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. Hemoglibin 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. fRMI = 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 1st 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:
    a. Number of days in August - constant
    b. The number of surgeries per day in a hospital - variable
    c. The age of patients hospitalized in the Department of Traumatology - variable
    d. The number of consultations in an ambulatory - Variable
    e. Maximum value of Apgar score - Constant
    f. The temperature of patients hospitalized in room 201 - Variable
    g. Systolic blood pressure of hospitalized patients
    h. Tuition fees per academic year 2008-2009 at the "Iuliu Haţieganu" 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:
    a. Sex: female – Qualitative – Nominal (Dichotomial)
    b. County: Bucureşti - Qualitative – Nominal
    c. Marital status: married - Qualitative – Nominal
    d. Age: 28 years – Quantitative discrete - Ratio
    e. Temperature: 37.9°C – Quantitative continuous - Ratio
    f. Pulse: 74 beats per minute – Quantitative discrete - Interval
    g. Systolic Blood Pressure: 180/110 mmHg – Quantitative continuous - Ratio
    h. Blood type: AB – Qualitative – Nominal
    i. Any known allergies to drugs: NO – Qualitative – Nominal (Dichotomial)
    j. Any known chronic diseases: hepatitis B – Qualitative – Nominal
    k. Diagnosis at admission: upper respiratory infection – Qualitative – Nominal.