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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) (BP 801T) 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 ($H\mu$) 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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VO—16—2022

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.

P.T.O.

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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VO—32—2022

FACULTY OF AA. ARCHITECTURE

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

MAY/JUNE, 2022

PHARMACEUTICAL REGULATORY SCIENCE

BP804ET

(Wednesday, 6-7-2022)

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.

1. Solve the following :

10×2=20

(a) What is target validation ?

(b) Give purpose of lead optimization.

(c) Give requirements for filling ANDA.

(d) What happens if there are more than one ANDAs for a particular drug ?

(e) What is therapeutic good ?

(f) Give purpose for establishment of ICH.

(g) What is Common Technical Document ?

(h) Why is DMF never approved or disapproved ?

(i) Define Good Clinical Practice.

(j) What is orange book ?

2. Solve any *two* of the following :

2×10=20

(a) Write constitution and functions of World Health Organisation.

(b) Explain types of Drug Master File.

(c) Write ethical considerations in clinical research as per Belmont report.

P.T.O.

3. Solve any *seven* of the following :

7×5=35

- (a) Describe approval procedure of New Drug Application.
- (b) Describe *two* types of safety reports in the Investigational New Drug regulations.
- (c) Write a note on "ANDA - Growth opportunities to Generic Pharmaceutical companies".
- (d) Give functions of state drug control authority in India.
- (e) Write a note on Investigational New Drug.
- (f) Write a note on "Types of submission subject to eCTD requirement".
- (g) Write ethic principle of essentiality in Clinical research.
- (h) What is the difference between drug safety and pharmacovigilance ?
- (i) Write importance of drug regulatory affairs.

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VO—41—2022

FACULTY OF SCIENCE & TECHNOLOGY

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

JUNE/JULY, 2022

COSMETIC SCIENCE

(Tuesday, 12-7-2022)

(BP809ET)

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 Sebumeter.
 - (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.