



BRAINWARE UNIVERSITY

Term End Examination 2020 - 21

Programme – Bachelor of Science in Physician Assistant

Course Name – Basic Anesthesia

Course Code - BPA303

Semester / Year - Semester III

Time allotted : 75 Minutes

Full Marks : 60

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

1. (Answer any Sixty)

(i) The persistent suppression of bacterial growth that may occur after limited exposure to some antimicrobial drug is called

- | | |
|------------------------------------|---------------------------|
| a) Time dependent killing | b) Post antibiotic effect |
| c) Concentration dependent killing | d) Sequential blockade |

(ii) Which of the following drug is bactericidal?

- | | |
|--------------------|------------------|
| a) Sulfonamides | b) Erythromycin |
| c) Chloramphenicol | d) Cotrimoxazole |

(iii) Which of the following is a broad spectrum antibiotic?

- | | |
|-----------------|-----------------|
| a) Erythromycin | b) Streptomycin |
| c) Tetracycline | d) All |

(iv) Drug resistance transmitting factor present in bacteria is:

- | | |
|------------|---------------|
| a) Plasmid | b) Chromosome |
| c) Introns | d) Centromere |

(v) Which antibiotic acts by inhibiting protein synthesis?

- | | |
|------------------|----------------|
| a) Cefotetan | b) Doxycycline |
| c) Ciprofloxacin | d) Oxacillin |

(vi) General anaesthesia includes-

- a) Analgesia
- b) Amnesia
- c) Temporary loss of consciousness
- d) All of these

(vii) Which of the following antitubercular drugs is safe in hepatitis?

- a) Isoniazid
- b) Rifampicin
- c) Pyrazinamide
- d) Ethambutol

(viii) A middle aged man with chronic renal failure is diagnosed to have sputum-positive pulmonary tuberculosis. His creatinine clearance is 25 ml/min. All of the following drugs need modification in doses EXCEPT:

- a) Isoniazid
- b) Streptomycin
- c) Rifampicin
- d) Ethambutol

(ix) Prolonged treatment with INH leads to deficiency of?

- a) Pyridoxine
- b) Thiamine
- c) Pantothenic acid
- d) Niacin

(x) Dissociative anaesthesia is caused by-

- a) Propofol
- b) Etomidate
- c) Ketamine
- d) None of these

(xi) Side effects of halothane are-

- a) Hepatitis
- b) Malignant hyperthermia
- c) Both
- d) None

(xii) Most of the general anaesthetic agent causes-

- a) Hyperpolarisation
- b) Hypopolarisation
- c) Lowers peak of action potential
- d) Both Hyperpolarisation and Lowers peak of action potential

(xiii) Medullary paralysis occurs in which stage of anaesthesia?

- a) Stage 1
- b) Stage 2
- c) Stage 3
- d) Stage 4

(xiv) Outpatient surgery can be done with which of the following agents?

- a) Sevoflurane
- b) Desflurane
- c) Both Sevoflurane and Desflurane
- d) None of these

(xv) Second gas phenomenon is exhibited by

- a) Nitrous oxide
- b) Ether
- c) Carbon dioxide
- d) Oxygen

(xvi) Which of the following are inducing agents?

- a) Thiopentone
- b) Methohexitone
- c) Ketamine
- d) All of these

(xvii) PRIS is caused by:

- a) Pentoxifylline
- b) Procaine
- c) Propofol
- d) Prilocaine

(xviii) Thiazide diuretics can be used for the treatment of all of these conditions EXCEPT:

- a) Idiopathic hypercalciurea with nephrocalcinosis
- b) Hyperlipidemia
- c) Congestive Heart Failure
- d) Hypertension

(xix) High ceiling diuretics are useful in the treatment of all of the following conditions except:

- a) Generalized edema
- b) Cerebral edema
- c) Acute pulmonary edema
- d) Pulmonary hypertension

(xx) Which one of the following is not a clinical use of spironolactone?

