

GUJARAT TECHNOLOGICAL UNIVERSITY**B. PHARM SEM -VIII. EXAMINATION–WINTER-2021****Subject Code:2280004****Date:01/12/2021****Subject Name: Pharmacology and Pharmacotherapeutics IV****Time: 10:30am to 01:30pm****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Give WHO definition of Hypertension and classify it. Discuss pathophysiology of Hypertension and explain mechanism of action of β blockers in its treatment. **06**
- (b) Discuss mechanism of action, adverse effects and therapeutic uses of Heparin. Name two Low Molecular Weight Heparins(LMWH) **05**
- (c) Write a short note on: Oral Contraceptives. **05**
- Q.2** (a) Discuss the risk factors, pathophysiology and diagnostic tests for Diabetes Mellitus. Explain the mechanism of action of Sulphonylureas. **06**
- (b) Classify diuretics giving examples of each class and explain mechanism of action of Loop Diuretics. **05**
- (c) Write a short note on: Erectile dysfunction. **05**
- Q.3** (a) Classify Acute Renal Failure (ARF) based on etiology. Discuss its signs and symptoms and treatment. **06**
- (b) Define Oxytocics. Give therapeutic uses of prostaglandins as oxytocic agents. **05**
- (c) Write a short note on: Coronary Artery Bypass Graft Surgery (CABG) and Percutaneous Transluminal Coronary Angioplasty (PTCA). **05**
- Q.4** (a) Discuss the two systems of lipid transport and metabolism in the body. Give etiology of Hyperlipidaemia and explain the mechanism of Simvastatin as antihyperlipidemic agent. **06**
- (b) Classify Anemia based on etiology. Write a short note on Iron Deficiency Anemia (IDA). **05**
- (c) Write a short note on: Fibrinolytic agents. **05**
- Q.5** (a) Discuss the pathophysiology, clinical presentation and diagnosis of Angina Pectoris. Justify the use of Nitrates in treatment of angina. **06**
- (b) Justify explaining mechanism of action the use of: **05**
- (i) Enalapril in treatment of CCF
- (ii) Streptokinase as fibrinolytic agent
- (c) Write a short note on: Megaloblastic anemia. **05**
- Q.6** (a) Define and classify Obesity. Discuss its diagnosis and treatment. **06**
- (b) Discuss the pathophysiology, clinical features and tests for diagnosis of Congestive Cardiac Failure (CCF). **05**
- (c) Write a short note on: Thrombosis **05**
- Q.7** (a) Explain the mechanisms of development of arrhythmias and classify antiarrhythmic agents based on mechanism of action. **06**
- (b) Discuss the mechanism of action, pharmacological actions and therapeutic uses of Oestrogens. **05**
- (c) Write a short note on: Long term complications of Diabetes Mellitus. **05**