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SP—04—2024

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Fourth Year) (Eighth Semester) EXAMINATION

APRIL/MAY, 2024

BIostatISTICS AND RESEARCH METHODOLOGY

(Wednesday, 15-05-2024)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

- Note :—*
- (i) All questions are compulsory.
 - (ii) Figures to the right indicate full marks.
 - (iii) Write your answers to the point only.

1. Answer the following :

20

- (a) Define biostatistics. Write briefly how biostatistics is significant in pharmaceutical research.
- (b) Find mode of the following data :
$$X = 3, 4, 3, 6, 6, 8, 10, 11, 12, 11.$$
- (c) Define harmonic mean and give its symbolic expression.
- (d) Define the term correlation and regression.

P.T.O.

WT

(2)

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- (e) What is histogram ?
- (f) Compare Cohort and case control study.
- (g) State the various objectives of research.
- (h) Mention different types of report.
- (i) State the reasons why sampling is used in the context of research studies.
- (j) Calculate Geometric Mean (GM) of the numbers $X = 3, 7$ and 9 .

2. Answer any *two* of the following :

20

- (a) What is sample size ? Explain, how to determine sample size ?
- (b) Explain in brief about sampling.
- (c) Calculate the following :
 - (i) Mean
 - (ii) Median
 - (iii) Standard deviation
 - (iv) Variance
 - (v) Coefficient of variance and
 - (vi) Range

from the following data :

$X = 70, 78, 80, 84, 88, 92, 94$

WT

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3. Answer any seven of the following :

7×5=35

(a) Summarize the following terms in short :

- (i) Cohort study
- (ii) Randomized control trial
- (iii) ANOVA
- (iv) T-test.

(b) Calculate mean, median and mode from the following data :

$$X = 12, 14, 16, 18, 20, 24$$

(c) Elaborate in detail observational studies.

(d) Write a note on research protocol.

(e) Explain in detail the measure of dispersion range, mean deviation and standard deviation variance.

(f) Explain the meaning and significance of research report and narrate the various steps involved in writing such a report.

(g) Define graphs. Explain various types of graphs in research tools.

(h) Write about hypothesis testing in simple and multiple regression models.

(i) Elaborate in detail clinical trial design.

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SP—08—2024

FACULTY OF PHARMACY

B.Pharm. (Eighth Semester) EXAMINATION

APRIL/MAY, 2024

SOCIAL AND PREVENTIVE PHARMACY

(Friday, 17-05-2024)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

Note :— (i) All questions are compulsory.

(ii) Draw neat labelled diagram wherever necessary.

(iii) Answer to the point only.

1. Solve the following questions :

10×2=20

(a) Define drug addiction and drug abuse.

(b) Write objectives of national health intervention programme for mother and child.

(c) Write sign and symptoms of Ebola virus diseases.

(d) Write sign and symptoms of diabetes mellitus.

P.T.O.

WT

(2)

SP—08—2024

- (e) Define vitamin. Write about types of vitamins.
- (f) Define the term hygiene and health.
- (g) Enlist the vaccines name for infants.
- (h) Enlist different stages of hypertension.
- (i) What is universal immunization programme ?
- (j) Enlist various health indicators.

2. Answer the following (any two) :

2×10=20

- (a) Explain role of WHO in Indian National Programme.
- (b) Discuss in short about PHC (Primary Health Centre).
- (c) Write about preventive medicine. Discuss national malaria prevention program along with management of malaria patient.

3. Answer the following (any seven) :

7×5=35

- (a) Write about national leprosy control programme.
- (b) Explain the national family welfare programme.
- (c) Explain malnutrition and its preventive measures.
- (d) Explain pulse polio programme.

WT

(3)

SP—08—2024

- (e) Discuss impact of urbanization on health and diseases.
- (f) Discuss about balance diet and its importance.
- (g) Write health promotion and education in school.
- (h) Explain guidelines for cholera control and prevention.
- (i) Explain National Tobacco Control Programme.

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SP—18—2024

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Eighth Semester) EXAMINATION

APRIL/MAY, 2024

PHARMACOVIGILANCE

(Friday, 24-05-2024)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

Note :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

(iii) Answer to the point only.

