



UNIVERSITY OF KARACHI

Office of Dean, Faculty of Sciences

ASR 702 • Research Methodology I

Course Supervisor: Professor Dr. Syed Arif Kamal

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Time Allowed: 2 hours • Maximum Marks: 60 • Date: Wednesday, June 3, 2009

Student's Name _____ (in CAPITAL LETTERS using a "marker") • Paper Format A

Attempt **ALL** questions. Marks of each question are displayed at the end of question text. Note down the time spent on solving each part of question and time spent on revision by making the following "Time Chart" on the answer - book front page (2 marks). Time spent on revision must be at least 10% of the total time.

Question No.	2a	2b	3a	3b	Revision
Time (minutes)					

a) DO NOT TURN PAPER AROUND unless the invigilator says: *Start* now

b) This is a closed book examination. Deposit all BOOKS, NOTES, MOBILE PHONES (switched off), DIGITAL DIARIES and LAPTOPS in the designated area. Remove everything from your desk except markers, pens, pencils, stapler and calculator.

c) If you want to use a calculator, **it must bear a "sticker"** displaying your NAME and your SEAT NUMBER large enough so that it is visible from a distance of 5 meters. **Absolutely, NO sharing of calculators.**

d) Use your own material. **Nothing can be borrowed from or given to** a friend.

e) The papers may be of different formats. Therefore, work on your own **without consulting anyone** (We have a record of your seating arrangement).

f) Write your "NAME" on all pages of **your question paper** (5 marks shall be deducted for failing to comply) [NOTHING ELSE SHOULD BE WRITTEN ON THE QUESTION PAPER] and "**PAPER FORMAT**" on the front page of **your answerbook** (the upper right-hand corner) and **the Yellow Sheet** using a "**marker**". Start your work from **Page 2** of your answerbook. The only thing that could be written on the front page is the "**Time Chart**" (see above) and the "**Honor Statement**" (see below).

g) The following statement must be copied on the front page of your answerbook and signed (2 marks): "*My signatures below testify that I am the person whose name and photograph appear on the Admit Card. Upon my honor, I declare that the following work is my own, completed without giving or receiving unacknowledged help, without copying, or the use of any unfair means.*" Signatures _____

h) This paper contains TWO PAGES (This page and the back page). On invigilator's signal (*Start now*) turn paper around, check if you have the back

page printed correctly. Last line of the second page is: <END>. Start working on the paper immediately.

i) Put your pens down and your papers turned (so that this page is facing you) and the FRONT PAGE of your answerbook should be facing you as soon as you hear "**ALL PENS DOWN**". Failure to do as directed shall result in "deduction of 5 marks" from your score.

j) If you use extra copies, it is "your responsibility" to write YOUR NAME, COPY NUMBER and all OTHER INFORMATION on each copy used. All the extra copies must be stapled with the main copy before turning in your paper (you may wish to bring in a stapler with you for this purpose).

k) If you have a question of "Fill in the blanks" in your paper you must write the complete sentence with the filled word underlined.

l) Nobody is allowed to leave the examination hall, **for whatsoever reason**, once the examination has started. Bring your own DRINKING WATER.

m) Students are not allowed to LEAVE THEIR SEATS or STAND UP during the examination. If you have a query, "raise your hand" and someone will help you.

n) All work, including rough work, must be on the official answerbook. No extra sheet may be used.

o) Students are *not* allowed to use RED anywhere. All work (except figures) must be in pen or ballpoint.

p) The result shall be displayed on my homepage on **Wednesday, June 24, 2009** at **0900h**. DO NOT contact the Course Supervisor. Students are not permitted to see the answerbooks.

q) Anyone found cheating in the examination should be facing disciplinary action, which may result in **EXCLUSION** or **SUSPENSION** for 2 or more years. **Absolutely, no conversation among students. DON'T TURN THE PAPER, YET. Wait for "signal" from the invigilator.**

Student's Name _____ (in CAPITAL LETTERS using a "marker")

- 1) **MCQ Portion: To be distributed at 1500h (3:00 p. m.) and filled-out paper collected back at 1600h (4:00 p. m.). As soon as you get the MCQ portion, please write your name on it. On the upper-left-hand portion of MCQ test paper, write down the number A-01 to A-150, which appears on the upper-left-hand portion of your answerbook [30 marks].**
- 2-a) What is missing in the following reference quotation[3 marks]:
Karlberg, J. Computer simulation of final height after growth-promoting therapy. *Acta Paediatrica Suppl.*, 417: 61-3
- Convert the following references into the British format (if given in American format) and vice versa[4 marks]:
- i) Mazumdar, J. and Woodard-Knight, D. (1984) A mathematical study of semilunar valve vibration. *J. Biomech.* 17: 639-641
- ii) M. M. El-Sayyad and S. A. Kamal, "The use of holographic techniques to obtain moiré topographic fringes of the human body," *Bull. Amer. Phys. Soc.*, vol. 27, p. 502, 1982
- 2-b) In the table, below, fill out the blanks and assign weights to each factor, in such a way that the total comes up to 100 [7 marks]:

AUTHORSHIP CREDIT

	Description	Weight
CONCEPT	the idea for the research or article, framing the hypothesis planning the methods to generate results	
SUPERVISION		
	dollars, equipment, space, personnel vital to the project	
MATERIAL		
DATA COLLECTION AND/OR PROCESSING	responsibility for making sense of and presenting the results	
LITERATURE SEARCH WRITING	responsibility for this necessary function	
	reworking the manuscript for intellectual content before submission, not just spelling and grammar checking	
OTHER		
		Total 100

- 3-a) List any 3 out of the 6 points, which the examiners look for when evaluating a thesis, the point given in example cannot be listed (*Example*: Selected a topic, which is suitable at the present state of development, and justified one's choice of approach) — word limit: 50 words or less [6 marks].
- 3-b) The need to compare computational results from one's research to those of others may be best expressed as _____ (*validate and verify one's results, prove incorrectness of other's research, practice understanding other's research*). The use of digital libraries and search engines helps one (in the context of MPhil/ PhD research) to _____ (*create polls, find other researchers working in one's field, get the best deal in airline fares*). If one needs to perform some numerical/computational modeling of one's research, the most efficient option is (*copy someone else's software, perform modeling using MATLAB, ask a software programmer to perform the modeling*) [6 marks].