

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LM 978]

MAY 2018

Sub. Code: 2978

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-II
BRANCH-V – PHARMACY PRACTICE – MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND
PHARMACOECONOMICS

Q.P. Code : 262978

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Pharmacoeconomics and discuss the cost categorization and resources for cost estimation. Explain about measurement of outcomes in Pharmacoeconomics.
2. Explain post marketing surveillance and record linkage study methods in detecting Drug effects in populations.

II. Write notes on:

(7 x 5 = 35)

1. Discuss the outcome measures in Pharmacoepidemiology.
2. Write a note on cost effectiveness analysis.
3. Discuss the significance and steps in drug utilization review.
4. Write a note on Time-risk relationship and odds ratio.
5. Define Pharmacoepidemiology and its application.
6. Write a note on Quality Adjusted Life Years and Disability Adjusted Life Years.
7. Differentiate between Cost Minimization and Cost Benefit analysis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LN 978]

NOVEMBER 2018

Sub. Code: 2978

**M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-II
BRANCH-V – PHARMACY PRACTICE – MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND
PHARMACOECONOMICS**

Q.P. Code : 262978

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Pharmacoepidemiology, its scope and need. Explain about measurement of outcomes in Pharmacoepidemiology.
2. Define the term Pharmacoeconomics and the need of Pharmacoeconomics in Indian scenario. Discuss the various Pharmacoeconomic evaluation methods.

II. Write notes on:

(7 x 5 = 35)

1. Use of software's in Pharmacoeconomics.
2. Write a note on cost utility analysis.
3. Brief on concept of risk in Pharmacoepidemiology.
4. Brief on the role of Pharmacoeconomics in formulary management decision.
5. Write a note on prescription event monitoring.
6. Medication adherence measurements.
7. Discuss the types of outcomes in Pharmacoeconomics and its measurement.

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M.PHARM. DEGREE EXAMINATION
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BRANCH-V – PHARMACY PRACTICE – MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND
PHARMACOECONOMICS

Q.P. Code : 262978

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. (a) Define the term Pharmacoeconomics and the issues in Pharmacoeconomic evaluation.
(b) Define Health related quality of life, its need and common measures for HRQOL.
2. Define the term “Pharmacoepidemiology”. Discuss in detail the various methods in conducting Pharmacoepidemiology studies.

II. Write notes on:

(7 x 5 = 35)

1. Scope, need and applications of pharmacoepidemiology.
2. Time – risk relationship & odds ratio.
3. Need of pharmacoeconomic studies in Indian health care system.
4. Explain the Markov modeling.
5. Note on Record linkage system.
6. Define Time Trade off and Discounting.
7. Explain Spontaneous reporting method.

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[LP 978]

NOVEMBER 2019

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M.PHARM. DEGREE EXAMINATION
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BRANCH-V – PHARMACY PRACTICE – MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND
PHARMACOECONOMICS

Q.P. Code : 262978

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define the term Pharmacoeconomics. Discuss the softwares used in Pharmacoeconomics.
2. Define the term Drug utilization Review. Discuss the steps and significance of DUR.

II. Write notes on:

(7 x 5 = 35)

1. Define cross-sectional and cohort studies with an example.
2. Benefits of post marketing surveillance.
3. Applications of pharmacoepidemiology.
4. Types of outcomes in Pharmacoeconomics.
5. Differentiate prevalence, incidence and incidence rate.
6. Explain Meta analysis models.
7. Various Pharmacoeconomics evaluation methods.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LQ 0121]

JANUARY 2021

Sub. Code: 2978

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

SEMESTER-II (PCI New regulations 2016)

PHARMACY PRACTICE – MPP

PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS

Q.P. Code : 262978

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Elaborate on the aims and applications of pharmacoepidemiology with suitable example.
2. Define the term Pharmacoeconomics and the need of Pharmacoeconomics in Indian scenario. Discuss the various Pharmacoeconomic evaluation methods.

II. Write notes on:

(7 x 5 = 35)

1. Define cross-sectional and cohort studies with an example.
2. Write about time-risk relationship of pharmacoepidemiology.
3. Differentiate prevalence, incidence and incidence rate.
4. Write a note on Time-risk relationship and odds ratio.
5. Outcome measure in pharmacoepidemiology.
6. Software's in Pharmacoeconomics.
7. Write a detailed note on Spontaneous reporting system.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MPHARM 0921]

**SEPTEMBER 2021
(OCTOBER 2020 EXAM SESSION)**

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER-II (PCI New regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMOLOGY AND PHARMACOECONOMICS
*Q.P. Code : 262978***

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Elaborate on various quantitative methods used in pharmacoepidemiological studies.
2. Discuss in detail about need, significance and applications of conducting various pharmaco-economic analysis.

II. Write notes on:

(7 x 5 = 35)

1. Enumerate the steps involved in drug utilization review.
2. Describe the significance of decision analysis and decision tree. .
3. Write a note on prevalence and incidence risk.
4. Describe the applications of pharmacoepidemiology studies.
5. Write a note on post marketing surveillance with its limitations.
6. Describe the advantages and disadvantages of cost benefit analysis.
7. Write a note on methods used to measure medication adherence.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MPHARM 0122]

**JANUARY 2022
(APRIL 2021 EXAM SESSION)**

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER-II (PCI New regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMOLOGY AND PHARMACOECONOMICS
*Q.P. Code : 262978***

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail on various drug use measures and outcome measures used in pharmacoepidemiology.
2. Describe cost minimisation analysis and cost effective analysis with its merits and demerits.

