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D. Pharm Exit Exam - 2024

Course Name	**: D. Pharm**
Year	**: First Year**
Subject Name	**: Pharmaceutics**
Topic Name	**: Novel Drug Delivery System**

Ch – 19.1

Novel drug delivery systems

MULTIPLE CHIOCE QUESTION

1. .....is the primary aim of novel drug delivery systems?

A) To increase drug toxicity

B) To decrease drug stability

C) To enhance drug targeting and efficacy

D) To minimize drug bioavailability

Answer: C) To enhance drug targeting and efficacy

2. Which of the following is NOT a characteristic of conventional drug delivery systems?

A) Targeted delivery

B) Rapid drug clearance

C) Limited drug solubility

D) Uncontrolled drug release

Answer: A) Targeted delivery

3. Novel drug delivery systems aim to overcome limitations associated with:

A) High drug bioavailability

B) Rapid drug clearance

C) Controlled drug release

D) Limited drug targeting

Answer: D) Limited drug targeting

4. What is the significance of controlled drug delivery systems?

A) They allow for rapid drug clearance

B) They provide uncontrolled drug release

C) They offer precise control over drug release rates

D) They decrease drug efficacy

Answer: C) They offer precise control over drug release rates

5. Which of the following is an example of a targeted drug delivery system?

A) Conventional tablets

B) Intravenous infusion

C) Liposomal formulations

D) Immediate-release capsules

Answer: C) Liposomal formulations

6. What role do nanoparticles play in novel drug delivery systems?

A) Decreasing drug stability

B) Minimizing drug solubility

C) Enhancing drug targeting and delivery

D) Increasing drug toxicity

Answer: C) Enhancing drug targeting and delivery

7. What is the primary advantage of using liposomes in drug delivery?

A) Decreased drug targeting

B) Rapid drug clearance

C) Enhanced drug stability

D) Limited drug release

Answer: C) Enhanced drug stability

8. Which factor is crucial for the success of transdermal drug delivery systems?

A) Rapid drug clearance

B) Effective drug penetration through the skin

C) Decreased patient compliance

D) Limited drug stability

Answer: B) Effective drug penetration through the skin

9. What distinguishes novel drug delivery systems from conventional ones?

A) They have limited drug targeting capabilities

B) They lack control over drug release rates

C) They offer enhanced drug delivery and targeting

D) They utilize outdated technology

Answer: C) They offer enhanced drug delivery and targeting

10. Which of the following is NOT a challenge in the development of novel drug delivery systems?

A) Achieving targeted drug delivery

B) Controlling drug release rates

C) Increasing drug bioavailability

D) Overcoming physiological barriers

Answer: C) Increasing drug bioavailability

11. What is the primary goal of using nanotechnology in drug delivery?

A) To decrease drug efficacy

B) To limit drug targeting

C) To enhance drug stability and targeting

D) To increase drug toxicity

Answer: C) To enhance drug stability and targeting

12. Which of the following is NOT a type of stimuli-responsive drug delivery system?

A) pH-responsive

B) Temperature-responsive

C) Pressure-responsive

D) Static-responsive

Answer: D) Static-responsive

13. What is the primary advantage of using polymeric micelles in drug delivery systems?

A) Decreased drug solubility

B) Increased drug toxicity

C) Enhanced drug targeting

D) Limited drug stability

Answer: C) Enhanced drug targeting

14. Imaging technique is commonly used for monitoring the distribution of nanoparticles in vivo:

A) X-ray crystallography

B) Magnetic resonance imaging (MRI)

C) Polymerase chain reaction (PCR)

D) Enzyme-linked immunosorbent assay (ELISA)

Answer: B) Magnetic resonance imaging (MRI)

15. Which of the following is NOT a benefit of using dendrimers in drug delivery systems?

A) Precise control over drug release

B) Low drug loading capacity

C) Large particle size

D) Increased drug stability

Answer: C) Large particle size

16. What is the primary challenge in developing inhalable drug delivery systems?

A) Achieving targeted drug delivery to the lungs

B) Minimizing drug bioavailability

C) Decreasing patient compliance

D) Increasing drug toxicity

Answer: A) Achieving targeted drug delivery to the lungs

17. Which drug delivery system is designed to release the drug in response to specific physiological cues?

A) Passive targeting

B) Active targeting

C) Stimuli-responsive

D) Non-responsive

Answer: C) Stimuli-responsive

18. What is the main advantage of using transdermal drug delivery systems?

A) Rapid drug clearance

B) Localized drug delivery

C) Improved patient compliance

D) Limited drug absorption

Answer: C) Improved patient compliance

19. Example of a mucoadhesive drug delivery system is:

A) Subcutaneous injection

B) Oral tablet

C) Transdermal patch

D) Nasal spray

Answer: D) Nasal spray

20. What is the primary challenge in developing RNA-based drug delivery systems?

A) Limited drug stability

B) High cost of production

C) Difficulty in achieving targeted delivery

D) Rapid drug clearance

Answer: C) Difficulty in achieving targeted delivery

21. What is the primary mechanism of action of osmotic pumps in controlled drug delivery systems?

A) Diffusion

B) Osmosis

C) Filtration

D) Adsorption

Answer: B) Osmosis

22. Which of the following is NOT a limitation of using liposomes in drug delivery systems?

A) Limited stability

B) Rapid clearance by the immune system

C) Difficulty in scaling up production

D) High cost of production

Answer: D) High cost of production

23. Biodegradable polymer commonly used in drug delivery systems is……

A) Polyethylene

B) Polystyrene

C) Poly(lactic-co-glycolic acid) (PLGA)

D) Polypropylene

Answer: C) Poly(lactic-co-glycolic acid) (PLGA)

24. ……is the purpose of using PEG in drug delivery systems?

A) Increase drug toxicity

B) Improve drug stability

C) Decrease drug solubility

D) Minimize drug targeting

Answer: B) Improve drug stability

25. What is the primary mechanism of action of magnetic nanoparticles in targeted drug delivery systems?

A) Diffusion

B) Osmosis

C) Electromagnetic attraction

D) Chemical reaction

Answer: C) Electromagnetic attraction