NAME:…….....……....
DATE: ……

HEART RATE (HR) and BLOOD PREASURE (BP) MEASURING

HRrest (palpation method) = …… beats/min

HRmax = 208 – (0,7x age) = 208 – (0,7 x ……) = ……..beats/min

BPs	BPd	HR	S (m^2)

S = surface area (m^2)

CARDIAC OUTPUT (Q)

$$Q(ml \cdot \min^{-1}) = \frac{BPpuls \cdot c}{BPs + BPd} \cdot HR \cdot S$$

BPpuls = pulse pressure= sTK-dTK
BPs = systolic BP
BPd = diastolic BP
c = constant = 200

Q ($ml.min^{-1}$) =

STROKE VOLUME (Q_S)

$$Q_S(ml) = Q(ml \cdot \min^{-1}) : HR$$

Q_S (ml) =

HR and BP AFTER LOAD

Working procedure:
1. After several minutes of rest setting idle person measure HR and BP.
2. Then the investigated person performs 30 deep squats with frequency: 1 squat per 1 sec.
3. After load (exercise) measure HR and BP and than measure every minute until the return to resting values (at lest 2 min after load).

Recording of measurement:

Values	HR	BP (mmHg)			Q	Q_S
		BPs	BPd	BPpuls		
rest						
immediately after load						
1 min. after load						
2 min. after load						
3 min. after load						
4 min. after load						
5 min. after load						