

FACULTY OF PHARMACY
Pharm. D (6 YDC) V-Year (Main) Examination, July 2017

Subject : Pharmacoepidemiology and Pharmacoeconomics

Time : 3 Hours

Max. Marks: 70

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

- 1 What is the need for Pharmacoepidemiologic studies in India?
- 2 Write briefly on defined daily dose and its significance.
- 3 What are the various methods to measure drug use?
- 4 Write the cost effective analysis plane.
- 5 How is odds ratio calculated? Give an example.
- 6 What is a decision tree?
- 7 What is ACER?
- 8 Define a formulary.
- 9 What is VAERS?
- 10 Define teratogenesis. Give two examples of teratogens.

PART – B (5 x 10 = 50 Marks)

- 11 (a) What are the methodologic problems to be addressed by Meta-analysis?
(b) Studies on drug induced birth defects.
- 12 Write in detail the concept and measurement of risk and their significance in pharmacoepidemiology.
- 13 Write in detail the concept of defined and prescribed daily doses and the other units of presentation of volume.
- 14 (a) Write a short note on surveys of drug use and its significance in pharmacoepidemiological studies.
(b) Write a note on record linkage system and its need in pharmaco epidemiological studies.
- 15 (a) Discuss regarding the automated data systems with examples.
(b) Write in detail regarding the DUE along with its applications.
- 16 Describe the Cost benefit analysis, their applications, advantages and disadvantages with the help of a case study.
- 17 (a) Elaborate on the role of pharmacoeconomics in formulary management decisions.
(b) Write a note on methods to measure indirect and intangible benefits.
- 18 (a) Write a brief note on ECHO model.
(b) What are the various types to costs in pharmacoeconomics study?

FACULTY OF PHARMACY
Pharm. D (6 YDC) V-Year (Main) Examination, July 2017

Subject : Clinical Research

Time : 3 Hours

Max. Marks: 70

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

- 1 Mention different types of preclinical studies.
- 2 What are the requirements to conduct clinical trials as per schedule Y?
- 3 What is ANDA? How is it filed ?
- 4 Explain briefly the steps involved in CDM.
- 5 What is PIC? Explain its role.
- 6 What is ICMR code?
- 7 Define the terms “protocol” and “protocol amendments”.
- 8 What is a regulatory authority? Write the general roles and responsibilities of regular authority.
- 9 What is “subject identification code” in clinical trials?
- 10 Write the composition of IRB and explain quorum for meetings.

PART – B (5 x 10 = 50 Marks)

- 11 Explain Dosage form development process.
- 12 (a) Explain the principles of CDSCO GCP guidelines.
(b) Explain the roles and responsibilities of Auditors as per ICH GCP.
- 13 What are the contents of INDA ? How IND application is reviewed?
- 14 Who is a sponsor? Enumerate sponsor's responsibilities as per ICH GCP.
- 15 (a) Explain randomization in clinical trials.
(b) Write notes on multicentre trials.
- 16 Discuss various toxicological testing required for discovery of new drugs.
- 17 (a) Explain various Data Entry methods.
(b) Write about safety monitoring in clinical Trials.
- 18 (a) Explain in detail responsibilities of investigator as per ICH GCP.
(b) Give an overview of Regulatory Environment in Europe.

FACULTY OF PHARMACY
Pharm. D (6 YDC) V-Year (Main) Examination, July 2017

Subject : Clinical Pharmacokinetics and Pharmacotherapeutic Drug Monitoring

Time : 3 Hours

Max. Marks: 70

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

- 1 What is the role of pharmacist in clinical pharmacokinetics?
- 2 Write the significance of population pharmacokinetics.
- 3 What are the major considerations in TDM?
- 4 What are the main factors that influence drug design in renal disease?
- 5 Why is creatinine clearance difficult to predict? Explain.
- 6 Define pharmacogenetics and write its applications.
- 7 Write the TDM for carbamazepine.
- 8 What are the pharmacokinetic considerations in designing a dosage regime?
- 9 Write a note on pharmacokinetic drug – drug interactions with suitable examples.
- 10 Write any one method dosage conversion from I.V. to oral dosing.

