

الجمهورية اليمنية جامعة صنعاء مركز الاختبارات الالكتروني



قائمة الاسئلة 04:13 2025-04-30 قائمة الاسئلة

معدات التخدير الرابع علوم التخدير - كلية العلوم الصحية درجة الامتحان (70)

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- 1) All are bag valve mask disadvantages, except:
 - 1) tactile feedback during ventilation.
 - 2) + deliver room air without a pressurized gas supply.
 - 3) no visual indication of spontaneous ventilation
 - 4) the system is expensive to use with anaesthetic gases
- 2) All are advantages of Adjustable pressure limiting valve, except:
 - 1) Facilitates scavenging.
 - 2) Permits application of PEEP.
 - 3) + Adds bulk to the breathing system.
 - 4) Permits control of the airway pressure during positive pressure ventilation.
- 3) About reservoir bag is false:
 - 1) an essential component of most breathing systems
 - 2) + It acts as a visual indicator of controlled ventilation.
 - 3) Manual ventilation is achieved by squeezing the bag.
 - 4) Permits tactile feedback.
- 4) All are advantages of Mapleson systems, except:
 - 1) are simple and cheap
 - 2) are easily portable
 - 3) do not require CO2 absorption
 - 4) + all Mapleson systems are inefficient in comparision to breathing circuit.
- 5) All are Magill system (Mapleson A) disadvantages, except:
 - 1) Inefficient for controlled ventilation.
 - 2) APL valve at the patient end adds bulk to the system
 - 3) + Efficient for spontaneous ventilation.
 - 4) Not suitable for paediatrics.
- 6) Bain system (Coaxial Mapleson D) advantages, except:
 - 1) facilitating scavenging
 - 2) Low dead space
 - 3) + Inefficient for spontaneous ventilation.
 - 4) Compact system with all the major components at the machine end
- 7) Ayre's T-piece (Mapleson E) disadvantages, except:
 - 1) + There is minimal dead space.
 - 2) Application of PEEP is not possible
 - 3) Scavenging is difficult.
 - 4) Positive pressure ventilation is difficult and potentially hazardous.
 - Jackson–Rees modification (Mapleson F) advantages, except:
 - 1) + Scavenging is difficult.
 - 2) Positive pressure ventilation and PEEP are possible
 - 3) More suitable for inhalational induction than a circle system.
 - 4) the standard breathing system for paediatric patients
- 9) All are The circle system disadvantages, except:
 - 1) The extra valves, tubing and soda lime canister increase the resistance.
 - 2) leaks and disconnections are more difficult to identify quickly
 - 3) Soda lime may degrade sevoflurane into harmful substances such as compound A.
 - 4) + Reduced atmospheric pollution

8)



4)

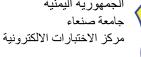
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- 10) All are The circle system advantages, except:
 - 1) low flow risking hypoxia and awareness.
 - 2) conserves anaesthetic gases, heat and moisture.
 - 3) + Low flow anaesthesia is possible
 - Reduced atmospheric pollution
 - Cylinder manifolds advantages, except:
 - 1) Provides an effective backup supply.
 - 2) ____ Simple and cheap.
 - 3) + Limited capacity when compared with a VIE.
 - 4) The alarm system means it should never run empty
- 12) Medical gas cylinders, advanages, except:
 - 1) + Heavy to transport
 - 2) Smaller cylinders are portable
 - 3) A variety of connectors exist.
 - 4) Can be refilled and reused.
- 13) All are safety Piped medical gas supply, except:
 - 1) + the pin index safety system
 - 2) Clear labelling both Schrader sockets and connecting hoses are labelled with the gas name.
 - 3) Colour coding both Schrader sockets and connecting hoses are colour-coded
 - 4) NIST the hose connects to the anaesthetic machine by means of a Non-Interchangeable Screw Thread
- 14) a component of scavinging system:
 - 1) Collecting system
 - 2) Receiving system
 - 3) Transfer system
 - 4) + all are scavinging components
- 15) which statement about scavenging system is not true:
 - 1) divided into active or passive
 - 2) + Transfer system connected to the adjustable pressure limiting
 - 3) Active systems use a pump to generate a negative pressure
 - 4) positive pressure generated by the patient's expiration is used in passive system
- 16) Passive humidifiers, advantages, except:
 - 1) ____ Do not require a power source.
 - 2) + HMEs can become occluded with secretions, blood or water.
 - 3) Produce 60–80% humidification of inspired gases
 - 4) Cheap and simple.
- 17) Nebulized humidifiers disadvanages, except:
 - 1) Expensive.
 - 2) Require a sterile water supply.
 - 3) ____ Require an electrical power supply.
 - 4) + There is no added dead space.
- 18) Quincke spinal needle (cutting) disadvanatages, except:
 - 1) Less tactile feedback
 - 2) + Cuts through tissue and ligaments, making insertion easier.
 - 3) increases the risk of nerve damage
 - 4) Higher incidence of PDPH
- 19) Ballpen (stylet point needle) advantages, except:
 - 1) No problems with coring of tissue or blockage of the aperture
 - 2) reduce the risk of neurological damage





