in animals.
 - (b) Write short notes on Endocannabinoid system.
 - (c) Explain the types and functions of cellular junction.
 - (d) In certain brain diseases like Parkinson's disease prodrug of dopamine is used. Why? What are the advantages of using prodrugs?
- Q.5 Answer any two of the following. (2x5=10)
- (a) Explain the factors which affect drug action.
 - (b) What is cytochrome P450 enzyme? Explain the pharmacogenomics of CYP2D6 with reference to metabolism of codeine.
 - (c) With examples describe the classes and functions of neurotransmitters.

Part-C

- Q.6 (a) State and explain any six reasons that encourage foreign firms to collaborate with the Indian Pharmaceutical Industry. (3+3=06)
- (b) Write in short about the superscription, subscription and signature part of a prescription.
