FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
Department of Science Education
2021/2022 ACADEMIC SESSION

COURSE TITLE:TEST AND MEASUREMENT IN EDUCATION   EDU321: (3 Units) TIME: 3hrs

INSTRUCTION: Answer all Questions in section A, and any other 2 questions in section B
SECTION A

1.(a) Explain any five classes of a test, giving two examples of test in each class.
(10 marks)
 (b) Describe the five functions of a test   (5 marks)

2. A sample of 10 students' Mid-Semester test scores and Semester Exam scores are shown in the table below:

STUDENTS	A	B	C	D	E	F	G	H	I	J
Mid- Sem. Test	37	39	36	29	34	37	32	0	37	35
Semester Exam.	44	38	52	40	47	47	55	0	53	46

 (a) Calculate the rank correlation coefficient of the students' performance.in each case. (12 marks)

 (b)Test the hypothesis that the rank correlation coefficient that there is significant relationship between the two scores. (Hint: Using critical value, $\alpha = 0.025$ @ 0.648, when n = 10). Hence, draw conclusion (3 marks)

SECTION B

3. Validity is a vital psychometric property of a test; discuss the five types you know.
(15 marks)

4. (a) Explain any two types of reliability of test in educational measurement. (5 marks)
   (b) With the aid of a table, explain the rule of thumb for reliability coefficients of a test (10 marks)

5. (a) What is evaluation in education?   (5 marks)
   (b) Explain any four types of evaluation   (10 marks)

6. (a). Given a set of scores, briefly explain the steps involved in computing standard deviation. Hence, compute the standard deviation of the following data: 12, 14, 13, 11, 10, 10, 15, 13, 10, 9, 11 and 16 (9 marks)

(b). State the Scales of Measurement you know, and briefly explain the one which has arbitrary zero but it is commonly used in the field of education (6marks)