

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**  
**D. Pharm, October 2019-20 Examination**

Year: 1

Subject Code: 08600101

Subject Name: Pharmaceutics-I

Date: 19/10/2019

Time: 10:00 am to 01:00pm

Total Marks: 80

**Instructions:**

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

**Q.1 Multiple Choice Questions (MCQs) (1 Mark Each)****(20)**

1. Which of the following is given by vaginal route?
  - a) Pessaries
  - b) Foams
  - c) Douches
  - d) All of the above
2. Prodrug is metabolically active. True or False
  - a) True
  - b) False
  - c) both
  - d) Cannot say
3. One millimeter means \_\_\_\_\_ meter
  - a) 1000
  - b) 100
  - c) 10
  - d) 10000
4. Whole container glass test is for \_\_\_\_\_.
  - a) Sodalime glass
  - b) Borosilicate glass
  - c) Treated sodalime glass
  - d) Neutral glass
5. Ball mill works on which principle \_\_\_\_\_.
  - a) Attrition
  - b) Impact
  - c) Both a and b
  - d) Compression
6. What is membrane filters made up of?
  - a) Cellulose acetate
  - b) paper
  - c) Glass
  - d) Cotton
7. Netra prabha is used in inflammation of \_\_\_\_\_.
  - a) Skin
  - b) Mouth
  - c) Eyes
  - d) Ears
8. Heat transfer is based on \_\_\_\_\_ mechanisms.
  - a) Conduction
  - b) Convection
  - c) Radiation
  - d) All of the above
9. The pH of Water for Injection is \_\_\_\_\_.
  - a) 4.5-6.3
  - b) 5.0-7.0
  - c) 6.0-7.0
  - d) 5.0-6.0
10. Bacteriostatic means\_\_\_\_\_.
  - a) To stop the growth of bacteria
  - b) To kill the bacteria
  - c) Both a and b
  - d) None of the above
11. What is the autoclaving temperature of moist heat sterilization?
  - a) 120 °C
  - b) 125 °C
  - c) 135 °C
  - d) 121 °C
12. What is the pore size of membrane filters used for sterile filtration?
  - a) 0.22 or 0.45 µm
  - b) 0.25 µm
  - c) 0.49 µm
  - d) 0.5 µm
13. Which gas is recognized as a general protoplasmic oxidant?
  - a) Ethylene oxide
  - b) Oxygen
  - c) Formaldehyde
  - d) Ozone

14. From the following tablets, which tablet is not used in oral cavity?
  - a) Dental cones
  - b) Chewable tablets
  - c) Buccal tablet
  - d) Sublingual tablets
15. The agents that improves the flow characteristics of granulations
  - a) Lubricants
  - b) diluents
  - c) Antiadherants
  - d) Glidants
16. \_\_\_\_\_ refers to the separation of top or bottom part of tablet from the main body.
  - a) Capping
  - b) Lamination
  - c) Chipping
  - d) Mottling
17. \_\_\_\_\_ refers to uneven distribution of color on the tablet surface.
  - a) Picking
  - b) Sticking
  - c) Mottling
  - d) Capping
18. What does hardness of the tablet determines?
  - a) Tensile strength
  - b) Abrasion
  - c) Friction
  - d) absorption
19. HEPA full form\_\_\_\_\_
  - a) High Effective Particulate air filter
  - b) High Efficient Particle air filter
  - c) High Efficiency particulate air filter
  - d) None
20. The large proportion of plasticizer is observed in which type of capsule?
  - a) Soft
  - b) Hard
  - c) Both
  - d) None

**Q.2 Long Answers (any 8 out of 10) (05 Mark Each)**

**(40)**

1. Define Aerosol. Briefly discuss aerosol container and its principle.
2. What is cyclone separation technique? Discuss reverse- flow cyclone separator in detail.
3. Write a detail note on-
  - a) Sigma blade mixer
  - b) Triple roller mill
4. Write a note on Water for injection.
5. Classify techniques of sterilization. Discuss anyone of them used to sterilize solutions containing thermostable drug.
6. Discuss various defects of tablets with their remedies.
7. How will you evaluate capsules for the following parameters?
  - a) Weight variation
  - b) Content uniformity
8. Classify immunity. Discuss acquired immunity in detail.
9. Classify the different dosage forms. Write in brief about the solid dosage forms.
10. Describe in detail about planetary mixer.

**Q.3 Short Answers (2 Mark Each){ Answer any 10}**

**(20)**

1. What does the term Marc and Maceration mean?
2. Write a note on antigens.
3. Draw a labeled figure of evaporating still.
4. Give a brief note on simple distillation.
5. Enlist the various size separation methods.
6. Difference between ball mill and hammer mill.
7. Give ideal properties of menstruum.
8. Give a brief about of diluents.
9. Give a short note on microencapsulation.
10. Differentiate: Hard gelatin and soft gelatin capsules.
- 11 Write a note on filter aids.
- 12 Why do parenteral and ophthalmic preparations required to be sterilized.