Q1) What is an incorrect statement for a Spinal Nerve?
   a) Spinal nerves arise in pairs from the spinal cord.

   b) Spinal nerves arise in pairs from the brainstem. ***

   c) Spinal nerves are part of the peripheral nervous system.

   d) There are 31 pairs of spinal nerves in the human body.

   e) 8 cervical, 12 thoracic, 5 lumbar, 5 sacral, and 1 coccygeal.

Q2) Identify the correct structural characteristic of a Typical Spinal Nerve?
   a) Each spinal nerve has two nerve roots.

   b) The second spinal nerve has no sensory root.

   c) The ventral root transmits impulses from the spinal cord to the muscles. ***

   d) The dorsal root carries motor information from the body receptors to the spinal cord.

   e) Each spinal nerve has multiple nerve roots.
Q3) **Mark what is an incorrect fate of anterior primary ramus:**
   a) C1 - C4 : form cervical plexus, supply neck.
   b) C5 - C8 & T1: form brachial plexus, supply upper limb.
   c) T1 - T12 & L1: supply posteriomedial body wall.***
   d) L1 - L4: form lumbar plexus, supply lower limb.
   e) L4, L5, S1 - S4: form sacral plexus, supply lower limb and perineum.

Q4) **Anterior wall of axilla is formed by following except:**
   a) Pectoralis Major
   b) Pectoralis Minor
   c) Subclavius
   d) Clavipectoral fascia
   e) Serratus Anterior. ***

Q5) **which one of the following is not content of axilla:**
   a) Axillary artery and its branches.
   b) Axillary vein and its tributaries.
   c) Subclavian artery. ***
   d) Brachial plexus.
   e) Nerves - long thoracic nerve, and intercostobrachial nerve.
Q6) Axillary lymph nodes arranged in following groups except:
a) Anterior group
b) Posterior group
c) Apical group
d) Basal group. ***
e) Medial group

Q7) Branch from the root is:
a) Dorsal scapular nerve. ***
b) Medial pectoral nerve
c) Medial cutaneous nerve of arm
d) Medial cutaneous nerve of forearm
e) Ulnar nerve

Q8) Posterior cord branches are following except:
a) Axillary nerve
b) Upper subscapular nerve
c) Thoracodorsal nerve.
d) lower subscapular nerve
e) ulnar nerve. ***

Q9) Methotrexate following is not correct
a) A potent anticancer agent
b) used for the treatment of cancers
c) It inhibits synthesis of thymidylate synthetase
d) used as the initial DMARD
e) Drug of choice in osteoporosis***
Q10) Clinical features of Rheumatoid Arthritis does not include
a) Radial deviation of wrist
b) Ulnar deviation of fingers
c) Swan neck deformity
d) Thickening of joint spaces***
e) Slow progression

Q11) Following type of fibers are predominant in cartilage:
a) collagen type 1***
b) collagen type II***
c) collagen type III
d) collagen type IV
e) reticular fibers

Q12) Regarding diagnosis of rheumatoid arthritis which of the following is not true
a) Serum uric acid***
b) X-ray
c) MRI
d) Color Doppler
e) High frequency Transducers

Q13) Criteria of Rheumatoid Arthritis include
a) Involvement of 1 large joint give 0 point
b) Involvement of 2-10 large joint give 1 point
c) Involvement of 1-3 small joint give 2 points
d) Involvement of 4-10 small joint give 3 points
e) Involvement of more than 8 small joint give 7 points***
Q14) Types of stimulus include following except
a) Electrical
b) Mechanical
c) Thermal
d) Chemical
e) Non electrical –magnetic***

Q15) Which of the following is not the Function of muscles
a) Inability to shorten with force***
b) Produce movements
c) Maintain posture
d) Stabilize joints
e) Generate heat

Q16) Regarding contractions of muscles
a) In Isotonic Contractions myofilaments are able to slide past each other during contractions
b) In Isometric Contractions tension in the muscle increases
c) In Isotonic Contractions there is muscle shortening
d) In Isometric Contractions tension there is muscle inability to shorten
e) In Isotonic Contractions there is muscle lengthening***
Q17) Which neuron is present in spinal and cranial ganglia?
   a) Unipolar
   b) Bipolar
   c) Multipolar
   d) Pseudounipolar.***
   e) Pseudopolar.

Q18) Nerve signals are transmitted by?
   a) Neurotransmitter.
   b) Transport protein.
   c) Action potentials.***
   d) Neuroglia.
   e) Epinephrine.

Q20) Action potential transmitted in?
   a) In one direction only.
   b) In both directions in a nerve fiber.***
   c) In forward direction only.
   d) In backward direction.
   e) None of above.

