Ph.D COURSE WORK 2010

BATCH-I (Semester –A, 2010)

Paper-I: ICT & Research Methodologies

MODEL QUESTIONS (FOR FACULTY OF COMMERCE,
MANAGMENT)

Research Methodology
Sample Questions

GENERAL

1. What do you mean by research? Explain different steps involved in a research
   process?
2. (a) Distinguish between Research Methods and Research Methodology.
   (b) Describe different type of research
3. What is research problem? Define the main issues which should receive the
   attention of researcher in formulating the research problem. Give suitable
   examples to elucidate your points.
4. (a)How do you define a research problem? Give three examples to illustrate
   your answer
   (b) What is the necessity of defining a research problem?Explain
5. (a)Explain the meaning and significance of a research design
   (b)Describe some of the important research designs used in experimental
   hypothesis-testing research study

6. (a) Give your understanding of a good research design.
        (b) Explain and illustrate the following research designs:
              i.   Two group simple randomized design
              ii. Random replications design
              iii. Simple factorial design

7. What is the meaning of measurement in research? What difference does it
   make whether we measure in terms of a nominal,ordinal, interval or ratio
   scale? Explain giving examples
8. Describe possible sources of error in measurement giving examples.
9. Enumerate the different methods of collecting data . Which one is the most
   suitable for conducting enquiry regarding family welfare programme in India?
   Explain its merits and demerits
10. Examine the merits and limitations of observation method in collecting
    material. Illustrate your answer with suitable examples
11. How does the case study method differ from the survey method? Analyse the
    merits and limitations of case study in sociological research
12. Clearly explain the difference between collection of data through
    questionnaires and schedules
13. Discuss interview as a technique of data collection

14. What are the guiding consideration in the construction of questionnaire? Explain
15. Distinguish between an experiment and survey. Explain fully the survey method of research
16. "Experimental method of research is not suitable for management field" Discuss, what are the problems in the introduction of this research design in business organization?

Statistics
1. (a)Write a brief note on different types of analysis of data pointing out the significance of each
    (b) Why tabulation is considered essential in research study? Narrate the characteristics of a good table
2. (a) Explain meaning and significance of concept of "Standard Error' in sampling analysis
    (b) State the reasons why sampling is used in the context of research studies
3. Describe briefly the commonly used sampling distributions
4. Distinguish between the following:
    a. Confidence level and parameter
    b. Random sampling and non-random sampling
    c. Sampling of attributes and sampling of variables
    d. Point estimate and statistical estimation
5. (a)From a packet containing iron nails, 1000 iron nails were taken at random and out of them 100 were found defective. Estimate the percentage of defective iron nails in the packet and assign limits within which the percentage probably lies
    (b) A random sample of 900 members is found to have a mean of 4.45 cms. Can it be reasonably regarded as a sample from a large population whose mean is 5 cms and variance is 4cms
6. Annual incomes of 900 salesmen employed by Hi-Fi Corporation is known to be approximately normally distributed. If the corporation wants to be 95% confident that the true mean of this year's salesmen's income doesnot differ by more than 2% of the last year's mean income of Rs 12,000/-, what sample size would be required assuming the population satandard deviation to be Rs 1500?
7. what is a hypothesis? What characteristics it must possess in order to be a good research hypothesis?
8. The procesure of testing hypothesis requires a researcher to adopt several steps. Describe in brief all such steps
9. Briefly describe the important parametric tests used in context of testing hypotheses. How such tests differ from non-parametric tests? Explain
10. What is t-test? When it is used and for what purposes? Explain by means of examples
11. What do you mean by the power of a hypotheses test?. How can it be measured? Describe and illustrate by an example
12. What is chi-square test? Explain its significance in statistical analysis
13. What do you mean by mulktivariate techniques? Explain their significance in context of research studies
14. Write a brief essay on Factor analysis particularly pointing out its merits and limitations

15. Name the important multivariate techniques and explain the important characteristics of each one of such techniques
16. Why are multivariate analysis techniques useful in modern day research? Describe utility of cluster analysis giving a suitable example
17. What is factor analysis? How is it useful in research?. Describe its application with a suitable example

Written Communications: Thesis /Report writing

1.Describe, in brief, the layout of a research report covering all relevant points

2.Explain significance of a research report and narrate the various steps involved in writing such a report

3. Write a short note on "Documentation" in the context of a research report
4. Explain the technique and importance of oral presentation of research findings.
5. What are the points to be kept in mind while preparing a research paper? Explain
6. Mention the different types of report, particularly pointing out the difference between a technical report and a popular report
7. Write short notes on the following:
(i)   The techniques of writing report
(ii)   Characteristics of a good report
(iii)   Bibilography and its importance in context of research report
(iv)   Rewriting and polishing of report
8. "Report writing is more an art that hinges upon practice and experience" Discuss

Information and Communication Technologies
1. What is a PC? Differentiate between a desktop and workstation computer.
2. What is a Computer?. What are different major components of a Desktop computer
3. What is ICT? Describe various uses of ICT for Researchers
4. Write down major specifications (CPU,memory, Disk, display,input and output ports etc) for a desktop computer for research work
5. What is the capacity of a (a) CD ROM, (b) DVD Drive, (c) Pen Drive,(d) Hard Disk normally used with your computer
6. Name and explain different page/paper sizes used with printers
7. What is dpi? What is the normal dpi used for printing a research report by a laser printer
8. What is a scanner? . What is meant by resolution of a scanner?.
9. What is an Operating system. Name any three operating system used with PC
10. What is a computer network?. What is LAN?
11. What is IP address? Write down IP address used for a computer in your campus
12. What is WAN? Explain how to connect your network to a computer in the WAN using telephone lines
13. What is Internet? What are the major Internet tools available for Reserachers
14. What is Intranet? Explain Intranet of your university
15. What is a search engine? Explain important features of Google.
16. What are important advance search features available in google

17. What is meant by impact factor of a research journal?. Name any five research journals in your area and its impact factors
18. What is the role of keywords in searching?.What is the area and topic of your research? Write down ten most important keywords of your research topic
19. What are important features of google scholar which you have find useful for literature survey
20. What is INFLIBNET?. What are the important facilities available from the web portal of INFLIBNET?
21. Briefly explain use of following in research
    (i) E-mail
    (ii) World Wide Web
    (iii) Wikipedia
    (iv) www. amazon.com
    (v) Google scholar
    (vi) Your university Intranet site
    (vii) Social networking sites

22. What is E-book? What is Digital Library?
23. What is Adobe portable document format? What are the advantages of it compared to MS word?.
24. What are different file formats available for storing images?.
25. What are important features you find useful for preparing reports using MS Word?
26. What is Font? Name any three important fonts which you found useful for your work
27. Differentiate between Word processing and publishing software. Name software used for both.
28. What is meant by Electronic spread sheet? What are important features available in MS excel for your research work
29. What are important features available in MS Excell for statistics work
30. What are important features of MS Powerpoint you have used for preparing presentations?. What is meant my template for presentations?