PART – B (5 x 10 = 50 Marks)

- 11 Explain TDM drugs used in cardiovascular and seizure disorders.
- 12 (a) Explain different dosage adjustment for uremic patients.
(b) Write a note on effect of hepatic disease on pharmacokinetics.
- 13 Explain briefly Bayesian theory and analysis of population pharmacokinetic data.
- 14 Explain the role of cytochrome p-450 isoenzyme in genetic polymorphism in drug metabolism.
- 15 Explain the drug dosing in elderly, pediatrics and obese patients.
- 16 Describe inhibition and induction of drug metabolism.
- 17 Explain measurement of glomerular filtration rate and creatinine clearance.
- 18 Explain how TDM will affect individualization of drug dosage Regime.

FACULTY OF PHARMACY**Pharm. D. (6 YDC) V Year (Instant) Examination, January 2014****Subject: Clinical Research****Time: 3 Hours****Max. Marks: 70*****Note: Answer all questions from Part A. Answer any five questions from Part B.*****PART – A (10 x 2 = 20 Marks)**

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| 1 | Write briefly about different types of masking designs in clinical trials. | 2 |
| 2 | Define IND and explain when IND application is not required. | 2 |
| 3 | What are the advantages of randomized clinical trials? | 2 |
| 4 | Explain the importance of drug characterization in drug discovery. | 2 |
| 5 | Write about the role of regulatory authority in clinical trials. | 2 |
| 6 | Explain briefly about phase II clinical trials. | 2 |
| 7 | Write briefly about pharmacological approach in drug development. | 2 |
| 8 | What is meant by informed consent process and explain the contents in document? | 2 |
| 9 | Explain the procedures of IRB. | 2 |
| 10 | Define ADR, write briefly about the monitoring of ADR. | 2 |

PART – B (5 x 10 = 50 Marks)

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| 11 | Explain in detail about CDSCO guidelines in maintaining good clinical practice. | 10 |
| 12 | (a) Explain about phase III clinical trials guidelines. | 5 |
| | (b) Write about various methods of post marketing surveillance. | 5 |
| 13 | Explain in detail about the design of clinical trials. | 10 |
| 14 | (a) Write about safety measures in ADR. | 5 |
| | (b) Explain the components of data management in clinical trials. | 5 |
| 15 | Write in detail about the submission of ANDA. | 10 |
| 16 | Explain about composition, responsibilities and procedures of IEC. | 10 |
| 17 | (a) Write about regulatory authority in India. | 5 |
| | (b) Explain the responsibilities of investigators and auditors in clinical trial. | 5 |
| 18 | (a) Write about methods of safety monitoring in clinical trials. | 6 |
| | (b) Write a note on ethical guidelines in clinical research. | 4 |

FACULTY OF PHARMACY**Pharm. D. (6 YDC) V-Year (Instant) Examination, January 2014****Subject: Pharmaco epidemiology and Pharmacoeconomics****Time: 3 Hours****Max.Marks: 70*****Note: Answer all questions from Part A. Answer any five questions from Part B.*****PART – A (10 x 2 = 20 Marks)**

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| 1 | Define cost utility analysis. | 2 |
| 2 | What do you mean by cost effectiveness analysis? | 2 |
| 3 | What do you mean prescription event monitoring? | 2 |
| 4 | Define formulary. | 2 |
| 5 | Mention pharmacoeconomic principles. | 2 |
| 6 | Write short notes on: | 2 |
| | i) Case report | |
| | ii) Case series. | |
| 7 | Write a note on meta analysis. | 2 |
| 8 | Mention two applications of pharmacoeconomics. | 2 |
| 9 | Write a note on spontaneous reporting. | 2 |
| 10 | What do you mean by decision analysis? | 2 |

