

श्री चित्रा तिरुवाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, तिरुवनंतपुरम् -11 SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY, THIRUVANANTHAPURAM—695 011

ENTRANCE EXAMINATION: ACADEMIC SESSION JANUARY 2020

PROGRAM: DM Neurology (General Medicine)

Time: 90 minutes

Max. Marks: 100

(Select the most appropriate answer)
(There are no negative marks for wrong answers)

- 1. The following situations suggest paradoxical embolism as cause of stroke except
 - a) Patient who had a recent major surgery
 - b) Sudden onset of stroke during straining at stool.
 - c) Pulmonary embolization occurring before or after stroke
 - d) Patient is less than 65 years of age
- 2. CADASIL is caused by a mutation of the notch 3 gene on
 - a) Chromosome 19
 - b) Chromosome 17
 - c) Chromosome 6
 - d) Chromosome 20
- 3. The following are features of mycotic aneurysm except
 - a) Mycotic aneurysms are often multiple
 - b) They usually develop in the basal arteries of circle of Willis
 - c) These aneurysm resolve with effective antibiotic treatment
 - d) Accessible aneurysm may require surgical treatment
- 4. The first direct oral anticoagulant drug to be licensed for use is
 - a) Dabigatran
 - b) Apixiban
 - c) Rivaroxaban
 - d) Edoxaban

- 5. HAS-BLED score includes the following except
 - a) Hypertension
 - b) Labile INR
 - c) Diabetes Mellitus
 - d) Concomitant Aspirin or NSAID
- 6. The plasma half-life of alteplase is
 - a) 30 minutes
 - b) 5 minutes
 - c) 45minutes
 - d) 15 minutes
- 7. Which one of the following clinical signs in a young patient strongly suggests the diagnosis of multiple sclerosis?
 - a) Acquired jerk nystagmus
 - b) Downgaze palsy
 - c) Rebound nystagmus
 - d) Bilateral internuclear ophthalmoplegia
- 8. A previously normal 3-year-old boy presents with language regression over the past 3 months. Video-EEG monitoring revealed left Centro temporal spikes, very frequent in sleep and rare in wakefulness, as well as focal slowing. Which of the following is the most likely diagnosis?
 - a) Autistic regression
 - b) Landau-Kleffner syndrome
 - c) Continuous spikes and waves during slow wave sleep syndrome
 - d) Rett syndrome
- 9. A 7-month-old infant is brought to his pediatrician for evaluation of recurrent episodes of head drops with simultaneous arm extension, associated with postictal vomiting and crying. These always occur 30 to 45 minutes after feeding. He had two brief febrile seizures 1 month and 2 weeks prior to this admission, each of which lasted 2 minutes and was bilateral and symmetric. Neurologically this is a normal infant. Which is the most likely diagnosis?
 - a) Severe myoclonic epilepsy of infancy
 - b) Complex febrile seizures
 - c) Myoclonic astatic epilepsy
 - d) Sandifer syndrome
- 10. The presence of a focal structural lesion is least likely in an otherwise normal child with epilepsy who has:
 - a) Brief losses of consciousness with EEG showing generalized 3-Hz spike-wave discharges
 - b) Frequent tonic-clonic convulsions
 - c) Recurrent paresthesias
 - d) Recurrent myoclonic seizures
- 11. A 4-month-old boy has exhibited generalized hypotonia and weakness since birth. He also has scoliosis and slow pupillary responses to light. Which of the following conditions is the most likely diagnosis?
 - a) Neonatal myasthenia

