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**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF EDUCATION**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF MASTER OF EDUCATION IN SPECIAL NEEDS EDUCTION**

**1ST YEAR 1ST SEMESTER 2017/2018 ACADEMIC YEAR**

**SCHOOL BASED MAIN CAMPUS**

**COURSE CODE: ESU 208**

**COURSE TITLE: RESEARCH METHODS II**

**EXAM VENUE:--**

**STREAM: (MA. ARTS) SNE**

**DATE:18/12/17 EXAM SESSION: 11.00 – 2.00PM**

**TIME: 3 HOURS**

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**Instructions:**

1. **Answer question 1 (compulsory) and any other 2 questions.**
2. **Candidates are advised not to write on the question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**QUESTION ONE (COMPULSORY)**

1. You have been requested to give a keynote address in an education forum entitled: *Writing a standard thesis in the 21st Century*. Discuss the salient features of the following :
2. Synopsis (8mks)
3. Chapter Three (8mks)
4. How wide and long should literature review be? (8mks)
5. Outline the differences between a proposal and a thesis (6mks)

**QUESTION TWO**

1. A group of ten candidates scored the following marks in English and Kiswahili tests:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| English(X) | 12 | 18 | 16 | 11 | 7 | 10 | 13 | 17 | 12 | 9 |
| Kiswahili (Y) | 6 | 5 | 7 | 7 | 4 | 9 | 8 | 13 | 10 | 11 |

Calculate and comment on Karl-pearson’s Product moment correlation coefficient (5 mks)

b)The marks of 1000 candidates in an examination were normally distributed with a mean mark of 45% and standard deviation of 10%.

i) Given that the pass mark in the test was 60%, estimate the number of candidates who passed the examination (3mks)

ii) Calculate the probability that a student picked at random from the group scored between 35% and 65% ( 2mks)

**QUESTION THREE**

The K.C.S.E Mathematics examination score for a given county assessment test in 2013 was 51% with a standard deviation of 14. A county director of education believes that students who were in public boarding primary schools score better in the test. The director obtains a simple random sample of 40 high school students who were in pubic boarding primary schools and finds that their mean score is 54%, conduct a traditional method of hypothesis testing to determine if the director’s believes are supported by data at 5% level of significance. (10mks).

**QUESTION FOUR**

The following information relates to the number of unlicensed drivers and number of road accidents in a given country.

|  |  |
| --- | --- |
| **No. of unlicensed drivers (X)** | **No. of road accidents (Y)** |
| 50 | 55 |
| 30 | 20 |
| 60 | 59 |
| 75 | 78 |
| 40 | 55 |
| 90 | 70 |
| 15 | 20 |
| 19 | 15 |
| 64 | 60 |
| 80 | 84 |

1. Represent the data using a scatter diagram and give your interpretation ( 3mks)
2. Find a regression equation that fits the data and interpret the results (7mks)

**QUESTION FIVE**

A researcher was interested in studying television channel viewing in some locality and age set of viewers. The results were as shown in the table below:

|  |
| --- |
| **TV Channel Viewed** |
| **Age set** | **KBC** | **KTN** | **NTV** | **Total** |
| **Young** | 120 | 112 | 129 | 361 |
| **Old** | 67 | 210 | 99 | 376 |
| **Total** | 187 | 322 | 228 | 737 |

Using Chi-square (χ2) and α=0.05, test whether there is a statistical relationship between TV viewed and Age set of viewers. (10mks)