Enrollment No......................................

Faculty of Pharmacy
End Sem (Even) Examination May-2022
PY6RD01 Research Methodology

Programme: Ph.D.   Branch/Specialisation: Pharmacy (Course Work).

Duration: 3 Hrs.   **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1
i. Define hypothesis.   **1**
ii. Enumerate the types of research.   **1**
iii. Define coefficient of variation.   **1**
iv. What are the three majors of central tendency?   **1**
v. Enumerate the types of sampling.   **1**
vi. Define types of errors in hypothesis testing.   **1**
vii. Define correlation.   **1**
viii. Define regression.   **1**
ix. What are the different steps in writing a report?   **1**
x. Define interpretation.   **1**

Q.2
i. What is the objective of research?   **2**
ii. What are the different types of research?   **3**
iii. What are the different steps involved in research process?   **5**
OR iv. What are the different ways to collect the data?   **5**

Q.3
i. How the data is collected for research.   **2**
ii. Define the role of statistics in research. Explain the measure of central tendency and dispersion.   **8**
OR iii. Define probability and probability distribution related to normal distribution.   **8**

P.T.O.

Q.4
i. Define sampling and sampling plan.   **3**
ii. What is the concept of hypothesis testing and write down the procedure for hypothesis testing?   **7**
OR iii. What are the different errors and parametric tests used in hypothesis testing?   **7**

Q.5
i. What is the processing and analysis of data?   **4**
ii. Define correlation and processing operations in analysis of data.   **6**
OR iii. Write a note on Pearson's correlation coefficient and simple regression analysis.   **6**

Q.6 Attempt any two:
i. What are the different steps in writing s report with one example of Bibliography?   **5**
ii. Write a comprehensive note on layout of research report.   **5**
iii. What are the different types of reports with a special emphasis on technical report?   **5**

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Scheme of Marking

	Faculty of Pharmacy
(Medi-Caps University logo) Knowledge is Power	End Sem (Even) Examination May-2022 PY6RD01 Research Methodology
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Note: The Paper Setter should provide the answer wise splitting of the marks in the scheme below.

Q.1	i)	Definition		1
	ii)	Any four types of research		1
	iii)	Definition		1
	iv)	Three Types of major central tendency	*Mean, Mode, Median*	1
	v)	Any four types of sampling	*Random*	1
	vi)	Any two types of errors	*α, β*	1
	vii)	Definition		1
	viii)	Definition		1
	ix)	List out names only		1
	x)	Definition		1
Q.2	i.	Four objectives of research		2
	ii.	Five types of research		3
	iii.	11 steps involved in research		5
OR	iv.	5 ways of collecting the data		5
Q.3	i.	Procedure for data colletion		2
	ii.	Role of statistics		2
		Measure of central tendency and dispersion		6
OR	iii.	Probability		3
		Probability Distribution		5
Q.4	i.	Definition of Sampling		1.5
		Definition of Sampling Plan		1.5
	ii.	Concept of Hypothesis testing		3

		Procedure for hypothesis testing	*Null, alternate*	4
OR	iii.	Errors in hypothesis testing		3
		Parametric test in hypothesis testing	*→ chi square t test*	4
Q.5	i.	Processing of data	*→ Correlation Regression*	2
		Analysis of data	*→ Pearsons distribution*	2
	ii.	Definition of correlation		2
		Processing operations in analysis of data		4
OR	iii.	Pearson's Corelation coefficient		3
		Simple regression analysis		3
Q.6				
	i.	5 steps with one example	✓	5
	ii.	Layout		5
	iii.	Technical Report		3
		Types of reports		2

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