b)	congenital myasthenia syndrome
c)	myasthenia gravis
•	drug induced myasthenia
12. Lik	elihood of a disease associated genotype to express a specific disease phenotype is called
	Expressivity
	Penetrance
-	Anticipation
	Relative risk
12 \\	hich of the following disorder is inherited as Autosomal dominant disorder?
	Friedrich's ataxia
•	Phenylketonuria
-	Huntington's disease
•	Fabry's disease
•	
	inical exome sequencing is a genetic test used for identifying
a)	Point mutations
b)	Non coding variants
c)	Copy number variations
d)	Repeat expansions
4 F 1 +	iterferon beta used in preventing relapses in Multiple Sclerosis acts by
15. ii a)	Decreasing production of IL-10, thereby up regulating this cens.
b)	t at an aftil 12 thoreby inhibiting TH1 production
c)	Down regulated VCAM expression
d)	te al
,	·
16. li	HIV infection of brain ,protein can bind directly to CXCR4 on neurons, resulting in
n	euronal signaling and apoptosis.
a)	HIV protein gp120
b	SDF-1
c)	
d	MMP
	Which of the following gastrointestinal peptide has an effect on feeding behavior and
17.\	atiety thru its effect on nervous system?
a	Vasoactive intestinal peptide
b	
	Cholecystokinin
) Secretin
	,
18.	REM behavioural disorder can be often been secondary to which among the following
	neurodegenerative disorder or may precede its offset by years.
) Alzheimer's disease
) Frontotemporal dementia
_	A parkingon's disease

d) Huntington's disease

19. Wh	ich among the following medication is effective for both day time sleepiness and
	aplexy in Narcolepsy?
a) l	Methyl phenidate
b) (Clomipramine
c)	Modafinil
d) :	Sodium oxybate
	- t p
	edrug of choice for treatment of Paroxysmal Kinesigenic Dyskinesia is:
•	Carbamazepine
•	Clonazepam
c)	Acetazolamide
d)	Levodopa
	stations in the Epsilon Sarcoglycan gene result in which of the following conditions?
21. Mu	Miyoshi Myopathy
-	Laing Distal Myopathy
	Myoclonus Dystonia
d)	Segawa Syndrome
22 40	eruloplasminemia is associated with accumulation of which of the following elements in
	e brain?
•	Manganese
-	Iron
•	Zinc
•	Copper
23. Pre	esence of which among the following clinical features would help to differentiate
Se	rotonin Syndrome from Neuroleptic Malignant Syndrome?
a)	Altered mental state
b)	Myoclonus :
c)	Tachycardia
d)	Rigidity
•	
24. Hy	ponatremia and "facio-brachial dystonic seizures" are characteristic of which of the
fo	Howing conditions?
a)	Anti NMDA receptor autoimmune encephalitis
b)	LGI1 antibody associated limbic encephalitis
c)	Anti-amphiphysin antibody associated encephalomyelitis
d)	Anti-Ri associated paraneoplastic encephalitis
	of Parkinson's dispass is a
25. Sa	finamide used in the treatment of Parkinson's disease is a
a)	Catechol-O-Methyl Transferase Inhibitor
b)	Dopamine agonist
c)	Monoamine Oxidase-B Inhibitor
d)	Anti-apoptotic agent

- 26. Development of which among the following symptoms post-operatively, attributable to the procedure, was a setback noted in fetal nigral cell transplantation studies in Parkinson's disease?
 - a) Depression and suicide
 - b) Impulse control disorders
 - c) Dyskinesia
 - d) Freezing of gait
- 27. What is the typical tremor frequency in Orthostatic Tremor?
 - a) 2-4 Hz
 - b) 5-8 Hz
 - c) 10-14 Hz
 - d) 14-18 Hz
- 28. Hoehn and Yahr staging is used to assess the severity of which of the following diseases?
 - a) Parkinson's disease
 - b) Alzheimer's disease
 - c) Huntington's disease
 - d) Amyotrophic Lateral sclerosis
- 29. Monocular temporal crescent results from
 - a) Ipsilateral Chiasmatic lesions
 - b) Ipsilateral Optic nerve lesions
 - c) Contralateral calcarine lesions
 - d) Contralateral temporal lobe lesions
- 30. Lesions in which of the following areas is likely to lead to a pseudo thalamic sensory syndrome:
 - a) Medial lemniscal lesions
 - b) Posterior-superior parietal lesions
 - c) Parietal opercular lesions
 - d) Midbrain tegmental lesions
- 31. Mutations of the microtubule-associated protein tau gene causes a phenotype resembling which of the following neuro-degenerative diseases?
 - a) CJD
 - b) Fatal familial insomnia
 - c) Huntington disease
 - d) Progressive supranuclear palsy
- 32. All of the following symptoms are associated with dysfunction in the anterior cingulate circuit **except**
 - a) Obsessive-compulsive disorder
 - b) Apathy
 - c) Akinetic mutism
 - d) Poor response inhibition
- 33. All of the following statements are true with regard to memory consolidation except:
 - a) Frontal lobe is the 'filing clerk' of the memory system

