Total No. of Questions: 3

Total No. of Printed Pages:2

Enrollment No.....



Faculty of Pharmacy End Sem Examination May-2024

PY3EL11 Good Manufacturing Practices
Programme: B. Pharm. Branch/Specialisation: Pharmacy

Duration: 3 Hrs. Maximum Marks: 75

Note: All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.

| Q.1 | i. | What do you mean by GMP? | 2 |
|-----|-------|---|----|
| | ii. | Write about the parts of schedule M. | 2 |
| | iii. | Describe investigational new drug (IND) application | 2 |
| | iv. | Define NDA and ANDA. | 2 |
| | v. | Write the importance of 21 CFR. | 2 |
| | vi. | Give the significance of pharmaceutical cGMP. | 2 |
| | vii. | Write four reasons for pharmaceutical product recall. | 2 |
| | viii. | Define product reprocessing. | 2 |
| | ix. | Write about operating characteristics curves for sampling. | |
| | х. | What do you mean by sampling plan and sampling tools? | 2 |
| Q.2 | | Attempt any two: | |
| | i. | Discuss good manufacturing practices and good laboratory practices. | 10 |
| | ii. | Discuss the documentation process for investigational new drug (IND) and new drug application (NDA) | 10 |
| | iii. | (a) Explain Standard operating procedures (SOP) | 5 |
| | | (b) Discuss the documentation & protocols for the maintenance of | 5 |
| | | record in pharmaceutical industries. | |
| Q.3 | | Attempt any seven: Two questions from each section is compulsory. | |
| | | Section - A | |
| | i. | Differentiate GMP and c-GMP. | 5 |

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| ii. | Discuss cGMP guidelines according to United States Food and | | | | |
|-------|--|---|--|--|--|
| | Drug Administration (USFDA). | | | | |
| iii. | Explain the parts of code of federal regulation. | | | | |
| | | | | | |
| | Section - B | | | | |
| iv. | Classify pharmaceutical product recall and give strategy for | 5 | | | |
| | effective recall. | | | | |
| v. | Discuss about the FDA requested recall and firm-initiated recall | 5 | | | |
| | procedures. | | | | |
| vi. | Discuss about finished product reprocessing and salvaging. | | | | |
| | | | | | |
| | Section - C | | | | |
| vii. | Write the WHO guidelines for sampling plans and techniques. | 5 | | | |
| viii. | | | | | |
| | | | | | |
| ix. | Write about the maintenance of sampling records of packaging | 5 | | | |
| | material. | | | | |
| | | | | | |

Marking Scheme

Good Manufacturing Practices (T) - PY3EL11 (T)

| Q.1 | i) | Explanation | 2 Marks | 2 | |
|-----|---|---|--------------|----|--|
| | ii) | Name of Part MQ | 1 Mark | 2 | |
| | | Importance | 1 Mark | | |
| | iii) | Explanation of investigational new drug (IND) – 2 Marks | | | |
| | iv) | Define NDA | 1 Mark | 2 | |
| | | Define ANDA | 1 Mark | | |
| | v) | One importance of 21 CFR | (1 Mark*2) | 2 | |
| | vi) | One significance of pharmaceutical cGMP | (1 Mark*2) | 2 | |
| | vii) | One reasons for pharmaceutical product recall | (0.5 Mark*4) | 2 | |
| | viii) | Definition | 2 Mark | 2 | |
| | ix) | Operating characteristics curves for sampling | 2 Mark | 2 | |
| | x) | Sampling Requirements | 1 Mark | 2 | |
| | | Tools | 1 Mark | | |
| Q.2 | Attempt any two: | | | | |
| | i. | Good Manufacturing Practices | 5 Marks | 10 | |
| | | Good Laboratory Practices | 5 Marks | | |
| | ii. | Investigational new drug (IND) | 5 Marks | 10 | |
| | | New drug application (NDA) | 5 Marks | | |
| | iii. | (a) Explanation | 5 Marks | 5 | |
| | | (b) Documentation | 2.5 Marks | 5 | |
| | | (b) Protocols | 2.5 Marks | | |
| Q.3 | Attempt any seven: Two questions from each section is compulsory. | | | | |
| | i. | One Difference | (1 Mark*5) | 5 | |
| | ii. | Importance | 3 Marks | 5 | |
| | | Explanation | 2 Marks | | |
| | iii. | Importance | 2 Mark | 5 | |
| | | Explanation | 3 Marks | | |

| iv. | Classification | 2.5 Marks | 5 |
|-------|--|-----------|---|
| | Strategy | 2.5 Marks | |
| v. | FDA requested recall | 2.5 Marks | 5 |
| | firm-initiated recall procedures | 2.5 Marks | |
| vi. | finished product reprocessing | 3 Marks | 5 |
| | Salvaging | 2 Marks | |
| | Section – C | | |
| vii. | WHO guidelines for sampling plans | 2.5 Marks | 5 |
| | WHO guidelines for sampling techniques | 2.5 Marks | |
| viii. | Maintenace | 2 Marks | 5 |
| | Discussion | 3 Marks | |
| ix. | Maintenace | 2 Marks | 5 |
| | Discussion | 3 Marks | |