1. Answer the following :

10×2=20

- (a) What is PvPI ?
- (b) Enlist importance of post-approval expedited reporting.
- (c) What is primary purpose of ICH ?
- (d) What is CIOMS ?
- (e) Define case report form.
- (f) Define pharmacovigilance.
- (g) What is minimum criteria for reporting ?

P.T.O.

- (h) What is MedDRA ?
- (i) Enlist various stakeholders involved in pharmacovigilance.
- (j) What is preclinical phase ?
2. Answer any *two* of the following : 2×10=20
- (a) What is vaccine safety surveillance ? Discuss pharmacovigilance methods used for passive and active surveillance.
- (b) Define adverse drug reaction. Classify ADRs with suitable examples with its mechanisms.
- (c) Discuss drug safety evaluation in special population.
3. Answer any *seven* of the following : 7×5=35
- (a) Discuss schedule Y.
- (b) What is pharmacogenomics of ADRs ?
- (c) Write about individual case safety reports and periodic safety update reports.
- (d) Discuss stimulated reporting.
- (e) Describe basic drug information resources.
- (f) Write international classification of diseases.
- (g) Discuss about contract research organizations.
- (h) Discuss methods in casualty assessment.
- (i) Write about importance of safety monitoring of medicine.

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SP—22—2024

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharm. (Final Year) (Eighth Semester) EXAMINATION

APRIL/MAY, 2024

COSMETIC SCIENCE

Paper BP-809-ET

(Tuesday, 28-05-2024)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

Note :— (i) All questions are compulsory.

(ii) Answer to the point only.

(iii) Figures to the right indicate full marks.

(iv) Illustrate your answer with neat sketch wherever necessary.

1. Solve the following :

10×2=20

(a) Define cosmetics and enlist any *four* marketed brands.

(b) Define Deodorants and antiperspirants.

(c) What are the causes of dry skin ?

P.T.O.

- (d) Give formula for Toothpaste.
- (e) Mention different excipients used in cosmetics.
- (f) Give ideal properties of shampoos.
- (g) Define the term dermatitis.
- (h) Give the structure of hair.
- (i) Enlist common problems of oral cavity.
- (j) Give structure of skin.

2. Solve any *two* of the following :

2×10=20

- (a) Give formulation, manufacturing and evaluation of soaps and syndet bars.
- (b) Discuss in detail about cosmetic problems associated with skin.
- (c) Explain in detail about formulation, manufacturing and evaluation of shampoos.

3. Solve any *seven* of the following :

7×5=35

- (a) Give classification of sunscreens.
- (b) Give advantages and disadvantages of cold creams.
- (c) Give formula and method of preparation of vanishing creams.

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(3)

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- (d) Discuss in brief hair growth cycle.
- (e) Describe in brief role of Aloe and Turmeric in skin care cosmetics.
- (f) Give principle of sebumeter.
- (g) Discuss in brief about role of neem and clove in oral care cosmetics.
- (h) Discuss in brief evaluation tests for toothpaste.
- (i) Write in brief about para-phenylene diamine based hair dye.

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PP—18—2023

FACULTY OF SCIENCE AND TECHNOLOGY

(PHARMACEUTICAL SCIENCE)

B.Pharm. (VIII Semester) EXAMINATION

JANUARY, 2024

PHARMACOVIGILANCE

(Thursday, 4-1-2024)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Answer to the point only.

1. Answer *all* of the following :

10×2=20

(a) What is pharmacovigilance ?

(b) What is MedDRA ?

(c) Define the following :

(i) Dechallenge

(ii) Rechallenge.

(d) What is INN ?

(e) Give principles of DDD assignment.

(f) Draw WHO-ART Hierarchy.

(g) Define ADR.

(h) Explain setinel sites.

(i) Give full form of :

(i) CIOMS

(ii) CDSCO.

(j) Write down objectives of ICH.

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2. Answer any *two* of the following : 2×10=20

- (a) Write down pharmacovigilance programme of India.
- (b) With appropriate illustration explain anatomical and chemical classification of drugs.
- (c) Outline schedule Y of Drugs and Cosmetics Act.

