## 2015 **BIOTECHNOLOGY**

Paper: 304

## RESEARCH METHODOLOGY

Full Marks: 80 Time: 3 hours

The figures in the margin indicate full marks for the questions

1.	Defi	1×8=8	
	a)	Objectives of Research	
	b)	Pilot survey	
	c)	Research hypothesis	
	d)	Sample size	
	e)	Short communication	
	f)	Abstract of research paper	
	g)	Pubmed	
	h)	Chi-Square Test	
2.	Write	2×6=12	
	a)	Case study	
		(1)	<i>P.T.O.</i>

	c)	Literature review	
	d)	Demographic variables	
	e)	Keywords of research paper	
	f)	Observation method of Data collection	
3.	Dist	inguish between (any four)	5×4=20
	a)	LD <sub>50</sub> and LC <sub>50</sub>	
	b)	Research Method and Methodology	
	c)	Schedule and Questionnaire	
	d)	Primary data and Secondary data	
	e)	Simple random sampling and Stratified sampling	l random
4.	An	swer the following questions briefly (any two)	8×2=16
	a)	Write briefly about the factors of a research a research problem.	design of
	b)	What are the steps of sample design? Discu	uss briefly. 2+6=8
	c)	What are the sources of secondary data in	a research
		problem? What characteristics make a seco	
		reliable?	4+4=8
		(2)	PT.O.

b) Research question

5. Illustrate the following questions (any two)  $12 \times 2 = 24$ 

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- a) What do you mean by Observational study? What are the common study designs in observational studies?
  Describe these study designs. 2+2+8=12
- b) What are the components of a research project proposal? Describe.
- c) What is Descriptive study? What are the types of descriptive studies? Where descriptive studies are used? What are strengths and weaknesses of a descriptive study? 2+5+3+2=12

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