

B.Pharm. (CBCS Pattern) Semester - V  
**BP502T - Industrial Pharmacy-I**

P. Pages : 3

Time : Three Hours



**GUG/S/23/13184**

Max. Marks : 75

- Notes :
1. All questions are compulsory.
  2. Diagrams and Chemical equation should be given wherever necessary.
  3. Illustrate your answers wherever necessary with the help of neat sketches.

**1. Multiple Choice Questions**

**20**

- i) For good bioavailability what is needed
  - a) Good solubility
  - b) Good permeability
  - c) Good solubility & poor permeability
  - d) Good solubility & good permeability
- ii) ISO electric point of Type 'A' gelatin is -----
  - a) Between 7 and 9
  - b) Between 4.7 and 5.3
  - c) 10
  - d) Between 12 and 15
- iii) For stable emulsion phase volume ratio is
  - a) 52/48
  - b) 26/74
  - c) 74/26
  - d) 48/52
- iv) In which type of suspension, particles form loose aggregates.
  - a) Deflocculated suspension
  - b) Flocculated suspension
  - c) Both a & b
  - d) None of these
- v) Can track are used in tablet for -----
  - a) Feeding the granules
  - b) Adjust shape
  - c) Guiding movement purchase
  - d) Compress the granules
- vi) Segregation of a tablet into two or more layer is known as -----
  - a) Capping
  - b) Lamination
  - c) Chipping
  - d) Spheronization
- vii) Which of the following is the state of nucleation phase
  - a) Pendular
  - b) Capillary
  - c) Funicular
  - d) All of these
- viii) Hausner's ratio is calculated by -----
  - a)  $H.R = \frac{\text{Tapped density}}{\text{Bulk density}}$
  - b)  $H.R = \frac{\text{Poured density}}{\text{Tapped density}}$
  - c)  $H.R = \frac{\text{Bulk density}}{\text{True density}}$
  - d)  $H.R = \frac{\text{Bulk density}}{\text{Void volume}}$
- ix) Preformulation is about -----
  - a) Stability
  - b) Safety
  - c) Efficacy
  - d) All of these

- x) According to IP, the limit of weight variation for the tablets having weight less than 80 mg is -----
- |        |         |
|--------|---------|
| a) 10% | b) 7.5% |
| c) 5%  | d) 1.5% |
- xi) ----- Agents prevent the sticking of tablet surface to dies & punches during compression.
- |                   |            |
|-------------------|------------|
| a) Anti Adhesives | b) Glidant |
| c) Lubricants     | d) Binders |
- xii) High bloom strength gelatin is used in manufacture of -----
- |                         |                         |
|-------------------------|-------------------------|
| a) Soft gelatin capsule | b) Hard gelatin capsule |
| c) Both a & b           | d) None of the above    |
- xiii) Sulphur is used as a -----
- |  |
|--|
| a) Surface coating material of glass       |
| b) Vulcanizing agent for rubber            |
| c) In manufacturing of leach proof plastic |
| d) None of the above                       |
- xiv) HEPA filter removes particle up to ----- size.
- |             |               |
|-------------|---------------|
| a) 0.1mm    | b) 0.3 micron |
| c) 5 micron | d) 0.1 micron |
- xv) ----- glass has a high hydrolytic and thermal shock resistance
- |             |            |
|-------------|------------|
| a) Type I   | b) Type II |
| c) Type III | d) Type IV |
- xvi) Pharmaceutical aerosols emit particles or globules of size smaller than -----
- |          |         |
|----------|---------|
| a) 100µm | b) 50µm |
| c) 20µm  | d) 70µm |
- xvii) ----- is prone to hydrolysis and forms hydrochloric acid in the presence of water which causes corrosion of container.
- |         |                     |
|---------|---------------------|
| a) P-11 | b) P-13             |
| c) P-14 | d) Compressed gases |
- xviii) EDTA used in shampoos as -----
- |                   |                     |
|-------------------|---------------------|
| a) Surfactant     | b) Sequestrant      |
| c) Coloring agent | d) Thickening agent |
- xix) Bees waxes are added in concentration of ----- in formulation of lipsticks.
- |          |           |
|----------|-----------|
| a) 3-10% | b) 10-20% |
| c) 25%   | d) 15%    |
- xx) Precipitated chalk is used in formulation of Toothpastes as -----
- |                  |                 |
|------------------|-----------------|
| a) Foaming agent | b) Abrasive     |
| c) Humectant     | d) Preservative |

2. Solve **any two**. **2x10**  
**=20**
- a) Explain Quality control tests for Tablets.
  - b) Explain in detail formulation and production of parenterals.
  - c) Write the evaluation and Quality control tests of Aerosols.

3. Solve **any seven**. **5x7**  
**=35**
- a) Explain defects in tablet coating.
  - b) Write a note on formulation of lipsticks.
  - c) Describe the manufacturing of Hard gelatin capsules.
  - d) Write a note on factors influencing choice of containers.
  - e) Write a note on pelletization process.
  - f) How flow properties of powders are measured?
  - g) Explain the factors affecting selection of pharmaceutical packaging materials.
  - h) Elaborate water attack test USP and powder glass test USP for packaging glass.
  - i) What are pyrogens? Discuss the pyrogen test for injectables.

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