3. Answer any *seven* of the following : 7×5=35

- (a) Explain pre-clinical studies.
- (b) Give importance of clinical phases of drugs.
- (c) Describe adverse events as per ICH guidelines.
- (d) What is process for reporting serious adverse reaction ?
- (e) Explain vaccine safety surveillance.
- (f) How INN are selected ? Give its procedure.
- (g) What is role of CRO in PUPI ?
- (h) What is ADR ? Give its classification.
- (i) What are roles and responsibilities of QPPV ?

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IP—04—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharmacy (Eighth Semester) EXAMINATION

APRIL/MAY 2023

BIostatISTICS AND RESEARCH METHODOLOGY

(Thursday, 04-05-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time— Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Answer to the point only.

(iii) Figures to the right indicate marks.

(iv) Scientific calculator is not allowed.

1. Answer the following :

20

(a) Define the term probability.

(b) Give the application of biostatistics in pharmacy

(c) Calculate the geometric mean of the numbers, 6, 8 and 9.

(d) Enlist types of graphs.

(e) Define level of significance.

(f) What is the need of research ?

(g) Calculate median from the following data :

$X = 16, 17, 19, 22, 27$

(h) What is null hypothesis and alteranate hypothesis ?

(i) What is SPSS and Minitab ?

(j) Define Cohort and case control study.

P.T.O.

2. Answer any *two* the following : 20
- (a) Calculate variance and standard deviation from the following data :
C.I. = 40–45, 43–39, 28–33, 22–27, 16–21, 10–15.
F = 4, 6, 6, 4, 5, 3.
- (b) Write a note on regression modelling.
- (c) Explain in brief about sampling methods.
3. Attempt any *seven* of the following : 7×5=35
- (a) Explain in detail phase of clinical trial design.
- (b) Explain in brief various graphic methods of displaying data in research.
- (c) Write a brief note on parametric and non-parametric test.
- (d) What are the advantages and disadvantages of randomised control design.
- (e) Define sample size. What are the methods to determine sample size ?
- (f) Describe experimental and non-experimental studies.
- (g) Describe in brief research report.
- (h) Calculate mean, standard deviation and variance from the following data :
 $X = 22, 24, 26, 28, 30, 32, 28, 26.$
- (i) Write in detail about hypothesis testing.

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IP—08—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (VIII Semester) EXAMINATION

APRIL/MAY, 2023

SOCIAL AND PREVENTIVE PHARMACY

Paper (BP-802T)

(Monday, 8-5-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Illustrate your answer with neat sketch wherever necessary.

(iii) Figures to the right side indicate full marks.

1. Answer the following :

20

(a) Define Public Health.

(b) Which vitamin deficiency causes Beriberi ?

(c) What is community participation ?

(d) Enlist the vaccine name for infants.

(e) What is drug abuse ?

(f) What is mode of transmission of Ebola infection ?

(g) What are rich sources of Vitamin A ?

(h) Enlist different stages of hypertension.

(i) Write the etiological factor for malaria.

(j) What is Marasmus ?

P.T.O.

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2. Answer any *two* of the following :

20

- (a) Describe role of World Health Organization (WHO) in Indian National Programme.
- (b) Write a note on Nutrition and Food.
- (c) Discuss about PHC (Primary Health Centers).

3. Answer any *seven* of the following :

35

- (a) Write a note on National Leprosy Control Program.
- (b) Explain the National Family Welfare Program.
- (c) Discuss general principles of prevention and control of diabetes mellitus.
- (d) Discuss objectives, functioning and outcome of National Leprosy Control Programme.
- (e) Explain about Integrated Disease Surveillance Program (IDSP).
- (f) Write a note on pulse polio programme.
- (g) Explain the concept of personal hygiene and healthcare.
- (h) Discuss objectives, functioning and outcome of National blindness.
- (i) Discuss impact of urbanization on health and disease.

IP—08—2023

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FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Eighth Semester) EXAMINATION

APRIL/MAY, 2023

PHARMACOVIGILANCE

(Saturday, 13-5-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (1) Answer to the point only.

(2) All questions are compulsory.

