

Dev

UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF PHARMACY
THIRD YEAR SECOND SEMESTER EXAMINATION – MARCH 2019

PHAHC 3236 HOSPITAL PHARMACY

Date: 29.03.2019

Time: ³2 hours

ANSWER ALL EIGHT QUESTIONS. Marks allotted to each part are given within brackets.

Answer Part A, Part B and Part C in a separate answer book.

PART A

1.
 - 1.1 Write an account on unit dose dispensing (50 Marks)
 - 1.2 Explain narcotic drug distribution in government hospitals (25 Marks)
 - 1.3 Briefly explain individual drug distribution system. (25 Marks)

2. List the functions of:
 - 2.1 government hospital Pharmacist. (35 Marks)
 - 2.2 medical supply division. (35 Marks)
 - 2.3 national drug review committee. (30 Marks)

3.
 - 3.1 Briefly explain the factors that determine the vaccine estimation. (25 Marks)
 - 3.2 Write the storage requirements different types of vaccine (25 Marks)
 - 3.3 Write an account on vaccine vial monitor and cold chain monitor card on vaccine storage. (50 Marks)

4.
 - 4.1 Explain different methods are used to prevent the counterfeit medicine entering the supply chain. (50 Marks)
 - 4.2 Write an account on procedure of supply chain from MSD to a base hospital. (50 Marks)

5. Write short notes on:
 - 5.1 Pricing and reimbursement of medicine. (35 Marks)
 - 5.2 List different type of hospitals in Sri Lanka and facilities which available in provincial hospitals. (35 Marks)
 - 5.3 ABC and VEN analysis (30 Marks)

Part B

- 6.1 Define “absorbed dose” in radiation. (15 Marks)
- 6.2 A patient receives an injection 1.1×10^8 Bq of I-131, which accumulate in the thyroid gland (Mass of the thyroid gland is 20 g). The mean energy of emitted radiation is 300 keV. Find the absorbed dose of thyroid gland. (20 Marks)
- 6.3 Define “radiopharmaceutical” used in nuclear medicine imaging. (15 Marks)
- 6.4 List the importance of Tc-99m radionuclide used in nuclear medicine imaging. (30 Marks)
- 6.5 A 5.3 ml vial of Tc-99m Sodium Pertechnetate contains 325.8 mCi at 3.30 pm in a particular day. In same day at 4.45 pm, a 20 mCi of dose is required to a patient. Find the required volume of radiopharmaceutical for that patient. (You may assume that the decay factor for Tc-99m is 0.865 for 1 hour 15 minutes) (20 Marks)
- 7.
- 7.1 Define “photo electric effect” in radiation. (10 Marks)
- 7.2 Briefly describe the importance of photo electric effect on radiography images. (20 Marks)
- 7.3 Distinguish the biological effect between high and low linear energy transfer (LET) radiation (25 Marks)
- 7.4 Briefly discuss the working principle of a thermo luminescence dosimeter (TLD). (20 Marks)
- 7.5 Briefly describe the functions of the following components in an X-ray tube
- 7.5.1 Cathode (10 Marks)
- 7.5.2 Anode (10 Marks)
- 7.5.3 Housing (05 Marks)

Part C

- 8.
- 8.1 Briefly explain the reasons for shortage of medicine in government or big private hospitals (50 Marks)
- 8.2 As a pharmacist, how would you prevent the shortage of medicine (25 Marks)
- 8.3 Do you think that the Drug review committee is useful to prevent shortages or excesses of medicine in hospitals? (25 Marks)