# ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD (Department of Educational Planning, Policy Studies and Leadership)

### Subject: MAILING PACKAGE OF M.PHIL EPM-3706 "ADVANCED COURSE ON EDUCATIONAL RESEARCH AND STATISTICS" SPRING 2014, SEMESTER

Dear Students,

Assalam-o-Alaikum,

I feel great pleasure to welcome you in the M.Phil EPM-3706 "Advanced Course on Educational Research and Statistics" in the current semester. The course, as you would feel it, is meant for equipping the prospective planners and administrators with the skills and techniques required by them. I hope you would find this course quite interesting as well as useful in your professional development. I am sure that the successful completion of this course will be a major step towards achievement of the M.Phil EPM degree from the University in due course of time.

This mailing package contains:

- i) Allied Material (2 Books)
- ii) Two Assignments
- iii) Assignment Proformas
- iv) Schedule for Submitting Assignments
- v) Acknowledgement Receipt

You will receive your workshop assignment in due course which you would be required to present and submit in writing in the forthcoming workshop of the course at the end of the semester.

Towards the end I wish you a happy and enjoyable semester. My services are available as and when required.

With best wishes.

Yours Sincerely,

(Dr. Hamid Khan Niazi) Course Coordinator

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### WARNING

- 1. PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.
- 2. SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".

Course: Advanced Course on Educational Research and Statistics (3706)Level: M.Phil-EPMSemester: Spring, 2014Total Marks: 100Pass Marks: 50

### Note: Before attempting assignments, please read the following instructions:

- 1. All questions are compulsory.
- 2. All questions carry equal marks.
- 3. Response to each question should not be less than 2500 words in theoretical part failing which marks will deducted accordingly.
- 4. Please write in your own words. Avoid irrelevant information and render a critical analysis the questions asked for.
- 5. No marks will be given for reproduction from the text or from elsewhere.
- 6. Please write in your assignment in legible handwriting. (Typed assignments are not accepted).
- 7. Please give source on case of quoting any material.
- 8. Use A-4 size of paper for writing assignment.
- 9. Please submit the assignment on or before the specified date.
- 10. Late assignment will not be accepted in any case.

# ASSIGNMENT No. 1 (Units: 1–5)

- Q. 1 (a) What is scientific method? Describe major steps involved in conducting a qualitative research study? How can it be called a scientific method? (10)
  - (b) Select three existing educational problems for which you will conduct research study and at least ten (10) complete references which directly relate to the selected problems. (10)
- Q. 2 Explain the following concepts with suitable examples. (20)
  - (a) Sampling techniques
  - (b) Methods of selecting a sample

- Q. 3 (a) Discuss in detail various steps of developing instruments in research for data collection. (10)
  - b) What are the procedures to measure the reliability and validity of each instrument with examples? (10)
- Q. 4 Develop a research proposal for the study titled "A study of the effectiveness of the workshops of M.Phil program of AIOU Islamabad". Include details of all features of a research proposal. (20)
- Q. 5 What is the purpose and process of review of related literature? As a researcher how can you avoid Plagiarism while reviewing literature? (20)

### ASSIGNMENT No. 2 (Units: 6–9)

- Q. 1 What are measurement scales? Elaborate different types of measurement scales and their application in research. (20)
- Q. 2 Describe and differentiate descriptive statistics and inferential statistics in educational research with examples. (20)
- Q. 3 (a) What do you understand by range, and standard deviation?(10)(b) Calculate Q and S.D from the following frequency distributions:(10)

Scores	90-94	85-89	80-84	75-79	60-69	50-59	40-49	30-39	20-29	10-19	0-9	
Frequency	5	9	14	19	21	30	25	15	10	8	6	N-162

Q. 4 (a) Calculate ANOVA from the following data and interpret results at 0.05 level.(10)

	S. No.	X1	X2	X3
	1	15	25	5
	2	10	10	10
Ī	3	20	15	20
Ī	4	5	15	5
Ī	5	10	10	10

(b) A test given to two students' groups as the given below:

(10)

Group	Ν	X	S.D
А	80	60	10
В	90	70	15

Calculate from the above as to which group is better than the other.

- Q. 5 (a) Define probability and elaborate what is probability curve. (10)
  - (b) A player got 201 marks in a competition. Find out the probability that he is a member of a team getting a mean of 300 with an SD of 45. (10)

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