- b) Medial temporal lobe is the 'recent memory filing cabinet' for consolidation
- c) Injection of protein synthesis inhibitors into the hippocampus can enhance memory consolidation
- d) Activation of the CREB gene in the Aplysia model is necessary for long-term facilitation
- 34. Which of the following sign is noted with infarcts of thalamic paramedian or deep interpeduncular profundus artery?
 - a) Hemi neglect
 - b) Hemi ataxia
 - c) Loss of convergence &pupillary reflexes
 - d) Loss of pain, temperature and vibration sense
- 35. Which of the following statements is true with regard to neurocysticercosis (NCC):
 - a) Spinal cord cysticercosis is the most prevalent form
 - b) Extraparenchymal disease occurs in one-third of patients with NCC
 - c) Increase intracranial pressure does not occur with the racemose form of NCC
 - d) Most pediatric patients have a single transitional cyst that does not resolve spontaneously
- 36. The primary, secondary and tertiary action of the inferior rectus muscle is
 - a) Intorsion, depression and adduction respectively
 - b) Depression, intorsion and abduction respectively
 - c) Depression, extorsion and abduction respectively
 - d) Depression, extorsion and adduction respectively
- 37. Which of the following is NOT an eye sign in myasthenia gravis?
 - a) Cogan's lid twitch
 - b) Peek sign
 - c) Enhanced ptosis
 - d) Unilateral ptosis and contralateral eyelid retraction
- 38. All of the following cause primarily a sensory neuropathy except
 - a) acromegaly
 - b) critical illness
 - c) HIV infection
 - d) hypothyroidism
- 39. True about Fingolimod is
 - a) monoclonal antibody
 - b) dose is 50-100mg daily
 - c) given subcutaneously
 - d) inhibits lymphocyte trafficking to CNS
- 40. Memantine acts by
 - a) acetyl cholinesterase inhibition
 - b) blocking overexcited NMDA receptors
 - c) GABA_B receptor agonistic action
 - d) all of the above

d) α secretase product 42. Parkinson's disease - Dementia is characterized by primary involvement of a) executive function and attention b) episodic memory and language c) calculations and visuo-spatial construction d) semantics 43. Endoscopic trans axillary T2 sympathectomy is done for a) excess palpitation b) primary hyperhidrosis c) excess lacrimation d) sialorrhoea 44. The type of dementia commonly associated with amyotrophic lateral sclerosis is a) Diffuse Lewy Body dementia b) Frontotemporal dementia c) Alzheimer's disease d) Cerebral amyloid angiopathy 45. In Charcot-Marie -Tooth disease type1 (CMT 1) the motor conduction velocities are a) < 38 meter / second in upper limbs b) >38 meter / second in upper limbs c) < 38 meter / second in lower limbs d) >38 meter / second in lower limbs 46. The Dix- Hallpike test is used for the diagnosis of which of the following conditions a) Posterior semicircular canal BPPV b) Horizontal semicircular canal BPPV c) Vestibular neuronitis d) Arnold Chiari malformation 47. Which of the following medicine is available as a nasal formulation for acute attack of migraine? a) Rizatriptan b) Zolmitriptan c) Eletriptan d) Almotriptan 48. Which among the following mitochondrial diseases is NOT commonly associated with ragged red fibers in muscle biopsy? a) Mitochondrial encephalomyopathy, lactic acidosis, and stroke-like episodes (MELAS) b) Kearns-Sayre syndrome (KSS) c) Mitochondrial neurogastrointestinal encephalomyopathy (MNGIE)

