



UNIVERSITY OF JAFFNA
BACHELOR OF PHARMACY
THIRD YEAR FIRST SEMESTER EXAMINATION – FEBRUARY 2017
PHACE 3134 PHARMACEUTICS IV – PAPER I

Date: 28.02.2017.

Time: 01 Hour

Please read the following instructions carefully before answering the questions.

- Answer all **20 questions** in the Answer Sheet provided.
- Write your Index Number on the Answer Sheet.
- Do not deface or write any remarks on the Answer Sheet.
- Only one Answer Sheet is provided per candidate.

Example of how to mark the Answer Sheet.

E.g. Subjects taught in Medical Course include:

- A Geology
- B Geography
- C Anatomy
- D Pathology
- E Chemistry

	A	B	C	D	E
T	●			●	
F		●	●		●

Marking:

- A- -1
- B- +1
- C- -1
- D- +1
- E- +1

Marks for this question = 1

- Each correct answer will be awarded a positive mark.
- Each negative answer will be awarded a negative mark.
- If no answer is offered, no marks will be awarded.
- **Each question carries 0 to + 5 marks.**
- **Please note that negative marks from one question will not be carried to other questions.**

- 1. Disintegration is required in the following formulations to exert systemic action.**
 - A. Enteric coated tablets
 - B. Sugar coated tablets
 - C. Dental cones
 - D. Sublingual tablets
 - E. Buccal tablets

- 2. Inadequate lubricants in the tablet formulations lead to following tablet defects.**
 - A. Weight variation
 - B. Less hardness
 - C. Pitting
 - D. Sticking
 - E. Lamination

- 3. Following granulation mechanisms involved in the formation of dry granules.**
 - A. Solid bridges
 - B. Partial melting
 - C. Attractive forces between particles
 - D. Hardening binders
 - E. Interfacial Forces in Mobile Liquid Films

- 4. Following soluble fillers are used in the tablet formulations.**
 - A. Lactose
 - B. Sucrose
 - C. Dextrose
 - D. Microcrystalline cellulose
 - E. Dicalcium phosphate

- 5. Tablet granules**
 - A. produce uniform weight of tablets.
 - B. prevent the segregation of constituents.
 - C. are converted into fine powder during compression.
 - D. can be produced by slugging method.
 - E. show good flow property than fine powders.

- 6. Following nanocarriers are produced by amphiphilic molecules.**
- A. Liposomes
 - B. Dextrimers
 - C. Niosomes
 - D. Solid lipid nanoparticles
 - E. Polymeric micelles
- 7. Viscosity imparting agents used in ophthalmic drops include**
- A. thimerosal.
 - B. phenyl ethanol.
 - C. polyvinyl alcohol.
 - D. hydroxyl propyl methyl cellulose.
 - E. propyl paraben.
- 8. Capping in tablets can be prevented by**
- A. reducing the production rate of tables.
 - B. increasing compression pressure.
 - C. eliminating moisture from the tablet formulations.
 - D. precompression of formulations.
 - E. using flat shaped punches.
- 9. Liquid core is used in the following methods.**
- A. Coacervation phase separation
 - B. Pan coating
 - C. Solvent evaporation
 - D. Air suspension
 - E. Spray drying
- 10. Enteric coating agents include**
- A. shellac.
 - B. cellulose acetate phthalate.
 - C. ethyl cellulose.
 - D. carnauba wax.
 - E. ethyl cellulose.

11. Antioxidants used in parenteral solution include

- A. citric acid.
- B. ascorbic acid.
- C. tocopherols.
- D. benzalkonium chloride.
- E. methyl p-hydroxybenzoate.

12. State whether the following statements are true or false regarding glidants.

- A. They improve the flow characteristics of a powder mixture.
- B. They reduce the interparticle friction.
- C. They facilitate the ejection of the tablets from the die cavity.
- D. Colloidal silica is used in the concentration of 5%.
- E. Insufficient amount of glidants affect the uniform weight of tablets.

13. Super disintegrants include

- A. microcrystalline cellulose.
- B. spray dried starch.
- C. sodium carboxy methyl cellulose.
- D. crospovidone.
- E. low substituted hydroxyl propyl cellulose

14. Lubricants that are used in tablet preparations include

- A. sodium lauryl sulfate.
- B. dextrose.
- C. dicalcium phosphate.
- D. glyceryl monostearate .
- E. magnesium stearate.

15. Controlled drug release can be produced by

- A. sublingual tablets.
- B. delayed release tablets.
- C. implants.
- D. transdermal patches.
- E. osmotic pumps.

16. Enteric coating

- A. causes delayed release of drug.
- B. is an acid stable.
- C. causes sustained drug delivery.
- D. is used to prevent gastric irritation.
- E. decreases the gastric emptying time.

17. Vesicular carriers include

- A. resealed erythrocyte.
- B. liposome.
- C. microsphere.
- D. niosome.
- E. nanoparticle.

18. Pyrogens

- A. are metabolic products of microorganisms.
- B. can be filtered by membrane filter with 0.2 μ m.
- C. are proteins.
- D. can be destroyed by moist heat sterilization.
- E. can be produced by fungi.

19. Freeze drying

- A. is a sterilization method.
- B. is also known as lyophilisation.
- C. products have higher surface area.
- D. products are crystalline substances.
- E. eliminates pyrogens.

20. In aerosol, hydrocarbon propellants

- A. function as solvents.
- B. deplete ozone layer.
- C. include chloro fluoro carbon.
- D. used in topical preparation.
- E. are compressed gas propellants.

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