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OFFICE OF THE DEPUTY PRINCIPAL

ACADEMICS, RESEARCH AND STUDENTS' AFFAIRS

UNIVERSITY EXAMINATIONS

2020 /2021 ACADEMIC YEAR

...1.... YEAR1... SEMESTER REGULAR EXAMINATION

FOR THE DEGREE OF BACHELOR OF EDUCATION

COURSE CODE: PSY 110

COURSE TITLE: QUANTITATIVE TECHNIQUES IN EDUCATION

DATE:22/02 2021

TIME:2.00-5.00pm

(3 marks)

QUESTION FOUR

Among a group of 200 students, 70 played cricket, 60 played hockey and 50 played volley ball. 25 played both cricket and hockey, 30 played both hockey and volley ball, 20 played cricket and volley ball and 10 played hockey and volley ball only.

Required;

| i. | Write the above information in a set notation | (2 marks) |
|------|---|-----------|
| ii. | Present the above information in the form of a venn diagramme | (3 marks) |
| iii. | How many students play all the 3 games | (3marks) |
| iv. | How many students play none of the 3 games | (3marks) |
| v. | How many students play 2 games only | (3marks) |
| vi. | How many students play 1 game only | (3marks) |
| vii. | How many students do not play cricket | (3marks) |

QUESTION FIVE

The table below relates to WXY ltd

| Class | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
|----------------------------------|---|------|-------|-------|-------|-------|-------|-----------|
| Interval | | | | | | | | |
| Frequen | cy 5 | 10 | 12 | 15 | 18 | 10 | 5 | 3 |
| You are required to; | | | | | | | | |
| a) Calc | a) Calculate the mean | | | | | | | |
| b) Calculate the median and mode | | | | | | | | (5marks) |
| c) Calc | c) Calculate variance and Standard deviation of your frequency distribution | | | | | | | |
| d) Calc | d) Calculate geometric mean | | | | | | | (4 marks) |
| e) Calc | e) Calculate harmonic mean | | | | | | | (3 marks) |

iii. Systematic sampling

(3 marks)

(4 marks)

QUESTION FOUR

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| v. | How many students play 2 games only | (3marks) |
| vi. | How many students play 1 game only | (3marks) |
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QUESTION FIVE

The table below relates to WXY ltd

| Class | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
|----------------------------------|-----|------|-------|-------|-------|-------|----------|----------|
| Interval | | | | | | | | |
| Frequency | 5 | 10 | 12 | 15 | 18 | 10 | 5 | 3 |
| You are required to; | | | | | | | | |
| a) Calculate the mean | | | | | | | | (3marks) |
| b) Calculate the median and mode | | | | | | | (5marks) | |

c) Calculate variance and Standard deviation of your frequency distribution (5 marks)

| d) |) Cal | lculate | geometric | mean |
|----|-------|---------|-----------|------|
|----|-------|---------|-----------|------|

e) Calculate harmonic mean (3 marks)