



**Assignment (1)**  
**Academic Year 2015/2016**  
**Term 2**  
**College/COBA**

<i>Course Title</i>	<b>Quantitative Methods for Managers</b>
<i>Course Code</i>	
<i>Day &amp; Date</i>	<b>12-3-2016</b>
<i>Period</i>	<b>One Week</b>

<i>Student Name</i>	
<i>Student I.D</i>	
<i>Section #</i>	

**Time allowed:**  
**Total Marks: (    ) Marks**

CLO.#	CLO's Score	Student's Score
<b>1</b>		
<b>2</b>		
<b>3</b>		
<b>4</b>		
<b>5</b>		
<b>Total</b>		

## Question.1[4 marks]

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The following list provides the NCAA top 25 football teams for 2002 season (NCAA News, January 4, 2003). Use the random numbers table to select six football teams using:

- 1) simple random sampling technique?
- 2) systematic random sampling technique?

1	Ohio State	14	Virginia tech
2	Miami	15	Penn State
3	Georgia	16	Auburn
4	Southern California	17	Notre Dame
5	Oklahoma	18	Pittsburgh
6	Kansas State	19	Marshall
7	Texas	20	West Virginia
8	Iowa	21	Colorado
9	Michigan	22	TCU
10	Washington State	23	Florida State
11	North Carolina State	24	Florida
12	Boise State	25	Virginia
13	Maryland		

## Question.2 [3 marks]

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Indicate the sampling technique should be used in the following cases:

- (a) From a group of 496 students, every 49th student starting with the 3rd student is selected. \_\_\_\_\_
- (b) You intend to survey of universities population to determine whether the students would like a dance in December. What sampling technique is used if you use random numbers to select ten classes from each university, and then use random numbers again to pick names from each class: \_\_\_\_\_
- (c) At a college there are 120 freshmen, 90 sophomores, 110 juniors, and 80 seniors. A school administrator selects a simple random sample of 12 of the freshmen, a simple random sample of 9 of the sophomores, a simple random sample of 11 of the juniors, and a simple random sample of 8 of the seniors. She then interviews all the students selected. \_\_\_\_\_

## Question.3 [3 marks]

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A normal distribution has a mean of 50 and standard deviation of 4.

- a) Compute the probability of a value between 44 and 55?[1.5 marks]

- b) Find the 30<sup>th</sup> percentile of this distribution?[1.5 marks]