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Course Name : D. Pharm

Year : First Year

**Subject Name**: Pharmaceutics

Topic Name : DRYING

# **DRYING**

### **MULTIPLE CHIOCE QUESTION**

- 1. What is the principle behind the operation of a fluidized bed dryer?
- A) Conduction
- B) Convection
- C) Radiation
- D) Fluidization

#### **Answer: D) Fluidization**

- **2.** In a fluidized bed dryer, what is used to fluidize the solid particles?
- A) Hot air
- B) Water
- C) Steam
- D) Inert gas

#### **Answer: A) Hot air**

- **3.** What is the purpose of fluidizing the solid particles in a fluidized bed dryer?
- A) To increase their density
- B) To reduce their size
- C) To improve heat transfer
- D) To prevent oxidation

### **Answer: C) To improve heat transfer**

- **4.** Which of the following statements about fluidized bed dryers is true?
- A) They rely on conduction for heat transfer
- B) They are only suitable for drying fine powders
- C) They have a fixed bed of solid particles
- D) They offer uniform drying and efficient heat transfer

# Answer: D) They offer uniform drying and efficient heat transfer

- **5.** How does the airflow in a fluidized bed dryer affect the drying process?
- A) It decreases the temperature inside the dryer
- B) It increases the residence time of particles
- C) It helps in agglomeration of particles
- D) It facilitates moisture removal from the particles

# Answer: D) It facilitates moisture removal from the particles

- **6.** What happens to the solid particles when the fluidizing velocity in a fluidized bed dryer is too low?
  - A) They remain stationary at the bottom
  - B) They are ejected out of the dryer
  - C) They become too hot
  - D) They agglomerate and form lumps

# Answer: A) They remain stationary at the bottom

- **7.** What is the advantage of using a fluidized bed dryer over other drying methods?
  - A) Faster drying time
  - B) Lower energy consumption
  - C) Reduced risk of product degradation
  - D) Higher moisture content in the final product

### Answer: C) Reduced risk of product degradation

- 8. What type of materials are commonly dried using fluidized bed dryers?
  - A) Liquids
  - B) Gases
  - C) Solids
  - D) Emulsions

### **Answer: C) Solids**

- 9. What is the maximum temperature typically used in a fluidized bed dryer?
  - A) Below 100°C
  - B) Around 200°C
  - C) Above 300°C
  - D) Varies depending on the material being dried

# Answer: D) Varies depending on the material being dried

- 10. Which of the following industries commonly utilizes fluidized bed dryers?
  - A) Textile industry
  - B) Food industry
  - C) Pharmaceutical industry
  - D) Automotive industry

# **Answer: C) Pharmaceutical industry**