

## M.Sc Sem-3 Examination

501

Pharma Science

November-2024

[Max. Marks : 70]

Time : 2-30 Hours]

Q1A	Define research and explain its different types with examples.	7 Marks
Q1B	Explain the differences between basic and applied research. Discuss how these two types of research contribute to scientific and practical advancements.	7 Marks

OR

Q1A	Discuss the steps involved in selecting a research problem. What factors should be considered when choosing a research topic, and how does this impact the quality of research?	7 Marks
Q1B	Outline the role of patent searches in research. How does searching for patents enhance the novelty and relevance of a research project?	7 Marks

Q2A	Explain quantitative research in detail with example. What is the structure of sample organisation in quantitative research?	7 Marks
Q2B	What is the importance of documentation? Explain computational methods for it with examples.	7 Marks

OR

Q2A	Explain the difference in inquiry forms and questionnaires followed in qualitative v/s quantitative research.	7 Marks
Q2B	What are the key techniques of data analysis in qualitative and quantitative research? Explain the graphical methods to be used in quantitative research.	7 Marks

Q3A	Name different parts of research papers. What is keyword? Explain in detail about selection and utilization of keywords.	7 Marks
Q3B	What is the importance of presentations? Explain its types and key skills.	7 Marks

OR

Q3A	What is the structure of "result and discussion" section of research paper? Explain how to write it in better way.	7 Marks
Q3B	List out different reference styles. Name reference management tools and explain any three.	7 Marks

Q4A	Define the term "Intellectual Property Rights", and provide a comprehensive overview on IPRs and discuss the different areas covered by IPRs?	7 Marks
Q4B	Write down the detailed note on patents, including patentable and non-patentable inventions (section 3 exclusions) under the Patents Act, 1970.	7 Marks

OR

Q4A	Write down a case study related to the first biotechnology patent: DIAMOND VS CHAKRABARTY CASE	7 Marks
Q4B	Explain Trademarks in detail along with its types, exclusive rights, and limitations.	7 Marks

(P.T.O)

<b>Q5 Answer the following questions (Any Seven)</b>		<b>14 Marks</b>
I	Why is a literature review important before starting a research project?	2 Marks
II	What is the difference between basic and applied research?	2 Marks
III	What is the significance of selecting a clear and specific research problem?	2 Marks
IV	What is EDMS? Give any tools used in EDMS.	2 Marks
V	What is SOP? What are its benefits?	2 Marks
VI	Give example of two error sources in qualitative and quantitative research.	2 Marks
VII	What is abstract of a research paper? List out any two importance of it.	2 Marks
VII	List out any four examples of servers or software used for spell checking of an article.	2 Marks
IX	What are the key body languages to be taken care of while presenting?	2 Marks
X	Write down two limitations of copyrights.	2 Marks
XI	Write down the types and subtypes of patents.	2 Marks
XII	What is TM, SM and ® in respect to trademarks?	2 Marks

**BEST OF LUCK**