

SVKM'S NMIMS

Shobhaben Pratapbhai Patel / School of Pharmacy & Technology Management

Programme: B. Pharm / B. Pharm + MBA ✓
Academic Year: 2019-20
Subject: Industrial Pharmacy I – Theory ✓

Year: III

Semester: V ✓
Marks: 75 ✓
Time: 10.00 am to 1.00 pm
Duration: 3 hrs. ✓
No. of Pages : 03

Date: 21 November 2019 ✓

FINAL EXAMINATION

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.

- 1) All the questions are compulsory.
- 2) Answer to each new question to be started on a fresh page.
- 3) Figures in brackets on the right hand side indicate full marks

Q.1 Multiple choice questions (MCQs) Answer all the questions [1×20=20 M]

1. The weight of tablet is significantly increased by :
(a) Film coating (b) Sugar coating (c) Compression (d) All of them

2. Content uniformity test is applicable when
(a) the tablet contains ≥ 50 mg drug (b) the tablet contains ≥ 1000 mg of the drug
(c) the tablet contains ≤ 50 mg of the drug (d) None of the above

3. Fluidized Bed Dryers is used in
(a) Granulation (b) Drying (c) Coating (d) All of the above

4. Particle size of the dispersed phase in an emulsion is
(a) 1-10 micrometre (b) 0.1-100 micrometre
(c) 0.01-10 micrometre (d) 0.01-100 micrometre

5. Lecithin is a good example of
(a) emulsifier (b) Surfactant (c) Antioxidant (d) None of these

6. Quaternary ammonium salt is an example of -
(a) cationic surfactants (b) anionic surfactants
(c) Both A and B (d) None of the above

7. Which method of preparation of WFI is permitted by European pharmacopeia
 (a) Distillation (b) Reverse osmosis (c) Ultrafiltration (d) None of the above
8. Validation of HEPA filter is done by -
 (a) DOP test (b) DOD test (c) DOC test (d) None of the above
9. The washing of ampoules and vials is carried out in-
 (a) Preparation area (b) Quarantine area (c) Clean up area (d) Aseptic area
10. Which Grade area is used to carry out a less critical operation in manufacturing of sterile product-
 (a) Grade C and A (b) Grade C and D (c) Grade A and B (d) Grade B and D
11. Full form of LAL test is:-
 (a) Limulus amebocyte lysate test (b) Leakers Analysis laboratory test
 (c) Limolus amorphous test (d) None of the above
12. Which of the following characters are needed for good bioavailability of a drug molecule :
 (a) Good solubility (b) Good permeability
 (c) Good solubility poor permeability (d) Good solubility and good permeability
13. Moisture content of a hard gelatin capsule should be :
 (a) <10% (b) 10-13% (c) 13-16% (d) >16%
14. Bloom strength is tested using :
 (a) Rheometer (b) Gleometer (c) Bloom meter (d) All
15. Which of these is not a pelletization process?
 (a) Spray drying/congeling (b) Melt spheronization
 (c) Fluidised granulation (d) Extrusion spheronization
16. Ophthalmic dosage forms administered inside the eye by injection are called?
 (a) Intraocular (b) Periocular (c) Topical (d) None of the above
17. In aerosols, the drug is in the propellant
 (a) Dissolved (b) Emulsified (c) Suspended (d) All of the above
18. An aerosol is manufactured by
 (a) Pressure filling (b) Cold filling (c) Both a & b (d) None of the above
19. Which of the following is responsible for saponification in vanishing cream?
 (a) Polypropylene (b) Stearic acid (c) Isopropyl stearate (d) Mineral oil

20. Which of the following is an example of Organic sunscreen agent :
- (a) Para-aminobenzoic acid (PABA) (b) Gamma aminobutyric acid (GABA)
(c) Both a and b (d) Titanium dioxide

Q.2 Long Answers (Attempt any 2 out of 3) [10×2=20 M]

1. What is the significance of the following parameters in preformulation studies? [10M]
(a) Hydrolysis (b) Oxidation and reduction (c) racemization (d) Flow Properties
2. What is the various ingredient required for the formulation of a hard gelatin capsule? [10 M]
Discuss the various powder filling principles of hard gelatin capsules.
3. Mention the purpose of a tablet coating. Discuss the common defects associated [10 M]
with coated tablets and some likely causes and the remedies thereof.

Q.3 Short Answers (Attempt any 7 out of 9) [7×5=35 M]

1. Discuss the BCS classification system and its significance in the drug development [5 M]
process.
2. Explain in quality control tests for tablets as per Indian pharmacopeia. [5 M]
3. Discuss various factors influencing the physical stability of a suspension. [5 M]
4. Define the term 'Ophthalmic Products'. Justify the use of following in ophthalmic [5 M]
preparations.
(a) viscosity imparters (b) buffers (c) surfactants
5. Differentiate between large volume and small volume parenteral. [5 M]
6. Write the ideal qualities of a lipstick. Discuss in brief about the formulation of [5 M]
Lipsticks.
7. Discuss components of aerosol packaging in brief. [5 M]
8. Give a comparative account of types of glasses used in pharmaceutical packaging. [5 M]
9. How will you evaluate an ampoule of diclofenac sodium injection (Strength; 75 mg/ [5 M]
vol.: 3ml) for its quality.