STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI –600 086 (For candidates admitted from the academic year 2023 – 2024)

M. Sc. DEGREE EXAMINATION, APRIL 2024 BIOINFORMATICS SECOND SEMESTER

COURSE : ELECTIVE

PAPER : RESEARCH METHODOLOGY, BIOETHICS AND IPR

SUBJECT CODE : 23BI/PE/RM15

TIME : 3 HOURS MAX. MARKS: 100

Q. No.	SECTION A (10 x 1=10 marks)	CO	KL
	All questions to be answered (Objective type)		
1	How is random sampling helpful?	CO1	K1
	a) Reasonably accurate		
	b) An economical method of data collection		
	c) Free from personal biases		
	d) All of the above		
2	Regarding the concept of bioethics, which of the following	CO2	K2
	statement is false?		
	a) It has to do only with cloning and euthanasia.		
	b) Bioethics is the same as Medical ethics.		
	c) It has to do with moral dimension of Medical care.		
	d) It has to do with all aspect of Medical care.		
3	The difference between a statistic and the parameter is	CO1	K1
	called:		
	a) non-random b) Probability		
	c) Sampling error d) Random sampling		
4	What types of issues do pilot studies attempt to reduce?	CO2	K2
	a) Systematic error and unexpected problems		
	b) Systematic and non-systematic errors		
	c) Anticipated and unrealistic logistical challenges		
	d) Variation and mistaken errors		
5	IPR protect the use of information and ideas that are of	CO1	K1
	a) Social value b) Moral value		
	c) Commercial value d) Ethical value		
6	Which one among the following statements is false in the	CO2	K2
	context of participatory research?		
	a) It recognizes knowledge as power		
	b) It is a collective process of inquiry		
	c) It emphasizes people as experts		
	d) Its solve purpose is the production of knowledge		
7	The first step of research is:	CO1	K1
	a) Selecting a problem b)Searching a problem		
	c) Finding a problem d) Identifying a problem		
8	The main aim of the scientific method in the research field is	CO2	K2
	to		
	a) Improve data interpretation b) Confirm triangulation		
	c)Introduce new variables d) Eliminate spurious relations		

9	A literature review is a) conducted after you have decided upon your research	CO1	K1
	question		
	b) helps in the formulation of your research aim and research		
	question c) is the last thing to be written in your research report d) is		
	not part of a research proposal		
10	is the conceptual framework in which the research is carried out.	CO2	K2
	a) Research hypothesis b) Synopsis of Research		
	c) Research paradigm d) Research design		
Q. No.	SECTION B $(10 \times 2 = 20 \text{ marks})$	CO	KL
11	Answers in about 50 words Define Primary Data.	CO3	K3
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12	Write a note on Data collection.	CO4	K4
13	Give an account on Proofreading.	CO3	K3
14	Brief the Format of thesis.	CO4	K4
15	Define Punctuations.	CO3	К3
16	Define Ethical Clearance.	CO4	K4
17	Define Bioethics.	CO3	K3
18	Expand GATT.	CO4	K4
19	Expand IBSC.	CO3	K3
20	What is WIPO?	CO4	K4
Q. No.	SECTION C (4 x 10= 40 marks)	CO	KL
	Answer in about 600 words - Internal choice		
21	a) Comment on Research Design	CO4	K4
	OR		
	b) Definition of Research and its Principle		
22	a) Describe about citation, types of citation and their	CO5	K5
	impact on research.		
	OR		
	b) Highlight the facts to be considered during writing		
	for non-native audiences.		
23	a) Elaborate the importance of a pilot study.	CO4	K4
	OR		
	b) Write a note on concept of mind maps.		
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24	a) Enumerate the data collection techniques.	CO5	K5
	OR		
	b) Discuss about the tools used for reference management.		
Q. No.	SECTION D (2x 15=30 marks)	CO	KL
	Answer any TWO questions in about 1200 words		
25	Explain a) Bioethics	CO5	K6
	b) IPR		
	c) Patents		
	d)TRIPS		
26	Brief about the software used for paper formatting.	CO5	K6
27	Elaborate the significance of patent and explain basmati, neem and turmeric cases.	CO5	K6
28	Appreciate the importance of writing well. Comprehend the different syntaxes that should be considered when writing well.	CO5	K6