- a) Pulmonary edema
- b) Hypertension
- c) Congestive heart failure
- d) To counteract hypokalemia due to thiazide diuretics

(xxi) All of the following are potassium sparing diuretics except:

- a) Triamterene
- b) Spironolactone
- c) Amiloride
- d) Indapamide

(xxii) Site of action of ADH is:

- a) PCT
- b) DCT
- c) Collecting tubule
- d) Ascending loop

(xxiii) K^+ sparing diuretic is:

- a) Furosemide
- b) Spironolactone
- c) Thiazide
- d) None of these

(xxiv) Diuretics that can be used in renal failure is:

- a) Furosemide
- b) Chlorthiazide
- c) Mannitol
- d) None of these

(xxv) Which of the following skeletal muscles is relaxed first by tubocurarine?

- a) Respiratory
- b) Fingers
- c) Limbs
- d) Head and neck

(xxvi) The Muscle relaxant of choice in liver disease is

- a) Atracurium
- b) Rocuronium
- c) Pipecuronium
- d) Vecuronium

(xxvii) Laudanosine is a metabolite of

- a) Atracurium
- b) Rocuronium

c) Pipecuronium

d) Vecuronium

(xxviii) The shortest acting non-depolarizing muscle relaxant is:

a) Succinyl choline

b) Rapacuronium

c) Atracurium

d) Pancuronium

(xxix) The neuromuscular blocker that does not need a reversal of action by neostigmine at the end of the operation is:

a) d-Tubocurarine

b) Doxacurium

c) Pipecuronium

d) Mivacurium

(xxx) One of the following statements about succinylcholine is true:

a) It may induce life threatening hyperkalemia

b) It has a long duration of action

c) It is the drug of choice in non traumatic rhabdomyolysis

d) It is useful in patients with spinal cord injuries with paraplegia

(xxxii) 'Second gas effect' is exerted by which of the following gas when coadministered with halothane:

a) Cyclopropane

b) Nitrogen

c) Nitrous oxide

d) Helium

(xxxiii) Baclofen is used in the treatment of:

a) Schizophrenia

b) Anxiety

c) Depression

d) Spasticity

(xxxiiii) Which of the following agents is most commonly used to induce anaesthesia:-

a) Thiopentone sodium

b) Propofol

c) Methohexitone sodium

d) Etomidate

(xxxiv) Short-acting non-depolarizing blocker is:

- a) Rocuronium
- b) Mivacurium
- c) Suxamethonium
- d) Pancuronium

(xxxv) True statements regarding halothane is:

- a) Hepatitis occurs in susceptible individuals after repeated dose
- b) It potentiates competitive neuromuscular blockers
- c) Causes respiratory depression
- d) All of these

(xxxvi) A patient, Tina was anesthetized with halothane and nitrous oxide and tubocurarine was used for skeletal muscle relaxation. She became hypertensive along with marked muscle rigidity and hyperthermia. Lab reports showed that she has developed hyperkalemia and acidosis. This complication was caused by:

- a) Block of autonomic ganglia by tubocurarine
- b) Activation of brain dopamine receptors by halothane
- c) Pheochromocytoma
- d) Excessive release of calcium from the sarcoplasmic reticulum

(xxxvii) Hallucinations are seen after _____ anaesthesia:

- a) Ketamine
- b) Thiopentone
- c) Fentanyl
- d) Nitrous oxide

(xxxviii) Malignant hyperthermia is a rare complication of the use of the following anaesthetic:

- a) Ketamine
- b) Thiopentone sodium
- c) Halothane
- d) Ether

(xxxix) The minimal alveolar concentration of an inhalational anaesthetic is a measure of its:

- a) Potency
- b) Therapeutic index
- c) Diffusibility
- d) Oil: water partition coefficient

(xl) Shortest acting non-depolarizing muscle relaxant is:

- a) Succinyl choline
- b) Rapacuronium
- c) Atracurium
- d) Pancuronium

(xli) All of the following are the true for post lumbar puncture headache except:

- a) Presents 12 hours after procedure
- b) Pain is relieved in standing position
- c) Pain is worsened by headshaking
- d) Pain is occipito-frontal in location

(xlii) Local anesthetic not recommended for peripheral nerve blockade:

