

2025

M.Sc. 1st Semester Examination

HUMAN PHYSIOLOGY

Paper : PHYC403X0

[Research Methodology, Ethics and Biostatistics]

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *two* questions : $2 \times 2 = 4$

1. What is meant by plagiarism? How to avoid it? 1+1
2. Write down the basic objectives of research. 2
3. What do you mean by genuine dichotomous variable? 2
4. State the advantages and disadvantages of the non-parametric test. 2

Group - B

Answer any *two* questions : $4 \times 2 = 8$

5. What is the difference between research method and research methodology? Briefly describe the steps involved in research process. 1+3

P.T.O.

(2)

6. What is research hypothesis? Write down the characteristics of research hypothesis. 1+3
7. Write briefly on the ethics that should have in a researcher. 4
8. How could the computation of Wilcoxon signed rank test be done? Mention its inaccuracies. 3+1

Group - C

Answer any *one* question : 8×1=8

9. Explain Model 1 Anova with an example. Workout the non-parametric Anova with the following data :

Heart rate (beats/min)

Men : 60, 65, 55, 58, 72, 75, 78, 75

Women : 80, 82, 85, 68, 80, 75

Find out the H value with the above. 3+5

10. What is correlation coefficient? Mention two properties of r . What does it signify by the 'magnitude' of r ? Write down the formula of ' r ' from raw scores. 2+2+2+2

Internal Assessment : 5 marks
