

Roll No: _____

JAMIA HAMDARD**SCHOOL OF CHEMICAL AND LIFE SCIENCES
DEPARTMENT OF BIOCHEMISTRY****BSc-MSc Integrated Biochemistry, Semester V Examination, 2023**

(OLD SCHEME)

**Paper Code: BBC DSE 02
Paper Title: Research Methodology**

Time: 3 h

Max Marks: 75

Note: This paper has 3 Sections, A, B, and C. Attempt all three sections. Section A: Answer all the questions; Section B: Answer any two; Section C: Answer all the questions, each question in this section has an internal choice

Course/Program Learning Outcomes (CLO/PLO) and Blooms Taxonomy Levels (BTL):
CLO-1: Understand concepts; CLO-2: Systematically learn the processes CLO-3: Understand mechanism; CLO-4: Comprehend how things are integrated; CLO-5: Analyze and evaluate.

SECTION A

Attempt All Questions

(1 M × 15 = 15 Marks)

Q. No.		BTL	CLO	PLO
1	OBJECTIVE TYPE			
(a)	i. What is the first step of research?	1	2	3
	ii. Epidemiology is which type of research?	3	2	3
	iii. Getting job is the only motivation of research (True/False)	4	5	2
	iv. Student 't' test is a liver function test (True/False)	1	4	3
	v. Review of literature is an essential component of any research (True/false)	3	3	2
	vi. Vaccine development is an example of research (Fill in the	5	4	3
	vii. Taxonomy is research (Fill in the gap)	4	4	3
	viii. In statistics 'p' is used to indicate (Fill in the gap)	4	4	3
	ix. Name one hazardous chemical used in household.	2	2	3
	x. In E-waste 'E' stands for (Fill in the gap)	2	2	3
	xi. Write full form of WIPO.	5	4	3
	xii. Can nucleotide sequence be patented? (Yes/No)	4	4	3
	xiii. Name one genetically modified crop?	4	4	3
	xiv. Define h-index.	2	2	3
	xv. Impact factor is related to author (True/False)	2	2	3

SECTION B
Attempt Any Two

(15 M × 2 = 30 Marks)

Q. No.		BTL	CLO	PLO
2	LONG ANSWER QUESTIONS			
a)	How qualitative research is different from quantitative research? Explain with one example each from biochemical research.	3	2	3
b)	What is importance of sample size? Why large sample size is preferred in statistical analysis of data? Give suitable examples.	5	3	2
c)	How researchers report their research results? Is publication of a research paper an essential requirement of research.	2	2	3
d)	What do you understand by plagiarism? What harm can be caused Conduct by research misconduct? Elaborate with suitable examples.	1	1	2

SECTION C
Attempt All Questions

(6 M × 5 = 30 Marks)

Q. No.		BTL	CLO	PLO
3	SHORT ANSWER QUESTIONS			
a)	Write a note on descriptive research. OR Describe importance of 'research hypothesis.	4	5	3
b)	How researchers identify a research problem? OR Write a short note on standard error.	3	2	3
c)	What are various levels of bio-safety? OR Why genetically modified crops are considered to be harmful to environment?	4	3	2
d)	What is difference between 'Patent' and 'Copyright'? OR Write short note on differences between writing a paper and a thesis.	2	2	3
e)	Write a short note on handling of infectious agents and hazardous materials. OR Write a note on protection from hazardous chemicals used in a biomedical research laboratory.	5	2	3
f)	What is role of protein databases in biochemistry research? OR Explain in brief 3Rs in research on animals.	2	2	3

END OF THE QUESTION PAPER