

## ENTRY EXAM – PHYSICS

### EXAMPLE QUESTIONS

1.  $1 \text{ dm}^3$  has:

- a)  $0,0001 \text{ m}^3$
- b)  $0,01 \text{ m}^3$
- c)  $0,00001 \text{ m}^3$
- d)  $0,001 \text{ m}^3$

2. The relationship of mass and volume of a substance is called:

- a) specific weight
- b) density
- c) pressure
- d) mass volume

3. If the velocity of an aircraft is  $v=300 \text{ km/h}$  and the distance to fly is  $S=60 \text{ km}$ , how long will the flight last?

- a)  $t = 21 \text{ minutes}$
- b)  $t = 0,2 \text{ hours}$
- c)  $t = 4,75 \text{ minutes}$
- d)  $t = 5 \text{ minutes}$

4. Body starts from the steady state and has uniform acceleration. After a time of  $t=5 \text{ s}$  it has a velocity of  $V=20 \text{ m/s}$ . What is the acceleration of this body?

- a)  $4 \text{ m/s}^2$
- b)  $100 \text{ m/s}^2$
- c)  $100 \text{ ms}^2$
- d)  $0,25 \text{ m/s}^2$

5. What is the frequency of oscillation of a body when the period of oscillation equals  $T=2\text{s}$ ?

- a)  $2 \text{ Hz}$
- b)  $0,5 \text{ Hz}$
- c)  $4 \text{ Hz}$
- d)  $10 \text{ Hz}$