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- AM-04-2024

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Fourth Year) (Eighth Semester) EXAMINATION NOVEMBER/DECEMBER, 2024

BIOSTATISTICS AND RESEARCH METHODOLOGY

BP-801T

(Tuesday, 17-12-2024)

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

Time-3 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. Answer the following:

 $2 \times 10 = 20$

- (a) Define research and biostatistics.
- (b) Enlist various phases of clinical trials.
- (c) Compare T-test and ANOVA.
- (d) List characteristics of good research report.
- (e) Distinguish between independent and dependent variable.
- (f) Calculate Mean from the following data:
 X = 22, 24, 26, 28, 30, 32.
- (g) Enlist types of graphs.
- (h) Calculate Median from the following data:
 X = 26, 27, 29, 32, 34.

P.T.O.

- (i) What is SPSS and Minitab? Write its importance
- (j) Compare Null hypothesis and Alternate hypothesis.
- 2. Answer any two of the following:

20

- (a) Discuss in brief about report writing.
- (b) Flaborate in detail clinical trial design.
- (c) Explain plagiarism. Write its application and mention measures to avoid plagiarism.
- 3. Answer any seven of the following:

 $7 \times 5 = 35$

- (a) Explain various types of research.
- (b) Distinguish between parametric and non-parametric tests in detail with example.
- (c) Calculate Mean, Median and Mode from the following data:

 X = 10, 12, 14, 16, 18, 20.
- (d) Elaborate Hypothesis and hypothesis testing.
- (e) Discuss in detail regression analysis.
- (f) Define sample size. Write methods to determine sample size.
- (g) Calculate variance and standard deviation from the following data:

CT	1—10	11—20	21—30	31—40	41—50
F	2	7	10	3	1

- (h) Compare advantages and disadvantages of randomized control design.
- (i) Define graph. Explain various types of graphs in research tools.

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AM-08-2024

FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

B.Pharm. (Eighth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2024

SOCIAL AND PREVENTIVE PHARMACY

BP-802-T

(Thursday, 19-12-2024)

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

Time-3 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. Answer the following:

 $10 \times 2 = 20$

- (a) Define health as per WHO.
- (b) What is mode of transmission of Ebola infection?
- (c) Enlist vaccine name for infants.
- (d) Which vitamin deficiency causes Beriberi?
- (e) Give sign and symptoms of Malaria.
- (f) Write objectives of national mental health programme.
- (g) Define drug abuse and drug addiction.
- (h) Enlist school health related problems.
- (i) What do you mean by Marasmus?
- (j) What are the rich sources of vitamin A?

P.T.O.

2. Solve any two of the following:

2×10

- (a) Write in detail about national health programme and national AIDS control programme.
- (b) Explain role of WHO in Indian national Programme.
- (c) Write notes on:
 - (i) Balanced diet
 - (ii) Nutrition and food.
- 3. Solve any seven of the following:

 $7 \times 5 = 35$

- (a) Write impact of urbanization on health and diseases.
- (b) Explain national tobacco control programme.
- (c) Write the deficiency disease of the following vitamins:
 - (a) Vitamin C
 - (b) Vitamin A
 - (c) Vitamin B₁₂
 - (d) Vitamin B₁
 - (e) Vitamin B₃.
- (d) Give objectives, functioning and outcome of national leprosy control programme.
- (e) What is malnutrition? How can it be prevented?
- (f) Write functions of PHC.
- (g) Explain universal immunization programme.
- (h) Explain various socio-culture factors related to health and disease.
- (i) Discuss in short pulse polio programme.

AM-08-2024

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AM-16-2024

FACULTY OF SCIENCE & TECHNOLOGY

B.Pharma. (Fourth Year) (Eighth Semester) EXAMINATION NOVEMBER/DECEMBER, 2024

PHARMACEUTICAL REGULATORY SCIENCE

(Tuesday, 24-12-2024)

(BP804T)

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

Time-3 Hours

Maximum Marks-75

- N.B.:— (1) All questions are compulsory.
 - (2) Answer to the point only.
 - (3) Figures to the right indicate full marks.
- 1. Solve the following:

 $10 \times 2 = 20$

- (a) What happens if there are more than one ANDAs for a particular drug?
- (b) What is therapeutic good?
- (c) Give purpose for establishment of ICH.
- (d) What is common technical document?
- (e) Give importance of drug regulatory affairs in pharmaceutical industry.
- (f) Write in short about CFR.
- (g) What is exemption period for orphan drug?
- (h) Which information is provided by Waxman Hatch Act?
- (i) Write two basic principles of ICH.
- (j) Give objectives of World Health Organisation.

P.T.O.

Solve any two of the following:

2×10=20

- (a) Write ethical considerations in clinical research as per Belmont report.
- (b) Write submission procedure of drug master file.
- (c) Elaborate process of drug discovery and development.
- 3. Solve any seven of the following:

 $7 \times 5 = 35$

- (a) Elaborate various phases in clinical trials.
- (b) Write a note on 'types of submission subject to eCTD requirement'.
- (c) Write a note on Investigational New Drug.
- (d) What is the purpose of ethical aspects of clinical research?
- (e) Describe new drug application.
- (f) Write a note on Therapeutic Goods Administration'.
- (g) Write functions of drug regulatory affairs department.
- (h) What is DMF? Add a note on its types.
- (i) Write a note on constitution and functions of WHO.