

### Topic: Anatomy - Thorax

1. Gas exchange, including oxygen exchange takes place in these thin walled sacs called: ?

- A. Bronchus
- B. Bronchioles
- C. Alveoli
- D. Bronchi

Answer:

C. Gas exchange takes place in the alveoli.

### Topic: Quality Assurance

2. Dynamic wedge factors on a linear accelerator are to be checked by a Medical Physicist on a \_\_\_\_\_ frequency basis?

- A. Daily
- B. Weekly
- C. Monthly
- D. Annual

Answer:

C. Dynamic wedge factors are to be checked by physics on a monthly basis. See Table IV of the AAPM (American Association of Physicists in Medicine) report no 142 for technical considerations.

### Topic: Safety

3. For occupationally exposed individuals, the whole body exposure limit in rems in a calendar year is equal to?

- A. 50.0 sievert
- B. 5.0 sievert
- C. 0.5 sievert
- D. 0.05 sievert

Answer:

D.  $1 \text{ sievert} = 100 \text{ rems}$ . The whole body exposure limit is 5 rems in a calendar year. The calculation is:  
 $5 \text{ rems} \times (1 \text{ sievert} / 100 \text{ rems}) = 0.05 \text{ sievert}$ .