1. Answer all of the following :

10×2=20

- (a) What is ADR ?
- (b) What is control studies and cohort studies ?
- (c) Give any four genetic related ADR.
- (d) What do you mean by post-approval phase ?
- (e) Write down objectives of pharmacovigilance.
- (f) Give principles of DDD.
- (g) What is UMC ? Give functions of UMC.
- (h) What is clinical trials ?
- (i) What is ICD ?
- (j) Enlist any four CIOMS forms.

2. Answer any two of the following :

2×10=20

- (a) Describe clinical safety data management PSUR as ICH and USFDA guidelines.

P.T.O.

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(2)

IP—18—2023

- (b) Give applications of Med DRA and standard Med DRA queries.
- (c) Write down (Pu PI) pharmacovigilance programme of India.
3. Answer any *seven* of the following : 7×5=35
- (a) What is WHO-FIC ? Classify it.
- (b) How INN are selected ? Give its procedure.
- (c) Write in detail about role of pharmacist in management of ADR.
- (d) Describe any *one* PU-ICH guideline.
- (e) Discuss about preventability assessment.
- (f) Write a note on GCP in pharmacovigilance.
- (g) Give pharmacovigilance of vaccine.
- (h) What is care control studies ? Give its advantages and disadvantages.
- (i) What is CRO ? Write its role in clinical phases.

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IP—22—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm (Final Year) (Eighth Semester) EXAMINATION

APRIL/MAY, 2023

COSMETIC SCIENCE

Paper BP 809 ET

(Wednesday, 17-5-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

- N.B. :—**
- (i) All questions are compulsory
 - (ii) Answer to the point only.
 - (iii) Figures to the right indicate full marks.
 - (iv) Illustrate your answers with neat sketch wherever necessary.

1. Solve the following :

10×2=20

- (a) Name any *four* marketed brands of cosmetics.
- (b) Give formula for tooth paste.
- (c) Enlist ideal properties of shampoos.
- (d) What is dermatitis ?
- (e) Mention common problems of oral cavity.
- (f) Enlist herbs used in hair care cosmetics.

P.T.O.

WT

(2)

IP—22—2023

- (g) What are the causes of dry skin ?
 - (h) Give advantages of moisturising creams.
 - (i) Give structure of hair.
 - (j) Give mechanism of action of antiperspirants and deodorants.
2. Solve any *two* of the following : 2×10=20
- (a) Discuss in detail cosmetic problems associated with skin.
 - (b) Give formulation, manufacturing and evaluation of shampoos.
 - (c) Discuss in detail soap and syndet bars.
3. Solve any *seven* of the following : 7×5=35
- (a) Give classification of sunscreens.
 - (b) Discuss in brief formulation of para-phenylene diamine based hair dye.
 - (c) Describe in brief hair growth cycle.
 - (d) Give role of Neem and clove in oral care cosmetics.
 - (e) Give principles of cosmeometer.
 - (f) Discuss role of Heena and Amla in hair care cosmetics.
 - (g) Give formulation and manufacturing of deodorants and anti-perspirants.
 - (h) Give structure and functions of skin.
 - (i) What are the causes of hair fall ?

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DP—04—2022

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharmacy (VIII Semester) EXAMINATION

NOVEMBER/DECEMBER, 2022

BIOSTATISTICS AND RESEARCH METHODOLOGY

(Tuesday, 27-12-2022)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Answer to the point only.

(iii) Figures to the right indicate full marks.

(iv) Scientific calculators are not allowed.

1. (a) What are continuous variables and discrete variables ? 20
- (b) Calculate mean and mode :
25, 30, 50, 70, 30, 42, 48, 60, 30
- (c) What is the meaning of problem of multicollinearity ?
- (d) What is Histogram ?
- (e) State the reasons why sampling is used in research studies.
- (f) What is t-test ? When is it used and for what purpose(s) ?
- (g) State the various objectives of Research.
- (h) Enlist important informal and formal experimental designs.
- (i) What do you understand by term plagiarism ?
- (j) Mention the different types of report.

P.T.O.

WT

(2)

DP—04—2022

2. Answer any *two* of the following : $2 \times 10 = 20$

- (a) Describe various phases of clinical trials and experimental designs used in clinical trials.
- (b) Write a note on Regression modelling.
- (c) Define sample size. What are the methods to determine sample size?

