

Exam Date & Time: 15-Dec-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester I - End Semester Examination, December 2022

Pharmaceutics-I [PCE-BP103T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

- 1) This person is known as Father of Indian Pharmacy Education
1) Prof R N Chopra 2) Prof M L Schroff 3) Prof P C Ray 4) Prof B N Ghosh (1)
- 2) The famous book written by Dioscorides is
1) National Formulary 2) De materia medica 3) The Canon of Medicine 4) Drug Compendia (1)
- 3) Bengal Chemical and Pharmaceutical Works was established in
1) 1801 2) 1810 3) 1901 4) 1910 (1)
- 4) All of the following liquids are for internal use except
1) Syrup 2) Elixir 3) Liniment 4) Aromatic water (1)
- 5) Dosage forms enclosed in a shell, made of a mixture of rice flour and water
1) Capsules 2) Cachets 3) Collodions 4) Draughts (1)
- 6) First pass metabolism of drug can NOT be avoided by using
1) Oral liquids 2) Nasal preparations 3) Enemas 4) Topical preparations (1)
- 7) The dose of drug ABC for an adult is 220 mg. What is the dose for a 10 year old, as per Young's formula?
1) 100 mg 2) 100 µg 3) 1000 mg 4) 1000 µg (1)
- 8) The dose of drug XYZ for a child of age 12 years is 24 mg. If this dose was calculated as per Dilling's formula, what is the adult dose of this drug? (1)

- 1) Insufficient data 2) 40 mg 3) 240 mg 4) 80 mg

9) Using Gaubin's formula, select the dose of drug for a 91 year old individual

- $\frac{1}{2}$ of $\frac{1}{3}$ of $\frac{1}{4}$ of $\frac{1}{5}$ of
 1) regular 2) regular 3) regular 4) regular
 adult dose adult dose adult dose adult dose (1)

10) Identify the magma from the following.

- 1) Four-phase emulsions 2) Three-phase emulsions 3) Single phase gels 4) Two-phase gels (1)

11) Pessaries are meant for insertion into

- 1) Rectum 2) Ear 3) Vagina 4) Nose (1)

12) Conversion of iodine into polyiodides to increase its water solubility is a form of _____.

- 1) Cosolvency 2) Complexation 3) Micellar solubilization 4) Surfactant action (1)

13) Which of these cannot be used for parenteral preparations?

- 1) Purified water 2) Water for injection 3) Sterile Water for injection 4) Bacteriostatic Water for injection (1)

14) The amount of dissolved solids in WFI should be less than _____

- 1) 100 ppm 2) 100 μ g 3) 10 ppm 4) 10 μ g (1)

15) Which of the following is unsuitable as vehicle for parenteral preparations?

- 1) Peanut oil 2) Methanol 3) Cottonseed oil 4) Sesame oil (1)

16) Identify the correct solubility of propylene glycol from the following

- immiscible with fixed oils, miscible with water
 1) oils, miscible with water immiscible with water, miscible with fixed oils
 2) miscible with fixed oils immiscible with fixed oils, immiscible with water
 3) oils, immiscible with water miscible with fixed oils, miscible with water (1)

- 17) Incompatibilities prepared by some addition or substitution of any of the ingredients in the prescription are called _____ (1)
- 1) Immediate 2) Delayed 3) Tolerated 4) Adjusted
- 18) Prescribing contraindicated drugs is a ---- incompatibility. (1)
- 1) Physical 2) Chemical 3) Therapeutic 4) Any of the above
- 19) Cold cream is an example of which of the following types of ointment bases (1)
- 1) Absorption base 2) Hydrocarbon base 3) Water removable base 4) Water soluble base
- 20) Water number is the maximum amount of water that can be added to _____ of absorption base at a given temperature (1)
- 1) 100g 2) 1000 g 3) 10 g 4) 1 g

II Long Answers

Answer all the questions.

- 1) Describe the factors affecting skin permeation of drugs. (10)
- 2) Describe the formulation of suspension with examples. Discuss the stability problems of emulsions and methods to overcome them. (10)

III Short Answers

Answer all the questions.

- 1) Enlist any TWO problems in preparing homogenous solutions. Compare and contrast gargles and throat paints. (5)
- 2) A pharmacist has 250 grams of 2% w/w fluconazole cream and 500 grams of 10% w/w fluconazole cream. How much quantities of the two need to be mixed to get 400 grams of 5% fluconazole cream? Express the final result in lb (avoir). (5)
- 3) Explain the types of dusting powders. (5)
- 4) Mention the problem and remedy for the following incompatibilities. A) Alcoholic vegetable tinctures are diluted with water, B) Addition of a high concentration of electrolytes to an aqueous solution of volatile oil, C) Addition of excess deflocculating agent in suspension. (5)
- 5) Write any three types of chemical incompatibilities with one example each. (5)
- 6) Explain various parts of prescription. (5)

- 7) Write two advantages of hydrocarbon bases in ointments. Enlist the factors affecting drug absorption from rectal suppositories.

(5)

-----End-----