

## **Ph.D. course work Semester-B, 2010**

### **Assignments**

#### **SECTION-A**

1. Submit a write up one page giving very brief survey of research activities of the department.( Research area of all the faculty members must be covered)
2. List major research facilities in the department giving details of each facility including sensitivity, resolution etc.
3. List major research facilities required for research work in your area. List the name of major universities and institutions in the country where these facility are available.
4. List name of 20 university Professors /Scientists working in your research area in the country and outside the country. Give their e-mail address.
5. Write down main 10 keywords in your area of research which can be used to find out research literature.
6. List major 10 research journals in your area of research with details of publisher and impact factor. Read instruction to authors and find out how to submit a manuscript.
7. Visit the central library to prepare a list of research journals in your subject available in the library.
8. Prepare a list of ten reference books very frequently cited in the research literature. Find out whether these books are available in the department/college/central library. If not available in the library, prepare a request to purchase these books in the library and submit to the Librarian through your supervisor. Write down justification for purchase of each book.

## SECTION-B

1. Write down specifications of a desktop computer required for your research work.
2. Write down Internet settings for following connections
  - a. Broad Band connection
  - b. 10 Mbps leased lined connection
3. Download and install latest Adobe acrobat reader, Primopdf (pdf writer) and Internet Explorer in your computer.
4. Browse university Intranet site to find out various resources available to you.
5. Use MS Word to prepare a manuscript (Type out at least a research paper of two pages length with references)
6. Use MS Excel to prepare a table and to plot a graph
7. Use MS Powerpoint to prepare a power point presentation of your department/research group
8. Use advance search options of google scholar and keywords of your research area to find out latest review
9. Use Amazon.com or google to find out latest reference books in your area of research and go through table of contents to judge whether the book is useful for your research work.
10. Use Origin graph plotting software to produce journal quality graphs
11. Use Adobe Photoshop to prepare a jpg format file of any scanned image.
12. Use following Internet facilities
  - a. ftp
  - b. telnet
  - c. Wikipedia (to understand a topic which is totally new to you)
  - d. Social networking
  - e. Blogging
13. Prepare a home page and other linked pages about your research group ( group work)