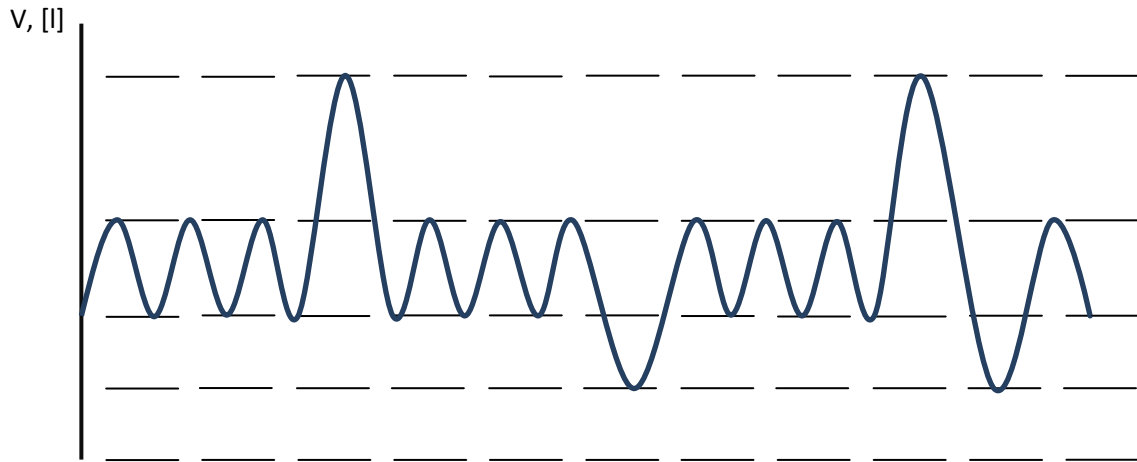


SPIROMETRY

I. Describe static volumes and capacities.



I. tidal volume

V. vital capacity

II. inspiratory reserve volume

VI. inspiratory capacity

III. expiratory reserve volume

VII. expiratory capacity

IV. residual volume

VIII. total lung capacity

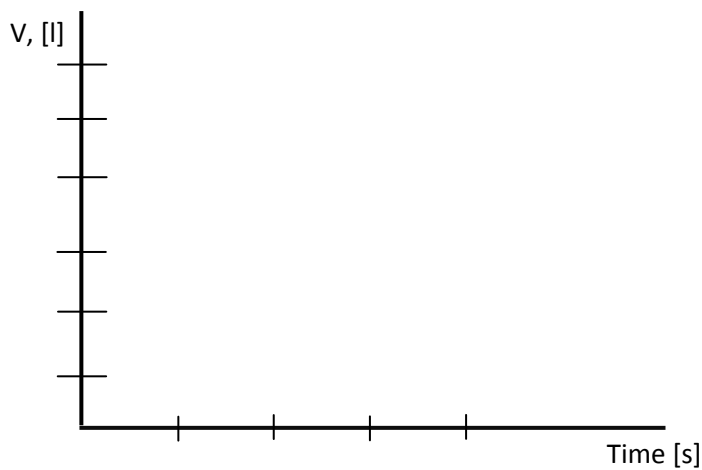
<i>Resting breathing</i>		unit
Frequency		(breaths/min)
tidal volume		Litre (l)
Minute Ventilation		l/min

Apneic pause in inspiration:

<i>Hyperventilation</i>		unit
Frequency		(breaths /min)
tidal volume		Litre (l)
Maximal Minute Ventilation (MMV)		l/min

Apneic pause in expiration:.....

II. Dynamic lung volumes



FEV₁

FVC

$\frac{FEV_1}{FVC}$

Conclusion _____

ELEKTRICKÝ MODEL AORTÁLNÍHO PRUŽNÍKU

I. Schematically redraw modeled records and describe the changes

Changes in stroke volume

	SV=50ml	SV=90ml
SBP		
DBP		
Δ BP		
ρ BP		

BP,
mmHg

Time, s

Change in peripheral resistance

	R = 0,5–0,8 mmHg's/ml	R = 1,2–1,5 mmHg's/ml
SBP		
DBP		
Δ BP		
ρ BP		

BP,
mmHg

Time, s

Change in compliance

	C = 0,5 ml/mmHg	C = 2,0 ml/mmHg
SBP		
DBP		
Δ BP		
ρ BP		

BP,
mmHg

Time, s

Cardiac arrest

	SV=0ml
SBP	
DBP	
Δ BP	
ρ BP	

BP,
mmHg

Time, s

II. Interest tasks:

Model and describe the changes in blood pressure during the stay in the sauna followed by a cool down (the heat reduces peripheral resistance, the cold increases peripheral resistance).



Model and describe the changes in blood pressure during physical activity (gradual increase of systolic output and heart rate, and then reduction of peripheral resistance).



Model and describe essential hypertension (increased SV and TF by + 20%) and fully developed hypertension (return of TF and SV to the original values and increased resistance by 40%).



Conclusion _____

BLOOD FLOW IN VEINS

Draw a diagram of veins and valves. Draw the course of the veins on the volar side of the forearm and mark the location of the flaps of your experiment.

Conclusion _____
