# GPAT Practice Questions - MCQs

1. 1. Which of the following drugs is a selective COX-2 inhibitor?

* A. Ibuprofen
* B. Aspirin
* C. Celecoxib
* D. Naproxen

✅ Correct Answer: C. Celecoxib

1. 2. The major metabolic pathway for Propranolol is:

* A. Glucuronidation
* B. Sulfation
* C. Aromatic hydroxylation
* D. Acetylation

✅ Correct Answer: C. Aromatic hydroxylation

1. 3. Which of the following techniques is used for determination of crystal structure of drugs?

* A. UV Spectroscopy
* B. X-Ray Diffraction
* C. Flame Photometry
* D. Potentiometry

✅ Correct Answer: B. X-Ray Diffraction

1. 4. Rifampicin is a potent inducer of:

* A. CYP2D6
* B. CYP1A2
* C. CYP3A4
* D. CYP2C9

✅ Correct Answer: C. CYP3A4

1. 5. The dissolution rate of a poorly soluble drug can be enhanced by:

* A. Decreasing the surface area
* B. Reducing the particle size
* C. Decreasing the diffusion coefficient
* D. Increasing the thickness of diffusion layer

✅ Correct Answer: B. Reducing the particle size

1. 6. Which phase of clinical trials primarily evaluates the efficacy of a drug?

* A. Phase I
* B. Phase II
* C. Phase III
* D. Phase IV

✅ Correct Answer: B. Phase II

1. 7. Which one of the following is a prodrug?

* A. Lisinopril
* B. Enalapril
* C. Atenolol
* D. Metoprolol

✅ Correct Answer: B. Enalapril

1. 8. The maximum allowable limit for loss on drying (LOD) for gelatin capsules as per IP is:

* A. 1%
* B. 5%
* C. 10%
* D. 15%

✅ Correct Answer: C. 10%

1. 9. In IR spectroscopy, the functional group region lies in the range of:

* A. 4000–1500 cm⁻¹
* B. 1500–400 cm⁻¹
* C. 2000–1000 cm⁻¹
* D. 3000–2800 cm⁻¹

✅ Correct Answer: A. 4000–1500 cm⁻¹

1. 10. The rate-limiting step in oral absorption of BCS Class II drugs is:

* A. Solubility
* B. Permeability
* C. Metabolism
* D. Gastric emptying

✅ Correct Answer: A. Solubility