NATIONAL OPEN UNIVERSITY OF NIGERIA
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Faculty of Education
Department of Educational Foundations
Programme: M.Ed. Educational Administration and Planning
POP EXAMINATION 2022_2

Course Code: EDA844
Course Title: Educational Statistics for Educational Managers
Credit Unit: 2
Time: 2 hrs 15 mins

Instruction: Answer question **one** and any other **two**

1. In Nigeria, the official Basic school age is 6. The length of Basic Schooling is 9 years with 6 years in primary school and 3 years in Junior Secondary School. This implies that all things being equal, a pupil will complete Basic school at the age of 14. According to Nigeria Population Census, Nigeria has a population of 182 million. Let assume that the population of ages 6 – 8 is said to be 950,000; 9 – 11 is 900,000, 12 – 14 is 850,000; 15 – 17 is 800,000 and 18 – 20 is 750,000 in the Census with the uncertainty of the actual ages in the age groups.

   a. Give three reasons that may lead to uncertainty in age groups?
   b. What will you do to normalise the uncertainty?
   c. What is the age group that will be in Junior Secondary School?
   d. Present the accurate population figure for Junior Secondary School. Show all workings and use the following formula:

$$S_o = \frac{1}{16}(S_{-2} + 4S_{-1} + 10S_o + 4S_1 - S_2)$$ *(30 Marks)*

2. Grade-wise Enrolment of a State's Primary School by Grade (Class) between 2010 and 2016

Year	Grade (Class)						Total
	1	2	3	4	5	6	
2010	19796	11291	11131	9995	98349	86793	62699
2011	11832	11363	11178	11106	9859	86791	64017
2012	11885	11421	11234	11041	9881	9688	64150
2013	11901	11500	11294	11087	9907	8715	64404
2014	12067	11609	11406	11183	9979	8772	65016
2015	12180	11768	11519	11291	9107	8860	64725
2016	12325	11844	11641	11368	9116	8934	65228

From the above Table, Calculate the:

   a. Progression ratios and present your answers in a Table *(14 Marks)*
   b. Standard Progression ratio and present your answers in a Table *(6 Marks)*

3. The following is data received from a State in Nigeria:

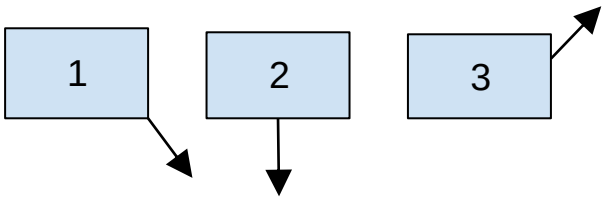
- Projected secondary school enrolment of 3,000,000 in 2019
- Student-Teacher Ratio is 35:1
- Current number of English Language teachers in the state is 40
- Total students' weekly periods are 440,000
- Total Teachers' weekly periods are 800

From the Data above:

a. What is the total weekly periods of a teacher? (*2 Marks)*
b. Calculate the number of English Language Teachers that would be required in the state based on student-teacher ratio and workload. *(10 Marks)*

c. Explain the implications of the numbers of English Language Teachers' requirement obtained in 'a' using clear indicators for quality education *(8 Marks)*

4. a. Interpret the following notations as used when determining student flow rate.



(3 marks)

b. What is the purpose of determining wastage ratio in educational planning? 2 marks

c. Three students - Morgaji, Nnamdi and Umoru were given data to calculate the wastage ratio of a school. The wastage ratio values presented by the students were 1.7, -1.80 and 1.0 respectively.

Analyse the implications of these values in education. 15 marks