3. Answer any *seven* of the following : $7 \times 5 = 35$

- (a) What does a measure of central tendency indicate ? Describe the important measures of central tendency.
- (b) Explain in detail about plagiarism.
- (c) Give the meaning of the following :
 - (i) Sample
 - (ii) Population
 - (iii) Sampling frame
 - (iv) Sampling design.
- (d) What are the differences between Randomised control design and Non-randomised control design.
- (e) Calculate mean, median, mode and standard deviation from the following data :
 $15, 16, 17, 18, 19, 20$
- (f) Write about hypothesis testing in simple and regression models.
- (g) Write a note on research protocol.
- (h) Write a note on Type-I and Type-II error.
- (i) Describe various types of Research.

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DP—06—2022

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharm (VII Semester) EXAMINATION

NOVEMBER/DECEMBER, 2022

INDUSTRIAL PHARMACY-II

Paper BP702T

(Wednesday, 28-12-2022)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

(iii) Answer to the point only.

1. Solve all of the following :

10×2=20

(a) What is COPP ?

(b) What do you mean by NDA ?

(c) Write the role of CDSCO.

(d) Give the functions of six-sigma.

(e) What do you understand by SOP ?

(f) What do you mean by GMP and CGMP ?

(g) Write the functions of Drug Regulatory Authorities.

(h) Write the functions of TQM.

(i) Write the responsibilities of Technology Transfer Team.

(j) What is meant by SU and RU ?

P.T.O.

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DP—10—2022

FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

B. Pharm (Final Year) (VII Semester) EXAMINATION

NOVEMBER/DECEMBER, 2022

PHARMACY PRACTICE

Paper BP703T

Time : 2.00 p.m. to 5.00 p.m.

(Friday, 30-12-2022)

Maximum Marks—75

Time—Three Hours

- N.B. :—**
- (i) All questions are compulsory.
 - (ii) Draw the diagrams wherever necessary.
 - (iii) Figures to the right indicate full marks.

10×2=20

1. Answer the following questions :

- (a) Write the role of clinical Pharmacist.
- (b) Enlist points involved in medication order.
- (c) Write need of medication history interview.
- (d) Define ambulatory patient. Enlist different types of ambulatory patient services.
- (e) Write functions of hospital pharmacy.
- (f) Define hospital. Enlist different services available in hospital.
- (g) Enlist requirements for the maintenance of records of drug store in community pharmacy.
- (h) Write the objectives of hospital formulary system.
- (i) Give the objectives of drug information services.
- (j) Write the advantages of planning of budget.

P.T.O.

2. Answer the following (any two) :

2×10=20

- (a) Discuss in detail about classification of hospital on the basis of clinical and non-clinical orientation with role of administration.
- (b) Define inventory management with its advantages and disadvantages and explain in detail about techniques in inventory management.
- (c) Write in detail about composition, function and role of pharmacy therapeutic committee in drug safety.

3. Answer the following (any seven) :

7×5=35

- (a) Explain the procedure for distribution of controlled drug.
- (b) Explain factors affecting on therapeutic drug monitoring.
- (c) Define material management. Write the functions of material management.
- (d) Explain steps involved in patient counseling.
- (e) Write contents and organization of hospital formulary.
- (f) Write mechanism of pharmacokinetic drug interaction.
- (g) Explain the various laboratory tests used in urine analysis.
- (h) Define ADQ and classify it with example.
- (i) Explain the role of pharmacist in community health education.

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DP—18—2022

FACULTY OF SCIENCE & TECHNOLOGY

B. Pharm. (Fourth Year) (Eighth Semester) EXAMINATION

JANUARY, 2023

PHARMACOVIGILANCE

(Friday, 06-01-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Answer to the point only.

1. Answer *all* the following :

10×2=20

- (a) What is CIOMS ?
- (b) Enlist four terminologies used in Pharmacovigilance.
- (c) Define ADR.
- (d) Explain contract research organization.
- (e) What is De-Challenge and Re-challenge ?
- (f) Enlist various drug dictionaries.
- (g) What are sentinel sites ?
- (h) Define pharmacogenomics.
- (i) What is Casualty assessment ?
- (j) Give anatomical classification of drugs.

