ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD (Department of Mathematics & Statistics)

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: Understanding of Mathematics Statistics and Computer (359) Level: F.A/F.Sc Semester: Spring, 2014 Total Marks: 100 Pass Marks: 40

ASSIGNMENT No. 1

(Units 1-5)

Note: Attempt all questions and each question carries equal marks.

- Q.1 a) In two years you need to earn Rs. 65,000/-. If you get an interest rate of 16.65% compound annually, how much do you need to invest now?
 - b) Solve the following linear system: 2x y = 44x - 2y = 8
- Q.2 a) Govt. increases 20% of the basic salary. If an employee has basic salary Rs. 6350/ per-month, calculate his new basic salary.
 - b) In an observation, 6 men can build a wall in 17 days. How many men would be required to complete the same wall in 7 days?
- Q.3 a) A digit is selected at random from the first 8 natural numbers. Find the probability that selected digit is:
 - i) Greater than 5 ii) A multiple of 2 iii) An even number
 - b) Define the following terms:
 i) Sample Points ii) Events iii) Statistical Probability
- Q.4 a) Find the surface area of the gas cylinder, if the radius of the cylinder is 21.6 cm and height of the cylinder is 40.2 cm.
 - b) Find the volume of a cone if its radius is 4.5cm and the height of the cone is 13.4cm.
- Q.5 a) Four coins are tossed, calculate the following probabilities:
 - i) P(4 Tails)
 - ii) P(3 Heads)

b) The perimeter of a rectangle is 194cm. The width is 28cm less than the length. Find the length and the width.

ASSIGNMENT No. 2

(Units 5-9)

Note: Attempt all questions and each question carries equal marks.

- Q.1 a) Write a brief note on Hardware and Software of Computer.
 - b) Discuss the role of computer in the development of science and technology.
- Q.2 a) 40,36,43,46,57,55,49,42,35 are the number of students in different classes of a school. Find the standard deviation of the data.
 - b) The price in rupees of different commodities are as follows: 26,27,31,25,30,35,40,28,37,50
 Find the range of these prices.
- Q.3 a) Calculate the Mean, Median and Mode for the following data.

Х	12	12.5	13	13.5	14	14.5	15	15.5
f	11	23	28	43	49	30	17	12

- b) Write brief notes on the following:
 - i) Computer in Designing
 - ii) Languages and Programming
 - iii) Secondary Storage
- Q.4 a) What is a computer? Explain the uses of computer in our daily life.
 - b) Define different input and output devices and explain in detail.
- Q.5 a) Explain in detail the use of some important software packages.
 - b) Define and explain artificial intelligence and discuss expert system in detail.