

CMD 305 - COURSE

(RESEARCH METHODOLOGY & BIOSTATISTICS)

TUTORIAL TOPIC: Scales of Measurements & Type of variables

Q1) Name type of measurement scale for the following:

- a. Education status(Illiterate / Literate): _____
- b. Outcome of a newborn baby(Boy/Girl) : _____
- c. Body mass Index [weight(kg)/.Height²(meters)]: _____
- d. Blood sugar level--Quantitative variable: _____
- e. Cholesterol level--Quantitative variable: _____
- f. Immunization status of the child (Yes/No): _____
- g. Grades of Exam Result (A+,A,B+,B, etc.): _____

Q2) A sample data of a study is given below. Name the type of variable:

<i>Pt ID</i>	<i>Age (Years)</i>	<i>Sex</i>	<i>Marital Status</i>	<i>Education</i>	<i>BMI</i>	<i>CD4 cell count</i>	<i>Viral load</i>	<i>ESR at 1 hour</i>
1	34	1	1	1	20.1	351	728000	35
2	30	2	1	1	17.8	33	11300	25
3	48	2	2	1	25.1	179	53900	30
4	40	1	1	2	17.6	235	498000	34
5	36	1	1	1	18.1	70	7360	19
6	25	1	2	2	17.3	86	400	10
7	29	2	1	1	16.9	228	750000	39
8	25	1	1	2	17.3	67	83400	22
9	38	2	2	1	22.5	27	14300	23
10	40	1	2	2	17.5	41	290000	30

Sex (1= Male, 2=Female); Marital status (1=single, 2=married); Education(1=illiterate, 2=literate)

Ans:

Age:

Sex:

Marital Status:

Education:

BMI:

CD4 cell count:

Viral Load:

ESR at 1 hour:

Q3) Classify the following variables as quantitative(discrete or continuous) and qualitative(ordinal or nominal).

- a) White blood cells per deciliter of whole blood: _____
- b) Leukemia rates in geographic regions (cases per 100,000 people) : _____
- c) Presence of type II diabetes mellitus (yes or no): _____
- d) Body weight (kilograms) : _____
- e) Low-density lipoprotein level (mg/dl) : _____
- f) Grade in course coded : A, B, C, D or F: _____
- g) Course credit (pass or fail) : _____
- h) Satisfaction: 1=very satisfied, 2= satisfied, 3= neutral, 4= unsatisfied, 5= other: _____
- i) Treatment group : 1= active treatment, 2 = placebo: _____
- j) The number of road accidents in KSA during Ramadan month. : _____
- k) The number of boys in a family. : _____
- l) The length of time that a cancer patient and survives after diagnosis. : _____
- m) The number of previous miscarriages an expectant mother had: _____