P.T.O.

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(2)

DP—18—2022

2. Answer any *two* of the following : $2 \times 10 = 20$

- (a) Define pharmacovigilance. Write a note on good clinical practices in pharmacovigilance studies.
- (b) Write a note on vaccine pharmacovigilance.
- (c) Explain various clinical phases of new drug development.

3. Answer any *seven* of the following : $7 \times 5 = 35$

- (a) Describe pharmacovigilance programme of India.
- (b) Explain pre-clinical studies.
- (c) Explain in detail about micromedexs.
- (d) Outline Schedule Y and its role in pharmacovigilance.
- (e) Explain scope of Med DRA in detail.
- (f) Write down Therapeutic classification of drugs.
- (g) Describe safety evaluation in paediatrics.
- (h) Name five websites and journals related to clinical toxicology.
- (i) Explain in detail importance of communication in pharmacovigilance.

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VO—08—2022

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharm. (Eighth Semester) EXAMINATION

MAY/JUNE, 2022

BIostatISTICS AND RESEARCH METHODOLOGY

(Wednesday, 29-6-2022)

Time : 2.00 p.m. to 5.45 p.m.

Time— 3.45 Hours

Maximum Marks—75

1. Attempt the following : 20
- (a) Define Biostatistics. Brief how biostatistics is significant in Pharmaceutical Research ?
- (b) Find mode from the following data :
4.3, 4.8, 5.0, 4.0, 4.9, 4.1, 4.5, 4.6, 4.2, 4.1.
- (c) Define the terms descriptive statistics and inferential statistics.
- (d) Enlist the important statistical measures used to summarise the research data.
- (e) Define Harmonic mean and give its symbolic expression.
- (f) Calculate harmonic mean (H_μ) of the numbers, 4, 5, 10.
- (g) Define the term Correlation and Regression.
- (h) Enlist various types of graphs.
- (i) Define the term Research.
- (j) What do you understand by the term Histogram ?
2. Attempt any two : 20
- (a) Explain in detail multiple correlation and multiple regression equation.

Or

Explain in detail about plagiarism.

P.T.O.

- (b) Explain the meaning of Analysis of Variance (ANOVA). Describe briefly the technique of Analysis of Variance for one-way (single factor) technique.
- (c) Describe different types of Research.
3. Attempt any seven : 35
- (a) For the following blood pressure measurement 100, 98, 101, 94, 104, 102, 108, 108, calculate mean, standard deviation, variance, coefficient of variation, range and median.
- (b) Explain in detail the measure of dispersion range, mean deviation (d) and standard deviation, variance.
- (c) How degree of relationship between two variables is measured by using Karl Pearson's coefficient of correlation ?
- (d) Write in detail parametric and non-parametric tests.
- (e) Describe the elementary definitions and theorems of probability.
- (f) Explain the meaning and significance of the concept of standard error in sampling analysis.
- (g) Explain the significance of a Research report and narrate the various steps involved in writing such Report.
- (h) Explain in brief various graphs and charts of displaying data in Research.
- (i) Describe various phases of clinical trials in context of experimental design.

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FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (VIII Sem.) EXAMINATION

JUNE/JULY, 2022

SOCIAL AND PREVENTIVE PHARMACY

(BP802T)

(Friday, 1-7-2022)

Time : 2.00 p.m. to 5.45 p.m.

Time—3.45 Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

(iii) Answer to the point only.

1. Answer the following questions :

20

- (a) Define Health. Enlist concept of Health.
- (b) Write sign and symptoms of Ebola virus disease.
- (c) Define drug addiction and drug abuse.
- (d) Write objectives of national health intervention programme for mother and child.
- (e) Enlist various respiratory tract infections.
- (f) Define protein. Name any two protein deficiency diseases.
- (g) Write cause of malaria with symptoms.
- (h) Enlist school health related problems.
- (i) Write withdrawal symptoms of alcohol.
- (j) Define vitamin. Enlist types of vitamin.

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2. Answer any *two* of the following :

10×2=20

- (a) Explain universal immunization programme.
- (b) Describe role of World Health Organization (WHO) in Indian National Programme
- (c) Write a note on nutrition and food.

