- (i) Distribution A has the same degree of variation as distribution B. Do you agree ? Give reason.
- (ii) Both distribution have the same degree of skewness. (True/False.)Give reason.

#### Unit IV

- 7. Write notes on the the following : 8,7
  - (a) Food note and bibliography
  - (b) Authored and Edited Books

**M-0171** 

Discuss a comprehensive layout of research report.
 15

No. of Printed Pages : 4 Roll No. .....

# 0171

Ph. D. Course Work EXAMINATION,

May 2019

#### CHEMISTRY

#### CH901B

Research Methodology

Time : 3 Hours] [Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

**Note** : Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

4 40 (4-16/10) M-0171

**P.T.O.** 

## Unit I

- List the steps that are used in conducting experimental research. Describe each step involved in the process. 15
- Discuss the criteria for the consideration of Plagiarism and explain how to avoid it. State probable punishments if Plagiarism found. 15

## Unit II

- What is an Operating System ? Discuss UNIX operating system and any *ten* Unix Commands.
   15
- 4. (a) Explain LAN, WAN and MAN and discuss their applications. 8
  - (b) Discuss, how to effectively use the Internet for Research ? 7

### Unit III

5. (a) Explain graphical respresentation of data. Write its importance. Draw Line, Bar and Pie diagram by taking suitable data for these.
9

2

M-0171

- (b) How do you construct a histogram from a continuous variable ?
- 6. (a) If the median of the distribution given below is 28.5, find the values of X and Y.

	,
<b>Class Interval</b>	Frequency
0-10	5
10–20	Х
20-30	20
30–40	10
40-50	Y
50-60	5
60-70	5
Total	60

(b) Consider the following distribution : 10

## **Distribution A Distribution B**

(4-16/11) M-0171	3	P.T.O.
Standard Deviation	10	10
Median	90	80
Mean	100	90