

or Amit

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT**  
**T1 EXAMINATION**  
**Ph.D. (All Branches), (HSS Module), September 2018**

**Course Code: 18P1WGE101**

**Max Time: 1 Hr**

**Course Name: Research Methodologies including Quantitative Methods and Computer Applications**

**Course Credit: Three**

**Max Marks: 25**

**Note: Answer all questions. Carrying of mobile phone in the examination hall will be treated as a case of unfair means. Make suitable assumptions, if necessary.**

1. Answer the following in one word/sentence only: (1x7=7)
  - a) Fundamental research is also called as ....
  - b) Research related to abstract ideas or concept is called as .....
  - c) Type I error is .....
  - d) *Ex post facto* research means .....
  - e) An example of "Quasi Experimental Research Design" is .....
  - f) Probability sampling is called so because .....
  - g) Snowball sampling is useful when .....
  
2. What is Validity in research? How many types of it? Briefly discuss its importance in different types of research, with suitable example. (5)
  
3. A recently opened Mall wants to measure the consumer satisfaction level of those who visited the mall at least thrice. The manger of the Mall has got the feedback that a good number of customers are not happy with the way the Mall functions. As per the feedback of the manager, about 45% of the people visited the mall, at least thrice, are not happy. Therefore, the manager wants to conduct a survey to find the level of customer satisfaction. What should be the sample size, if the manager wants to estimate the population proportion to ensure 95% confidence in result, and to be within 5% of the true population proportion? (Z value at 95% is 1.96) (5)
  
4. Some students have complained about the quality of food served in the JUIT mess. The University Administration has asked the Research Methodology students to find out the level of satisfaction of the students with the canteen. Please write the following: (2x4=8)
  - a) Research question
  - b) Research Design
  - c) Sample Frame
  - d) Sample Population