

## GPAT 2011 Model Test Paper and Pattern of Question Paper

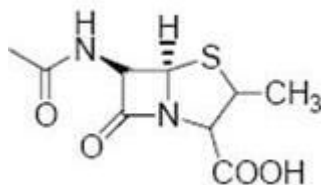
### Pattern of Question Paper

The **GPAT-2011** question paper will consist of one hundred fifty (150 Nos.) multiple choice objective questions only. Candidates have to mark the correct choice by darkening the appropriate bubble against each question on an Optical Response Sheet (ORS). Each right answer will carry one mark while for each wrong answer 1/3 (one third) marks will be deducted.

Each question will have four choices for the answer. Out of these, only one choice is correct. Each choice contains a single, stand-alone statement / phrase / data / structure.

The type of questions asked in this examination would be to evaluate a candidate's aptitude and subject knowledge of Pharmacy field which may involve basic principles, facts, formulae/laws, understanding of the fundamental ideas, and application or drawing observations of the fundamental.

**Q.1** At physiological pH the following compound would be MOSTLY in the:



- (A) cationic form (B) unionized form  
(C) zwitterionic form (D) anionic form

**Q.2** The effects observed following systemic administration of levodopa in the treatment of Parkinsonism have been attributed to its catabolism to dopamine. Carbidopa, can markedly increase the proportion of levodopa that crosses the blood-brain barrier by:

- (A) increasing penetration of levodopa through BBB by complexation with it  
(B) decreasing peripheral metabolism of levodopa  
(C) decreasing metabolism of levodopa in the CNS  
(D) decreasing clearance of levodopa from the CNS

**Q.3** Drugs in suspensions and semi-solid formulations always degrade by

- (A) first order kinetics (B) second order kinetics

(C) zero order kinetics (D) non-linear kinetics

**Q.4** Tropane alkaloids are NOT present in

(A) Datura stramonium (B) Erythroxylum coca  
(C) Duboisia myoporoides (D) Lobelia inflata

**Q.5** In nucleophilic aliphatic substitution reactions the ability of the following leaving groups:(P) Fluoride (Q) Iodide (R) Chloride (S) Bromide follows the order:

(A)  $P > Q > R > S$  (B)  $R > S > Q > P$   
(C)  $Q > S > R > P$  (D)  $P > R > S > Q$

**Q.6** In sequence rules, the priority of the following atoms attached to chiral carbon is to be decided for designating its absolute configuration:

(P) Oxygen (Q) Carbon (R) Nitrogen (S) Hydrogen  
Priority of the atoms is to be decided on the basis of their:

(A) electronegativity (B) atomic mass  
(C) atomic number (D) atomic size

**Q.7** In the four major constituents of vitamin B complex, thiamine, riboflavin, pyridoxal and cynocobalamine:

(p) riboflavin contains ribose sugar  
(q) thiamine contains pyridine ring  
(r) pyridoxal contains pyrimidine ring  
(s) cynacobalamine contains porphyrin ring

The given statement is correct:

(A) r is true, s is false, p is true, q is false  
(B) r is true, s is true, p is true, q is true  
(C) r is false, s is true, p is false, q is false  
(D) r is true, s is false, p is false, q is true

**Q.8** Determine the correctness or otherwise of the following Assertion [a] and the Reason [r].

Assertion: For a fully developed laminar flow in a circular pipe, the average velocity is one half of the maximum velocity.

Reason: The velocity for a fully developed laminar flow in a circular pipe varies linearly in the radial direction.

(A) Both [a] and [r] are true and [r] is the correct reason for [a]  
(B) Both [a] and [r] are true but [r] is NOT the correct reason for [a]  
(C) Both [a] and [r] are false  
(D) [a] is true but [r] is false

There is a one-third ( $1/3$ ) negative marking for each wrong answer.