II. Write notes on:

(7 x 5 = 35)

1. Write a note on prescription event monitoring and record linkage system.
2. Describe the role of pharmacist in drug utilization review.
3. Write a note on odds ratio and calculation of odds ratio.
4. Describe the methods to estimate indirect cost.
5. Write a brief note on significance of Pharmacoeconomic studies.
6. Define relative risk and attributable risk with suitable example.
7. Write in brief on sensitivity analysis and Markov modeling.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 0922]

**SEPTEMBER 2022
(APRIL 2022 EXAM SESSION)**

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS**

Q.P. Code : 262978

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss the descriptive and analytical studies in pharmacoepidemiologic studies.
2. Discuss cost-benefit and cost-effectiveness analysis with its advantages and disadvantages.

II. Write notes on:

(7 x 5 = 35)

1. Describe briefly on rating scale and standard gamble methods.
2. Explain observational study design in pharmacoepidemiology.
3. Compare and contrast case control and cohort studies.
4. Explain the drug use measures in pharmacoepidemiology.
5. Write note on Human Capital (HC) method and Willingness to Pay (WTP) method
6. Explain Markov Modeling.
7. Define cross-sectional and meta-analysis studies.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 0423]

**APRIL 2023
(OCTOBER 2022 EXAM SESSION)**

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS**

Q.P. Code: 262978

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss the experimental studies in pharmacoepidemiology.
2. What do you mean by Post marketing Surveillance? Explain. Mention various applications of Pharmacoepidemiology.

II. Write notes on:

(7 x 5 = 35)

1. Differentiate case report and case series.
2. Difference between Attributable risk and relative risk.
3. Explain the most common methods used in determining utilities in Pharmacoeconomics.
4. Describe cost minimization analysis with a suitable example.
5. Summarize the applications of Pharmacoeconomic studies.
6. Write a brief note on cost utility analysis.
7. Briefly describe defined daily dose and prescribed daily dose.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 0823]

**AUGUST 2023
(APRIL 2023 EXAM SESSION)**

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS**

Q.P. Code: 262978

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss the various study designs used in pharmacoepidemiologic studies.
2. (a) Discuss the various instruments used for measuring Health Related Quality of Life (HRQOL).
(b) Discuss the various types of costs in pharmacoeconomics.

II. Write notes on:

(7 x 5 = 35)

1. Explain cost effectiveness analysis.
2. Explain the need for prescription event monitoring.
3. Describe the various types of costs and outcomes in pharmacoeconomic study.
4. Write note on post marketing surveillance.
5. Explain the various perspectives in pharmacoeconomics.
6. Briefly explain cost benefit analysis.
7. Explain the measurement of risk.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS**

Q.P. Code: 262978

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. A) Define the term Pharmacoeconomics, the need for Pharmacoeconomics in Indian scenario.
B) Discuss the types of pharmacoeconomic evaluation methods.
2. How do you express the outcome of drug use in pharmacoepidemiologic studies?
Discuss briefly on meta-analysis.

II. Write notes on:

(7 x 5 = 35)

1. Methods of medication adherence measurement.
2. Briefly discuss the 'concept of risk' in pharmacoepidemiology.
3. Prescription event monitoring and record linkage system.
4. Write a note on applications of Software in Pharmacoeconomics.
5. Elaborate on studies of vaccine safety.
6. Case Control studies.
7. Write a note on drug induced birth defects of Pharmacoepidemiology.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 0524]

**MAY 2024
(APRIL 2024 EXAM SESSION)**

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS**

Q.P. Code: 262978

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define the term Pharmacoeconomics and the need of Pharmacoeconomics in Indian scenario. Discuss the various Pharmacoeconomic evaluation methods.
2. Define the term Drug Use Evaluation. Discuss the steps and significance of DUE.

II. Write notes on:

(7 x 5 = 35)

1. Post marketing surveillance.
2. Differentiate prevalence, incidence and incidence rate.
3. Outcome measure in pharmacoepidemiology.
4. Quality adjusted Life years.
5. Write a note on odds ratio and calculation of odds ratio.
6. Differentiate case report and case series.
7. Case-control studies.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 0425]

APRIL 2025

Sub. Code: 2978

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS**

Q.P. Code: 262978

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define the term Pharmacoeconomics and need of pharmacoeconomic studies in Indian health care system.
2. Discuss the cost categorization and resources for Cost estimation. Explain about measurement of outcomes in Pharmacoeconomics.

II. Write notes on:

(7 x 5 = 35)

1. Incremental Cost Effective Ratio.
2. Use of software's in Pharmacoeconomics.
3. Define Time Trade off and Discounting.
4. Cohort study.
5. Write a note on Quality Adjusted Life Years and Disability Adjusted Life Years.
6. Differentiate Cost Minimization and Cost Benefit analysis.
7. Explain the Markov modeling.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[M.PHARM 1025]

OCTOBER 2025

Sub. Code: 2978

M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACY PRACTICE - MPP
PAPER IV – PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS

Q.P. Code: 262978

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss the significance of Drug Utilization Review (DUR) and explain the steps involved in DUR.
2. Discuss the descriptive and analytical studies in pharmacoepidemiologic studies.

II. Write notes on:

(7 x 5 = 35)

1. Define cross-sectional and cohort studies with an example.
2. Benefits of post marketing surveillance.
3. Applications of pharmacoepidemiology.
4. Types of outcomes in Pharmacoeconomics.
5. Differentiate prevalence, incidence and incidence rate.
6. Explain Meta analysis models.
7. Cost consequence analysis.
