THE TOTAL PERMOLOGIA BETTER TH

SECI2143: PROBABILITY & STATISTICAL DATA ANALYSIS 2021/2022 – SEMESTER 2

QUIZ 1

| Name | : | | Marks: | / |
|------------|---|-----------|--------|----|
| Student ID | : | Section : | | |
| Date | : | | | 20 |

QUESTION 1 (10 MARKS)

Personal records of seven employees from a total of 40 employees in the Mantop Company are listed in Table 1.

Table 1

| Name | Age | Gender | Qualification | Position | Salary | Department | |
|---------|-----|--------|---------------|-------------------|--------|------------|--|
| Ismail | 24 | Male | Diploma | Programmer | 3500 | IT | |
| Jamal | 30 | Male | Degree | Manager 10000 | | Finance | |
| Fatimah | 33 | Female | Degree | Accountant | 7000 | Finance | |
| Ahmad | 45 | Male | Master | Project | 12000 | IT | |
| | | | | Manager | | | |
| Maria | 42 | Female | Diploma | loma Officer 6000 | | Human | |
| | | | | | | Resource | |
| Salina | 27 | Female | Diploma | Secretary | 2500 | Finance | |
| Nasir | 28 | Male | Degree | System | 8000 | IT | |
| | | | | Engineer | | | |

- a) Based on the data given in Table 1, answer the following questions:
 - i. What is the population?
 - ii. What is the sample?
 - iii. Is it primary or secondary data? Justify your answer.

b) Determine which of the four levels of measurement (nominal, ordinal, interval, and ratio) is most appropriate for each question below:

| | Questions | Level of | | | |
|------|--|-------------|--|--|--|
| | | Measurement | | | |
| i. | The lecturer records the letter grade for the Database | | | | |
| | subject for each student. | | | | |
| | | | | | |
| ii. | Birth year of staff at the School of Computing, UTM. | | | | |
| | | | | | |
| iii. | The number of students who graduated in each | | | | |
| | program for each convocation ceremony. | | | | |
| | | | | | |
| iv. | The university where you were studying. | | | | |
| | | | | | |
| v. | The honours classification awarded for all | | | | |
| | Undergraduate programs: First Class, Second Class | | | | |
| | (Upper), Second Class (Lower), Third Class. | | | | |
| | | | | | |
| vi. | The nationality of students for all Postgraduate | | | | |
| | programs at the Faculty of Engineering, UTM. | | | | |

QUESTION 2 (10 MARKS)

Table 2 shows the number of students obtaining marks in their final examination for the Logic Digital Subject.

Table 2

| 40 | 17 | 25 | 35 | 51 | 60 | 73 | 96 | 70 | 90 |
|----|----|----|----|----|----|----|----|----|----|
| 52 | 10 | 20 | 55 | 62 | 63 | 73 | 70 | 79 | 88 |
| 44 | 65 | 47 | 29 | 35 | 67 | 56 | 38 | 49 | 77 |

Based on the data given in the Table 2, answer the following questions:

a) Draw a stem-and-leaf diagram.

b) Calculate mean and median.

c) Calculate the Q1 and Q3.