Q21) Regarding osteoarthritis, following is not correct:
   a) Heberden nodes are common in female
   b) First tarsometatarsal joints of feet are commonly affected
   c) Morning stiffness is one of feature of OA
   d) Deep achy pain worsening with use
   e) OA is common in young age***
Q22) Osteoporosis is a disease of:
   a) young adults
   b) children
   c) senility***
   d) Females only
   e) Married women

Q23) Regarding ossification of bones at the time of birth, following is false:
   a) Diaphysis of bone is completely ossified
   b) Epiphysis remains cartilaginous
   c) Shortly ossification centers appear in epiphysis
   d) Temporarily the cartilaginous plate remains in between epiphysis and diaphysis
   e) Epiphyseal plate in small bones is present on both extremities ***

Q24) Limb bud appears from ventro lateral body wall in following week:
   a) 3rd week
   b) 5th week ***
   c) 7th week
   d) 9th week
   e) 11th week

Q25) Joints begin to develop during following week:
   a) 6th week ***
   b) 8th week
   c) 10th week
   d) 12th week
   e) 13th week
Q26) which of the following is not the recognizable zone of epiphyseal plate:
   a) zone of reserve cartilage
   b) zone of maturation and hypertrophy
   c) zone of calcification
   d) zone of ossification
   e) zone of regression ***

Q27) At what age, the rate of mitosis decreases in zone of proliferation of epiphyseal plate:
   a) 20\textsuperscript{th} year***
   b) 17\textsuperscript{th} year
   c) 26\textsuperscript{th} year
   d) 29\textsuperscript{th} year
   e) 23\textsuperscript{rd} year

Q28) In the treatment of Rehumatoid arthritis incorrect is:
   a) Most of the gold salts are given parenterally
   b) Azathioprine can be given
   c) The beneficial effects of DMARD therapy usually appear after 6 weeks to 6 months
   d) Chloroquine is a chelating agent***
   e) Sulfasalazine is also used
Q29) In osteoporosis true is
a) There are pseudofractures
b) Loss of height & stability of vertebral column***
c) Pseudofractures of femoral neck, wrists, vertebrae are common
d) Radiographic determination of bone loss is evident when the loss of bone is 100%.
e) More pronounced in males

Q30) Primarily osteoporosis is due to:
a) Hyperparathyroidism
b) Hyperthyroidism
c) Idiopathic***
d) Hypothyroidism
e) Hypogonadism

Q31) Regarding Acetylcholine following is incorrect
a) synthesized from acetyl-CoA and choline and is stored in synaptic vesicles
b) There are nicotinic Ach receptor
c) There are muscarinic ACh receptors
d) The ionotrophic receptors influence the cAMP level in the postsynaptic cells***
e) Ionotrophic receptors are ligand-gated ion channels

Q32) Nerve signals are transmitted by?
a) Neurotransmitter.
b) Transport protein.
c) Action potentials.***
d) Neuroglia.
e) Epinephrine.
Q33) Which nervous system is voluntary?

a) Central nervous system.
b) Autonomic nervous system
c) Parasympathetic
d) Sympathetic
e) Somatic nervous system.***

Q34) During synaptic excitation?

a) The membrane potential of the post-synaptic cell hyperpolarizes.

b) The epsps are all or none in nature.

c) The EPSPs can summate.***

d) After an EPSP the post synaptic cell passes through a refractory period.

e) Resting membrane potential occurs.

Q35) The velocity of action potential propagation?

a) Is independent of an axon’s diameter.
b) Depends on the thickness of the myelin around the axon.***
c) Depends on the availability of neurotransmitter.
d) Will be unaffected if the axon becomes demyelinated.
e) Is fastest in unmyelinated axons.
Q36) Which of these is not a feature of rheumatoid arthritis?
   a) Swollen joints
   b) Painful joints
   c) Morning stiffness
   d) Headache
   e) Weight loss.

Q37) What is true regarding the prevalence of rheumatoid arthritis?
   a) More common in males but difference is less in younger age group
   b) More common in females but difference reduces in older age group.
   c) More common in females but difference is less in younger age group
   d) More common in males but difference reduces in older age group
   e) More common in males but difference is less in younger age group

Q38) Rheumatoid factors are autoantibodies found in many individuals. Their importance in rheumatoid arthritis is as a.
   a) Treatment.
   b) Screening factor
   c) Prognostic factor
   d) Diagnostic factor
   e) None of the above
Q39) The interior of the cell negative Typically?

a) -30Mv.
b) -70Mv***
c) -98Mv
d) 120Mv.
e) 110Mv.

Q40) Immunosuppressive therapy for rheumatoid arthritis is associated with serious side effects except:

a) Bone marrow suppression
b) GI disturbances
c) Increased risk of infection
d) Nephrotoxicity
e) Otoxicity***

THANK YOU