PART – B (5 x 10 = 50 Marks)

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| 11 | Describe in detail need and applications of pharmacoeconomics and pharmacoepidemiological studies in the field of pharmacy practice. | 10 |
| 12 | Write notes on attributable risk, relative risk and odds ratio. | 10 |
| 13 | Describe in detail, theoretical pharmacoepidemiological methods with the help of case studies. | 10 |
| 14 | Write notes on Adhoc data source and automated data system. | 10 |
| 15 | (a) Explain in detail developing a formulary list and formulary management. | 7 |
| | (b) Short note on teratology reports. | 3 |
| 16 | Explain in detail cost minimization, cost benefit and cost effectiveness analysis with the help of case studies. | 10 |
| 17 | Explain health economics, health outcome research and health related quality of life. | 10 |
| 18 | Write short note on DDD, PDD and medication adherence measurement. | 10 |

FACULTY OF PHARMACY**Pharm. D. (6YDC) V Year (Main) Examination, Sept/Oct 2013****Subject: Clinical Research****Time: 3 Hours****Max.Marks: 70****Note: Answer all questions from Part A. Answer any five questions from Part B.****PART – A (10x2 = 20 Marks)**

1. Write about the responsibilities of IRB. 2
2. Define IND and write its applications. 2
3. What is the role of dosage form in drug development process? 2
4. What is the role of auditor's in clinical trials? 2
5. Write about the protocol design in clinical study document. 2
6. Write in brief about safety monitoring in clinical trials. 2
7. Write about different methods of randomization in clinical trials. 2
8. Define informed consent process and when the documents of ICP are revised. 2
9. Write about methods of reporting ADR. 2
10. Write about the advantages of double-blind design in clinical trials. 2

PART – B (5x10 = 50 Marks)

11. Explain in detail about GCP according to ICH guidelines. 10
- 12.(a) Write the responsibilities of sponsor and clinical research associate in clinical trial. 7
(b) Write a note on CRF. 3
13. Define clinical trial and explain various phases of clinical trials. 10
14. Explain about regulatory environment in USA and India. 10
- 15.(a) Write about data management in clinical trials. 5
(b) Explain how the challenges can be overcome in implementation of guidelines. 5
16. Explain in detail how a clinical trial can be designed. 10
17. Write in detail about submission of ANDA. 10
- 18.(a) Define ADR and explain how it can be monitored. 5
(b) Write the composition and responsibilities of IEC. 5

FACULTY OF PHARMACY**Pharm. D. (6 YDC) V Year (Main) Examination, September 2013****Subject: Pharmacoepidemiology and Pharmacoeconomics****Time: 3 Hours****Max.Marks: 70****Note: Answer all questions from Part A. Answer any five questions from Part B.****PART – A (10x2 = 20 Marks)**

1. Define cost of illness. 2
2. What do you mean by cost minimization analysis? 2
3. Define cost utility analysis. 2
4. What do you mean by pharmacoepideomiology? 2
5. Mention various factors to be considered in evaluating pharmacoepideomiological study. 2
6. What do you mean by Cochrane reviews? 2
7. How do you measure medication adherence? 2
8. Write a note on meta analysis. 2
9. Define teratology reports. 2
10. Mention major quality of life domains. 2

PART – B (5x10 = 50 Marks)

11. Describe aims, applications of pharmacoepidemiology. Add a note on the origin and evolution. 10
12. Describe in detail medication adherence measurement. Add a note on DDD. 10
13. Write notes on measurement of risk, attributable risk and relative risk. 10
14. Explain various pharmacoepiemiological methods with the help of case studies. 10
- 15.(a) Explain in detail developing a formulary list and formulary management? 7
(b) Short note on teratology reports. 3
16. What are the sources of data for pharmacoepidemiological studies? 10
17. What do you mean by pharmacoepidemiological studies in hospital setup and add a note on vaccine safety? 10
18. What are various pharmacoeconomic methods of evaluation and explain in detail with the help of case studies. 10