

## MEDICAL DATA AND INFORMATION

1. Give 10 examples of qualitative medical data.

Qualitative medical data:

1. Colour of the tissues
2. Patient occupation
3. History of illness (yes/no)
4. Epigastric pain (yes/no)
5. Colour of vomiting (blood red, wine-coloured or like coffee coloured)
6. Nose bleeding (yes/no)
7. Alcoholism (yes/no)
8. Herbs consumption (yes/no)
9. Blumberg sign (positive/negative)
10. Esophageal erosion (present/absent)

2. Give 10 examples of metric medical data.

Metric medical data:

1. Systolic blood pressure (mmHg)
2. Diastolic blood pressure (mmHg)
3. Prostatic volume
4. Plasma digoxin level (ng/ml)
5. Serum cholesterol level (mg/dl)
6. Birth weights (kg)
7. Methemoglobin content of blood
8. Hemoglobin level (g/dl)
9. Plasma concentration of luteinizing hormone (UI/l)
10. Serum creatinine level (mg/dl)

3. Give 10 examples of medical data of signal type.

Medical data of signal type:

1. EKG = Electrocardiography
2. EMG = Electromyography
3. EEG = Electroencephalography
4. CT = Computer Tomography
5. FCT = Functional CT
6. RMI = Magnetic resonance imaging
7. fMRI = Functional RMI
8. Thermo-Scan
9. Holter monitoring = portable electrocardiogram
10. Osteodensitometry
11. ...

4. For the following elements please specify the name of the statistical unit, name of the variable, type of the variable, and scale (see the model presented in the table - first element):

- a. Number of pages of 300 books in a Library.
- b. The expenses fees of a dentistry office for a year.
- c. The temperature of a patient hospitalized in a sepsis section measured every morning at 6 a.m.
- d. Place of birth of first year students of the Faculty of Dentistry.
- e. Apgar score obtained for each child born on 14/10/2008 in 1<sup>st</sup> Gynecology Hospital.

	Statistical unit	variable	Type of variable	Scale
a	Book	No of pages	Metric (quantitative) - discrete	Interval
b	Fee	Expenses	Metric (quantitative) - continuous	Ratio
c	Temperature values	Temperature	Metric (quantitative) - continuous	Ratio
d	Students	Place of birth	Attributes (qualitative)	Nominal
e	Score	Apgar	Attributes (qualitative)	Ordinal

5. Identify which of the following examples is a statistical variable and which is a constant:
- Number of days in August - constant
  - The number of surgeries per day in a hospital - variable
  - The age of patients hospitalized in the Department of Traumatology - variable
  - The number of consultations in an ambulatory - Variable
  - Maximum value of Apgar score - Constant
  - The temperature of patients hospitalized in room 201 - Variable
  - Systolic blood pressure of hospitalized patients
  - Tuition fees per academic year 2008-2009 at the "Iuliu Hațieganu" University of Medicine and Pharmacy Cluj-Napoca - Constant
6. Specify the type of data and scale of measurements for the following data obtained from the observation sheet of a patient:
- Sex: female – Qualitative – Nominal (Dichotomial)
  - County: București - Qualitative – Nominal
  - Marital status: married - Qualitative – Nominal
  - Age: 28 years – Quantitative discrete - Ratio
  - Temperature: 37.9°C – Quantitative continuous - Ratio
  - Pulse: 74 beats per minute – Quantitative discrete - Interval
  - Systolic Blood Pressure: 180/110 mmHg – Quantitative continuous - Ratio
  - Blood type: AB – Qualitative – Nominal
  - Any known allergies to drugs: NO – Qualitative – Nominal (Dichotomial)
  - Any known chronic diseases: hepatitis B – Qualitative – Nominal
  - Diagnosis at admission: upper respiratory infection – Qualitative – Nominal.