

SUPPLEMENTARY
BACHELOR OF PHARMACY (PRACTICE)
F.Y. B. Pharm. (Practice) :SUMMER- 2022
SUBJECT : APPLIED PHARMACEUTICS

Day : Friday

Time : 10:00 AM-01:00 PM

Date : 23-09-2022

S-20430-2022

Max. Marks : 60

N.B.

- 1) **Q.1 and Q. 5** are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from Section I and Section – II.
- 2) Answer to both the section should be written in **SEPARATE** answer book.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 A) Attempt **ANY SEVEN** objective questions (MCQ/Fill in the Blanks) of the following: **(07)**

- i) Main demerit of syrup as dosage form _____.
 - a) Faster chemical degradation
 - b) Cap locking
 - c) Slower drug absorption of drug
 - d) Turbid appearance
- ii) One of the main reasons to formulate topical gel is _____.
 - a) To increase bioavailability of medicine
 - b) To mask irritation from drug
 - c) To increase chemical stability of drug
 - d) Non-greasy, easy to spread and wash
- iii) Main reason to formulate tablets is _____.
 - a) To increase bioavailability of medicine
 - b) Easy to consume by patients
 - c) Convenient to handle and store
 - d) Taste masking
- iv) As for I.P. Standards the compressed tablet should disintegrate within _____ minutes.
 - a) 5
 - b) 15
 - c) 10
 - d) 30
- v) Following oral liquid should not be diluted with water at the time of administration _____.
 - a) Syrup
 - b) Mixture
 - c) Linctus
 - d) Suspension
- vi) Following drops must be isotonic _____.
 - a) Ear
 - b) Eye
 - c) Pediatric drops
 - d) All of these
- vii) Injections must follow all criteria, except _____.
 - a) Sterile
 - b) Apyrogenic
 - c) Isotonic
 - d) Solution state
- viii) When the drug is sensitive to hydrolysis, following dosage form is recommended for pediatric use _____.
 - a) Drop
 - b) Syrup
 - c) Dry syrup
 - d) Tablet

B) Write method to test quality of suspension.

(03)

P.T.O.

- Q.2** Discuss principle, merit and demerit of various types of injectable dosage forms with one marketed example of each type. **(10)**
- Q.3** a) Explain concept of BCB Class II and two examples of drugs. **(05)**
 b) Write importance of ionized and unionized form of drug. **(05)**
- Q.4** Answer **ANY FIVE** of the following: **(10)**
 a) Write two examples of oral powders with one marketed name for each.
 b) Which are the hard gelatin capsule sizes recommended for human? Why?
 c) Define cracking of emulsion and any one way to minimize it.
 d) Write various applications of soft gelatin capsules.
 e) Write any two drugs that have skin surface as site of action.
 f) Justify composition of body powder.

SECTION – II

- Q.5** A) Attempt **ANY SEVEN** objective questions (MCQ/Fill in the Blanks) of the following: **(07)**
- i) Following parameters are important for better bioavailability of drug after its oral administration, except _____.
- | | |
|---|---|
| a) Drug should have sufficient liophilic nature | c) Drug should be chemically stable in GI tract |
| b) Drug must be highly water soluble | d) Drug formulate in syrup form |
- ii) Spacer tube attached to nozzle of MDI inhaler is useful as _____.
- | | |
|-------------------------------------|--|
| a) It increases velocity of spray | c) It ensure better therapeutic effect |
| b) It allows formation of fine mist | d) It is marketing strategy |
- iii) Storage condition of temperature between 8 to 25 degree Celsius is called as _____.
- | | |
|---------------|---------------------|
| a) Cold place | c) Room temperature |
| b) Cool pace | d) Ambient |
- iv) Drug with half-life of 30 minutes is most related to following parameter _____.
- | | |
|----------------------------------|---|
| a) Dose of drug is always small | c) Delay frequency of drug administration |
| b) Drug shows faster elimination | d) Drug shows Cmax within half an hour |
- v) Drug that is having weak acidic nature will have _____.
- | | |
|---|------------------------------------|
| a) Better absorption from stomach | c) Better absorption from colon |
| b) Better absorption from small intestine | d) Poor absorption from oral route |
- vi) Sublingual tablets are formulated for following reasons _____.
- | | |
|--|------------------------------|
| a) Tablets are easy to administer | c) Fastest onset of action |
| b) It avoids first pass metabolism of drug | d) Sustained release purpose |
- vii) Following type of dosage form is suggested to avoid excessive metabolism of drug in liver, except _____.
- | | |
|----------------|----------------------------|
| a) Injection | c) Mouth dissolving tablet |
| b) Suppository | d) Transdermal patch |

viii) Effervescent based tablets of antibiotic for paediatric patients are formulated for following reason _____.

- a) Tablet are easy to administer c) Antibiotics cannot be formulated as syrups
b) To protect drug from hydrolysis d) Effervescent salts improve chemical stability of antibiotics

B) Write with example enema preparation of any two drugs with direction to use. (03)

Q.6 What do you mean by DPI and MDI? Write merits, demerits and patient counselling for these two type of pulmonary drug delivery system. (10)

Q.7 a) Write ideal requirements of a drug for better oral bioavailability. (05)

b) Write ideal requirements of drug to formulate as transdermal patch. (05)

Q.8 Answer ANY FIVE of the following: (10)

- a) What is importance of half life of drug for formulating it is sustained release tablet.
b) Write patient counselling for eye drops.
c) Write two name of drugs that are available as creams with reason to formulate and one brand name of each.
d) Why we should not prescribe penicillin with Probenecide?
e) Write merits and demerits of fixed dose combinations.
f) What is mean by Biliary excretion and give examples?

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