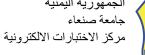


- 3) + Withdrawal of the stylet may dislodge the hollow cannula from the subarachnoid space
- 4) The pencil-point stylet aids atraumatic insertion
- 20) Epidural needles advantages, except:
 - 1) ____ Tactile feedback as it passes through tissues and ligaments
 - 2) + Dural puncture almost invariably leads to a PDPH due to its wide bore.
 - 3) Blunt, curved tip reduces the incidence of dural puncture
 - 4) The curved tip also facilitates directional placement of the catheter
- 21) all are anesthetic machine components, except:
 - 1) E cylinder
 - 2) flowmeter
 - 3) + pulse oxymeter
 - 4) vaporizer
 - 5) breathing circuit
- 22) the false statement is:
 - 1) + PISS connects gas pipelines to the anaesthetic machine.
 - 2) The pin index system prevents connection of an incorrect gas cylinder to the yoke on the anaesthetic machine
 - 3) A Bodok seal is a neoprene washer surrounded by a steel reinforcing ring
 - 4) The oxygen flush delivers oxygen at 35–75 l.min
- 23) which statement is true:
 - 1) Pressure relief valves are located downstream of each pressure regulator as a backup in case of regulator failure
 - 2) Needle valves are located at the base of flowmeters
 - 3) ____ The back bar is part of the low pressure system situated downstream of the flowmeter block
 - 4) + All statements are true
- 24) Boyle's bottle disadvantages, except:
 - 1) + Full saturation of the vapour chamber gas fl ow was possible.
 - 2) No temperature compensation
 3) Tipping Boyle's bottle could be
 - Tipping Boyle's bottle could lead to dangerous rises in anaesthetic concentrations
 - The concentration of anaesthetic delivered to the patient was imprecise
- 25) Copper kettle advantages:

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- 1) Temperature stabilized by the copper heat sink.
- 2) ___ Could be used with any volatile anaesthetic agent
- 3) + both are advantages
- 4) both are disadvantages
- 26) Modern variable bypass vaporizers disadvantages, except:
 - 1) High internal resistance so must be used 'out of circle
 - 2) ____ Temperature compensation only works within a reasonable range of ambient temperatures.
 - 3) + Easy to use and reliable.
 - 4) The heat sink makes the vaporizer heavy
- 27) Advanteges of flowmeters, EXCEPT:
 - 1) + can get stuck
 - 2) cheap and simple
 - 3) easy to obtain
 - 4) no power required
- 28) The bobbin inside the flowmeter moves due to:
 - 1) Electrical force
 - 2) Magnetic force
 - 3) + Gas flow







- 4) Vacuum pressure
- 29) about flowmeters is false:
 - 1) they have an accuracy of $\pm 2.5\%$
 - 2) + they have a tappered tube with narrow top
 - 3) at high flows, the density of the gas is important in measuring the flow
 - 4) the reading of the flow from the top of the bobbin
- 30) all about flowmeters is true except:
 - 1) + N2O maybe used in an O2 flowmeter without a change in calibration
 - 2) flowmeters use a tube and bobbin
 - 3) they are an example of a variable baypass orifice devices
 - 4) both laminar and turbulant flow is encountered
- 31) About The normal capnograph trace, is false:
 - 1) Phase one represent the dead space
 - 2) Phase two rapid rise in PCO2 as alveolar gas appears.
 - 3) + phase two represents end-tidal CO2 (EtCO2)
 - 4) Phase four representing inspiration.
- 32) About rebreathing in capnoghraph trace is false:
 - 1) fraction of inspired CO2 (FiCO2) rises above zero
 - 2) + a sign of malignant hyperthermia.
 - 3) EtCO2 will also rise as a consequence.
 - 4) Caused by exhausted soda lime
- 33) The 'curare clefts' occur when:
 - 1) exhausted soda lime
 - 2) malignant hyperthermia
 - 3) chronic obstructive lung diseases
 - 4) + Loss of neuromuscular blockade
- 34) Pulse oximeters disadvantages, except:
 - 1) inaccurate measurments in atrial fibrillation
 - 2) + Is not affected by the presence of different haemoglobins
 - 3) carboxyhaemoglobin gives false high measurment
 - 4) methaemoglobinaemia gives false low measurment
- 35) Pulse oximeters advantages, except:
 - 1) + Interference from movement or nearby electrical devices can cause loss of signal.
 - 2) Is not affected by the presence of different haemoglobins
 - 3) Easy to use, safe, non-invasive.
 - 4) continuous measurement of oxygen saturation and pulse rate.