



### General Instructions

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- (i) The examination consists of 200 multiple-choice questions (MCQs).
- (ii) Duration of the examination is 2 hours (120 minutes).
- (iii) Each correct answer carries +1 mark.
- (iv) Each wrong answer carries a penalty of -0.25 marks (negative marking).
- (v) Unanswered questions will receive 0 marks.

1. Type B gelatin is from an alkali treated precursor and has its isoelectric zone in the region of:

- (A) pH 9.0
- (B) pH 4.7
- (C) pH 7.0
- (D) pH 1.2

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2. The HLB value of sodium oleate is:

- (A) Approx 3.0
- (B) Around 10.0
- (C) Around 18.0
- (D) Approx 40.0

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3. By coating the granules with water-insoluble polymer, one can achieve the release of drug

**as per:**

- (A) Zero order rate
  - (B) First order rate
  - (C) Half order rate
  - (D) Pseudo First order rate
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**4. In transdermal therapeutic systems the most commonly used penetration enhancer is**

- (A) Glycerin
  - (B) Propyl Glycol
  - (C) Dimethyl sulfoxide
  - (D) Lanolin
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**5. Transdermal preparations are prepared for those drugs which**

- (A) Undergoes first pass metabolism
  - (B) have bigger molecules
  - (C) are costly
  - (D) are hydrophilic
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**6. A sustained release products can be prepared by using**

- (A) Solid dispersion technique with water soluble excipients
  - (B) Large particles delaying its disintegration
  - (C) Spray drying technique with water soluble excipients
  - (D) A good disintegrating agent
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**7. The Implant of sustained release devices which are:**

- (A) Introduced into tissues
- (B) taken orally

- (C) Used in place of suppository
  - (D) Placed on the skin to release the drug
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**8. The release of drug from cellulose acetate phthalate is due to:**

- (A) pH independent solubility
  - (B) pH dependent solubility
  - (C) Release of drug due to erosion
  - (D) Zero order release
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**9. Methyl cellulose dissolves better in:**

- (A) Cold water
  - (B) Hot water
  - (C) Soft paraffin
  - (D) Glycerin
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**10. In pharmaceutical dosage forms for external application, the glycerin is used as**

- (A) Therapeutic agent
  - (B) Humectant
  - (C) Surface active agent
  - (D) antiseptic
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**11. Aerosil is a pharmaceutical excipient and it is also called**

- (A) Spray drying lactose
  - (B) Calcium sulphate
  - (C) Colloidal silica
  - (D) HPMC
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**12. India was officially struck off the list of polio-endemic countries by the World Health Organization (WHO)**

- (A) 25 December, 2012
  - (B) 15 February, 2012
  - (C) 25 January, 2012
  - (D) 25 February, 2012
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**13. After the birth which of the following vaccine given primarily to the infant:**

- (A) BCG
  - (B) OPV zero
  - (C) Hepatitis B - 1
  - (D) All
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**14. Drug protein binding can be determined by:**

- (A) Chromatography
  - (B) Dialysis
  - (C) Phase separation
  - (D) Langmuir's method
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**15. Shock organ in anaphylaxis is:**

- (A) Liver
  - (B) Lung
  - (C) Kidney
  - (D) Spleen
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