AMEZON/PARANA/KARNFULI/SURAMA/SIYANA/SINHAGAD-I (2007COURSE) JULY - 2013 SUBJECT: RESEARCH METHODOLOGY 10:00 A.M. TO 1:00 P.M. Day Saturday Time: Date : 06/07/2013 Max.Marks.100 N.B. 1) Q.No 1 and Q.No.5 are COMPULSORY. Out of remaining attempt any TWO questions from Section-I and any TWO questions from Section-II. 2) Answers to the two sections should be written in SEPARATE answer books. 3) Figures to the RIGHT indicate full marks. **SECTION-I** Q.1 Enlist different types of research. During your M.Pharm course which type of (10)research you will select? Describe the type of research in details. Q.2 Describe the main features of research publication. What is impact factor? (20) What is its importance? Explain in details how you will select a problem. Q.3 (20)Q.4 Write short notes on any TWO of the following: (20)Clinical trials b) Authorship of paper Technology transfer c) Qualitative research **SECTION-II** Describe briefly various types of records (registers) required for animal house. Q.5 (10)Q.6 Explain the guidelines for experimentation with animals. (20)Define bioassay. Describe the types and principles of bioassay. What are the (20) Q.7 advantages of bioassay over chemical assay?

a) Chi square test

Q.8

- b) Randomization
- c) OECD guidelines No 403
- d) Handling of biological waste.

Write short notes on any TWO of the following:

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(20)

SINHAGAD / AMAZON/ PARANA/ KARNAFULI/ SURAMA/ SIYANA-I (2012 - CBCS): JULY - 2013 SUBJECT: RESEARCH METHODOLOGY AND BIOSCREENING

10:00 A.M. TO 1:00 P.M. Day Saturday 06/07/2013 Date Max. Marks: 60. N.B.: Answer any THREE questions from Section-I and any THREE questions from 1) 2) Answer to the two sections should be written in SEPARATE answer books. 3) The use of non-programmable electronic pocket calculator is allowed. 4) Figures to the RIGHT indicate full marks. **SECTION-I** Q.1 Explain the various sources of literature survey. Justify the need of extensive (10) literature survey. Q.2 Describe in details the selection of a research problem. (10)Q.3 Describe in details various components of a research paper. (10)Q.4 Write elaborate notes on any TWO of the following: (10)Basic concepts of quality by design Plagiarism b) Qualitative research. **SECTION-II** Q.5 Explain the OECD guideline no 407 for subacute oral toxicity testing. (10)Q.6 Describe the bioscreening of of antiparkinsonian drugs. (10)0.7 a)Two groups of 100 subjects each were included in a vaccine clinical trial. (05) 15 subjects contracted the disease out of 100 inoculated subjects, while 25 subjects of the other groups contracted the disease. Test the effectiveness of the vaccine (use 5% L.O.S.). Following is the data in respect of the weight and pulse rate for 7 men in a (05) weight therapy club. weight in kgs - x 50 57 62 53 68 70 65 Pulse rate/ min y

Compute the Karl Pearson's coefficient of correlation and predict the pulse rate of a man who weights 72 kg.

Q.8 Write elaborate notes on any TWO of the following:

(10)

- a) Probit and logit
- b) Factorial design
- c) Type-I and Type-II errors.