3. Answer the following (any *seven*) :

35

- (a) Explain concept of disease prevention.
- (b) Explain guidelines for cholera control and prevention.
- (c) Write a note on personal hygiene with its importance.
- (d) Discuss in short pulse polio programme.
- (e) Describe prevention and control of hypertension.
- (f) Explain national tobacco control programme.
- (g) Write the name of vitamins of the following deficiency disease of :
 - (i) Scurvy
 - (ii) Rickets
 - (iii) Beriberi
 - (iv) Night blindness
 - (v) Pellagra.
- (h) Write about transmission, symptoms and treatment of dengue fever.
- (i) Explain various socio-culture factors related to health and disease.

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FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Eighth Semester) EXAMINATION

MAY/JUNE, 2022

PHARMACOVIGILANCE

(Thursday, 30-6-2022)

Time : 2.00 p.m. to 5.45 p.m.

Time— 3.45 Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Answer to the point only.

(iii) Draw neat labelled diagram wherever necessary.

1. Answer all the questions :

10×2=20

- (a) What is pharmacovigilance ?
- (b) Enlist various clinical phases of new drug development.
- (c) What are sentinel sites ?
- (d) What are solicited sources for individual case study reports.
- (e) What is CIOMS ?
- (f) Define pharmacogenomics.
- (g) What is causality assessment ?
- (h) Give anatomical classification of drug.
- (i) Enlist any *four* routes of Administration.
- (j) Define Adverse Drug Reaction.

2. Answer any *two* of the following :

2×10=20

- (a) Describe Pharmacovigilance Program of India (PVPI).

P.T.O.

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(2)

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- (b) What are International Non-proprietary names of drugs ?
- (c) Write a note on Vaccine Pharmacovigilance.
3. Answer any *seven* of the following : 7×5=35
- (a) What is Micromedix and Toxnet ?
- (b) Explain in detail effective communication in pharmacovigilance and its importance.
- (c) Explain pre-clinical studies in drug development.
- (d) Write a short note on Good clinical practices in pharmacovigilance studies.
- (e) Discuss historical development of MedDRA.
- (f) Explain therapeutic classification of drugs.
- (g) Classify various adverse drug reactions.
- (h) Name *five* websites and Journals related to Pharmacovigilance and clinical toxicology.
- (i) Write a note on Clinical Research Organization (CRO).

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FACULTY OF SCIENCE & TECHNOLOGY

B. Pharm. (Final Year) (Eighth Semester) EXAMINATION

JUNE/JULY, 2022

COSMETIC SCIENCE

(Tuesday, 12-7-2022)

Time : 2.00 p.m. to 5.45 p.m.

Time— 3.45 Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Answer to the point only.

(iii) Figures to the right indicate full marks.

(iv) Illustrate your answers with neat sketch wherever necessary.

1. Solve the following : 10×2=20

- (a) Define cosmetics and enlist any *four* marketed brands.
- (b) Give structure of skin.
- (c) Enlist common problems of oral cavity.
- (d) Give structure of Hair.
- (e) Define Deodorants and Antiperspirants.
- (f) Give ideal properties of shampoos.
- (g) Mention different excipients used in cosmetics.
- (h) What are the causes of dry skin ?
- (i) Define the term Dermatitis.
- (j) Give formula for Toothpaste.

2. Solve any *two* of the following : 2×10=20

- (a) Explain in detail formulation, manufacturing and evaluation of shampoos.
- (b) Discuss in detail cosmetic problems associated with skin.

P.T.O.

- (c) Give formulation, manufacturing and evaluation of soaps and syndet bars.

3. Solve any *seven* of the following : 7×5=35

- (a) Discuss in brief Hair growth cycle.
- (b) Give formula and method of preparation of cold cream.
- (c) Write in brief about para-phenylene diamine based hair dye.
- (d) Describe in brief role of Aloe and Turmeric in skin care cosmetics.
- (e) Give principle of Sebometer.
- (f) Give advantages and disadvantages of vanishing creams.
- (g) Discuss in brief evaluation tests for Toothpaste.
- (h) Give classification of sunscreens.
- (i) Discuss in brief role of Neem and Clove in oral care cosmetics.