



OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE
FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND COUNSELLING
2011/2012 M.A./M.ED. HARMATTAN EXAMINATION
EFC 681: TEST THEORIES

TIME ALLOWED: 3 HOURS
ANSWER ALL QUESTIONS

1. Represent the following facet designs with venn diagram and derive their generalizability coefficients.

- i. I : P (3 marks)
- ii. P x I x J (3 marks)
- iii. P x (I : J) (3 marks)
- iv. I x (J :P) (3 marks)
- v. J : I : P (3 marks)

- 2a. Identify and briefly discuss 5 validity sources of evidence. (10 marks)
- 2b. Evidence for construct-related validity can be obtained in quite a number of ways. Describe five of such ways. (10 marks)
- 2c. What are the four classes of validation that influence the tenability of theories and generalizability of findings from empirical research. (4 marks)

- 3a. Given that the observe score of a person selected from a population is $X = T + E$, what are the four assumptions of Classical Test Theory? (8 marks)

3b. If
$$r_{XT}^2 = \frac{\sigma_T^2}{\sigma_X^2} = \frac{\sigma_T^2}{\sigma_T^2 + \sigma_E^2}$$

derive the standard error of measurement formula (11 marks)

4. Describe the basic assumption of item response theory and their implications. (12 marks)