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**Question Paper**

Exam Date & Time: 04 April 2021 (2 pm to 5 pm)

**MANIPAL ACADEMY OF HIGHER EDUCATION**

**Industrial Pharmacy I [PCE-BP502T]**

**Marks: 75, Duration: 180 mins.**

**I Multiple Choice Questions (MCQs)**

**Answer all the questions. Section Duration: 30 mins (2 pm to 2:30 pm)**

No.	Question
1	One of the following is ionized at all pH values. a) Strong bases                      b) Strong acids                      c) Weak bases                      d) Weak acids
2	Crystal shapes are mainly of _____ types. a) Five                      b) Two                      c) Three                      d) Four
3	Ketoprofen is an example for _____ a) BCS Class III                      b) BCS Class IV                      c) BCS Class II                      d) BCS Class I
4	_____ type is characterized by dead spaces during flow in hopper. a) Mass                      b) Core                      c) Gravity                      d) Forced
5	_____ are essential in dentifrices. a) Abrasives                      b) Color                      c) Flavoring agents                      d) Preservative
6	Primary packages are specifically tested for _____. a) Deformation                      b) Description                      c) Shade                      d) Leakage
7	Speed of drying, cleansing, good lather etc is a property related to _____ a) Tooth paste                      b) Shampoo                      c) Tooth powder                      d) Soap
8	Plasticizer content in soft gelatin capsules A. 10-15%                      B. 1-3%                      C. 20-25%                      D. 5-10%
9	_____ serves as a transition point between one area and adjacent area as per GMP. a) Air lock                      b) Clean room                      c) Sterile room                      d) Compounding room
10	Among laminar flow types, vertical flow is referred to _____. a) Sterile cabinet                      b) Biological safety cabinet c) UV cabinets                      d) Laminar flow hood

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11	_____ indicator is commonly used to detect leak test. a) Gentian violet b) Methylene red c) Methylene pink d) Methylene blue
12	One of the following is a disadvantage of eye solution. a) Increased contact period b) High viscosity c) Poor bioavailability d) Need for sterility
13	Surfactant toxicity is in the order of : a) Cationic-nonionic-anionic b) Nonionic-anionic-cationic c) Anionic-cationic-nonionic d) Anionic-nonionic-cationic
14	Which of the following is a non enteric polymer? A. Cellulose Acetate Phthalate B. Hydroxy propyl methyl cellulose pthalate C. Polyvinyl acetate phthalate D. Hydroxypropylmethyl cellulose
15	Which of the following is not a component of coating formulation A. Polymer B. Solvent C. Plasticizer D. Lubricant
16	Crosslinked Poly vinylpyrrolidone(crosspovidone) is used as A. Binder B. Disintegrant C. Plasticizer D. Film former
17	For tablets having average weight 150 mg, in the weight variation test none of the 20 tablets should have a percentage deviation A. More than 5 % from the average weight B. More than 10 % from the average weight C. More than 15% from the average weight D. More than 20 % from the average weight
18	If a drug is weak acid its solubility is increased by A. Decreasing the pH B. Decreasing the temperature C. Decreasing the viscosity D. Increasing the pH
19	Type B gelatin has its isoelectric point in the region of A. pH 4.7 B. pH 9.0 C. pH 7.4 D. pH 8.4
20	Moisture content of empty hard gelatin capsules should be between A. 2-4% B. 6-8% C. 8-10% D. 13-16%

Register Number									
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**Question Paper**

Exam Date & Time: 04 April 2021 (2 pm to 5 pm)

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**Industrial Pharmacy I [PCE-BP502T]**

Section Duration: 150 mins (2:30 pm to 5 pm)

**II Long Answers**

**Answer all the questions.**

- 1) What are the parts of a tablet compression machine? Mention the role of each. List the problems encountered during tableting and briefly discuss the reasons for the same. (10)
- 2) Briefly describe the steps in the semi automatic method of filling Hard Gelatin Capsules. Mention 2 advantages of pellets and explain the extrusion-spheronization method of preparing pellets. (10)

**III Short Answers**

**Answer all the questions.**

- 1) Briefly discuss any two Biopharmaceutical classification system with one example for each type. (5)
- 2) Briefly discuss various factors affecting corneal absorption. (5)
- 3) Enlist any five precautions to be taken while manufacturing parenteral products. (5)
- 4) Mention any five important functions of packaging components. (5)
- 5) With the help of a formula, briefly explain the method of preparation of cold creams. (5)
- 6) Describe the properties of various types of hair colors (5)
- 7) Write a note on the quality control tests for pharmaceutical aerosols (5)

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