TAKORADI TECHNICAL UNIVERSITY
FACULTY OF APPLIED SCIENCES
DEPARTMENT OF TOURISM
END OF FIRST SEMESTER EXAMINATION
2020/2021 ACADEMIC YEAR

BASIC STATISTICS
TIME:3 HOURS

APRIL, 2021
ITM 301

ANSWER ALL QUESTIONS IN SECTION "A" AND TWO QUESTIONS IN SECTION "B"

SECTION A

Answer all questions in this section

1. Find the mode of the following set of numbers.
   a) 2,3,3,2,4,5,3
   b) 4,5,5,2,3,5,4,1,5
2. Find the median of the following set of numbers
   a) 2,1,2,3,5
   b) 3,7,2,9,8,11,12
3. Find the mean of the following set of numbers.
   a) 0,2,3,4,5 and 4
   b) 3,9,11,28,37 and 20
4. Find the mean from the frequency distribution table below. Using assumed mean of 13.

Marks	1-5	6-10	11-15	16-20	21-25
Frequency	4	6	11	6	3

5. Define the following terms as used in Statistics:
   a) Parameter
   b) Statistic
   c) Sample
   d) Variable

6.
   a) State and explain the two main branches of Statistics
   b) Draw a histogram to illustrate the information in the table below.

Marks	10-19	20-29	30-39	40-49
Frequency	5	6	8	4

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7. The relationship between expenditure on welfare services and absenteeism for similar periods of time is shown for a small company.

Expenditure	3.5	5.0	7.0	10.0	12.0	15.0	18.0
Days of lost	241	318	174	110	147	122	86

a) Determine the coefficient of linear correlation for the data.

b) Interpret your results

8. The table below relates the weekly maintenance cost in Ghana cedis to the age in months of ten photo copier machine at Cape Coast Castel. Find the least square regression line of maintenance cost on age and use it to predict the cost for a photo copier machine which is 40 months old.

Age(x)	5	10	15	20	30	30	30	50	50	60
Cost(y)	190	240	250	300	310	335	300	300	350	395

9. The table below is the frequency distribution of the ages of tourist who visited kakum National Park in 2016.

Age	10-14	15-19	20-24	25-29	30-34	35-39
Number of Tourist	2	12	27	41	30	8

Calculate the:
   a) Mode
   b) Median

10. The table below shows the number of tourism students who offers certain subjects in Takoradi Technical University.

Subjects	Number of Students
Communication Skills	45
Basic Statistics	39
ICT	28
Science	14
History	36
Economics	18

a) Draw a pie chart to illustrate the above information
b) What percentage of students offer Basic Statistics