

## MCQ's : Oxygen concentrator

1. Which of the following is NOT a clinical use of oxygen concentrator?
  - a) Pneumonia management in a peripheral health set up.
  - b) Sick newborn with a systemic illness
  - c) Utility in ventilation of preterm infants
  - d) Home oxygen therapy in preterm infants with bronchopulmonary dysplasia.
  
2. The main function of external coarse filter through which atmospheric air passes is
  - a) To remove dust particles
  - b) To concentrate room air
  - c) To remove bacteria in the room air
  - d) To remove viruses in the room air
  
3. The main function of zeolite filter through which air passes is
  - a) To remove nitrogen
  - b) To remove carbon dioxide
  - c) To remove sulphur dioxide
  - d) To remove extra water content of the atmospheric air
  
4. The BEST STATEMENT to justify the need of two zeolite cylinders is
  - a) The period of oxygen outflow from one, coincides with the discharge of nitrogen from the other, so that, a continuous supply of oxygen-enriched gas is delivered to the patient.
  - b) Aluminum trisilicate removes nitrogen very efficiently
  - c) The presence of lithium in two cylinders helps in the delivery of oxygen enriched air.
  - d) Removal of nitrogen increases the oxygen concentration by 50% only if one cylinder is present.
  
5. Which of the following statements is NOT TRUE about flow splitter?
  - a) A "flow-splitter" is a device which aggregates the flow of oxygen to different babies.
  - b) Oxygen to five different patients can be given at the same time.
  - c) Each baby can receive different flow rates.
  - d) The oxygen is delivered through plastic tubing connecting the outlet nozzle and the nasal prongs fixed to the patient.

6. Which of the statements regarding the maintenance of oxygen concentrator is **TRUE**?
- a) The external coarse filter has to be washed every day.
  - b) The inlet filter has to be replaced after 1 week.
  - c) The inlet filter should be washed
  - d) The life of the zeolite crystals is expected to be nearly 365 days.
  - e) Bacterial filter must be changed once in a 10 years.
7. What is the effect of humid air on the delivered oxygen concentrations in oxygen concentrator?
- a) The concentration of oxygen may be reduced to 70%.
  - b) The concentration of oxygen may be reduced to 21%
  - c) The concentration of oxygen may be increased to 100%
  - d) No oxygen delivery may occur.
8. What is the effect of low voltage on oxygen concentrator?
- a) Overheating the machine due to inefficient running of the motor.
  - b) Clogging of the inlet filter due to accumulation of dust particles.
  - c) Blockage of the bacterial filter due to accumulation of dust particles.
  - d) No effect of low voltage on the functioning.
9. Which statement is false about oxygen concentrator?
- a) Oxygen concentration goes down as the flow keeps on increasing.
  - b) If the flow is at 1 L/min the oxygen concentration is nearly 96 %.
  - c) At nearly 2L/min the concentration goes down to 95%.
  - d) At flows of 5l/minute the concentration is nearly 100%.
10. Match the following action points with the appropriate faults detected?
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| a) If the machine is making too much of noise  | 1. Fan needs to be repaired.                           |
| b) If there is too much heating of the machine | 2. Wash and clean the coarse filter                    |
| c) Yellow light is not going off               | 3. One should keep the concentrator from the wall      |
| d) Compressor is producing too much heat       | 4. Desired oxygen concentration has not been achieved. |