- a) lidocaine (Xylocaine)
- b) bupivacaine (Marcaine)
- c) ropivacaine (Naropin)
- d) tetracaine (pontocaine)

(xliii) Which of the following agents is most commonly used to induce anaesthesia:

- a) Thiopentone sodium
- b) Methohexitone sodium
- c) Propofol
- d) Etomidate

(xliv) Neurotoxicity following local anesthesia: lower extremity paresis--predisposing conditions may include advanced age and peripheral vascular disease

- a) transient radicular irritation
- b) cauda equina syndrome
- c) anterior spinal artery syndrome
- d) None of these

(xlv) Local anesthetic lipophilicity and effectiveness of epinephrine on local anesthesia:

- a) more lipophilic anesthetics benefit most by epinephrine in addition to local anesthetic solutions
- b) more lipophilic anesthetics benefit least by epinephrine in addition to local anesthetic solutions
- c) Both more lipophilic anesthetics benefit most by epinephrine in addition to local anesthetic solutions and more lipophilic anesthetics benefit least by epinephrine in
- d) None of these

addition to local anesthetic solutions

(xlvi) The term balanced anaesthesia has been given by:

- a) Simpson
- b) Fischer
- c) Lundy
- d) Mortan

(xlvii) Ester-type local anesthetic:

- a) lidocaine (Xylocaine)
- b) ropivacaine (Naropin)
- c) tetracaine (pontocaine)
- d) dibucaine (Nupercainal, generic)

(xlviii) Factors influencing local anesthetic distribution and plasma concentrations:

- a) liver function
- b) cardiovascular status
- c) extent of protein binding
- d) All of these

(xlix) Factors that influence local anesthetic absorption and distribution:

- a) dosage
- b) presence of epinephrine in the local anesthetic solution
- c) injection site
- d) All of these

(l) The enzyme pseudocholinesterase acts on:

- a) Decamethonium
- b) Tubocurarine
- c) Gallamine
- d) Succinylcholine

(li) Shortest acting benzodiazepine among these is:

- a) Flurazepam
- b) Alprazolam
- c) Triazolam
- d) Diazepam

(lii) Which drug is used for pain control in cancer patients?

- a) Pethidine
- b) Fentanyl
- c) Methadone
- d) Remifentanyl

(liii) Local anesthetics: chemical properties

- a) many local anesthetics are chiral
- b) enantiomers are often less toxic than racemates and many local anesthetics are chiral
- c) ropivacaine (Naropin) is an example of a pure R enantiomer
- d) all of these

(liv) Propranolol (Inderal) -- local anesthetic effect(s):

- a) inhibits bupivacaine (Marcaine) extraction
- b) increases lidocaine (Xylocaine) plasma clearance
- c) Both inhibits bupivacaine (Marcaine) extraction and increases lidocaine (Xylocaine) plasma clearance
- d) None of these

(lv) Enhancement of spinal anesthesia by the presence of epinephrine in local anesthetics: Reason(s) --

- a) increased substance P release
- b) increased dorsal horn neuronal activity
- c) decreased local neuronal uptake
- d) none of these

(lvi) Most effective non habit forming sedative is:

- a) Lorazepam
- b) Zolpidem
- c) Flurazepam
- d) Trazadone

(lvii) All of the following are halogenated anaesthetic agents except:

- a) Halothane
- b) Propofol
- c) Enflurane
- d) Isoflurane

(lviii) Chlorzoxazone is used in the treatment of:

- a) Anxiety
- b) Depression
- c) spasticity
- d) Schizophrenia

(lix) Eutectic mixture of local anaesthetic (EMLA) cream is:

- a) Bupivacaine 0.5% + Lidocaine 2.5%
- b) Lidocaine 2.5% + Prilocaine 5%
- c) Bupivacaine 2.0% + Prilocaine 2.5%
- d) Lidocaine 2.5% + Prilocaine 2.5%

(1x) Regarding propofol, which one of the following is false:

- a) It has no muscle relaxant property
- b) It is painful on injecting intravenously
- c) It causes severe vomiting
- d) It is used as an intravenous induction agent