41. Excess of which product is the key initiator of cellular damage in Alzheimer's disease

a) Aβ40b) P3c) Aβ42

d) Neuropathy, ataxia, retinitis pigmentosa syndrome (NARP) 49. Which of the following infections is noted to have a strong association with incidence of multiple sclerosis? a) Human herpes virus 7 b) Varicella zoster c) Epstein Barr virus d) Coxsackie B virus 50. The eye movement abnormality seen in Parinaud syndrome a) Ocular bobbing b) Convergent retraction nystagmus c) Opsoclonus d) Reverse bobbing 51. Which of the following statements about sickle cell anemia in pediatric population is TRUE? a) Commonest neurological presentation is Posterior reversible encephalopathy syndrome b) Salmonella septicemia is the most common infectious complication seen in this condition c) Most common reason for hospitalization in sickle cell anemia is due to pulmonary complications d) Trans cranial Doppler is a useful tool for predicting risk of ischemic stroke in patients with sickle cell anemia. 52. Which chemotherapeutic agent can produce sensory neural hearing loss as a side effect? a) Busulfan b) Vincristine c) Cisplatin d) Cyclophosphamide 53. What is the approximate FiO2 (Fraction of Inspired Oxygen in percentage) during use of a nasal cannula in an older child when the nasal cannula flow rate is kept at 3 Liters / minute? a) 21% b) 30% c) 40% d) 50% 54. Which of the following may be a direct consequence of severe magnesium deficiency? a) Hypophosphatemia b) Hypercalcemia c) Hypokalemia d) Shortening of the QT/QT interval 55. Neurofibromatosis type I is associated with which mutation? a) 9q34 b) 3p25-25 c) 17q11.2 d) 22q12.2

- 56. Select the most appropriate statement regarding distinguishing Cardiogenic from Non-Cardiogenic Pulmonary edema?
 - a) Prominent rales and wheezes on chest auscultation right from early stages suggest non-cardiogenic pulmonary edema.
 - b) Interstitial thickening and predominant perihilar distribution of alveolar infiltrates suggests non-cardiogenic rather than cardiogenic pulmonary edema
 - c) Pleural effusions are more common in non-cardiogenic pulmonary edema when compared to cardiogenic pulmonary edema
 - d) Ventilation perfusion mismatch is largely responsible for hypoxemia in Cardiogenic pulmonary edema, unlike non-cardiogenic pulmonary edema where other factors operate
- 57. Which of the following is indicative of central diabetes insipidus
 - a) Plasma osmolality <290 mosmol/kg
 - b) High urine osmolality
 - c) Reduction in body weight by of child by >5% from starting weight
 - d) Absence of rise in urine specific gravity following DDAVP
- 58. A 7-year-old boy is referred because of digestive problems. He often experiences severe abdominal cramps after eating a high fat meal. He is worked up and diagnosed with a genetic defect resulting in a deficiency of lipoprotein lipase. Which of the following substances would most likely be elevated in this patient's plasma following fatty meal?
 - a) Albumin-bound free fatty acids
 - b) Chylomicrons
 - c) LDL
 - d) Unesterified fatty acids
- 59. Antibiotics used in MDR-TB which can cause optic neuritis
 - a) Linezolid
 - b) Isoniazid
 - c) Pyrazinamide
 - d) Ofloxacin
- 60. Which bacterial meningitis can be contracted by ingestion of contaminated food products?
 - a) Haemophilus influenza
 - b) Listeria monocytogenes
 - c) Neisseria meningitidis
 - d) Staphylococcus aureus
- 61. An 8 year old girl presented with a diffuse erythematous rash, fever, severe headache and is found to have meningitis due to a particular organism. She and her siblings had never received any childhood vaccines because their parents were concerned about reports linking vaccination to autism. Which of the following treatments should be administered to the patients asymptomatic siblings?
 - a) Ampicillin
 - b) Dexamethasone
 - c) rifampicin
 - d) vaccine to the detected organism

- 62. Which of the following is the most common neurologic manifestation of Zika virus infection in adults?
 - a) encephalitis
 - b) Guillain Barre syndrome
 - c) meningitis
 - d) transverse myelitis
- 63. Which of the following is recommended as the primary test for rapid diagnosis of cryptococcal meningitis
 - a) cryptococcal antigen in CSF
 - b) cryptococcal antigen in serum
 - c) fungal culture in CSF
 - d) india ink microscopy in CSF
- 64. In a patient with chronic meningitis, the presence of (1,2) beta-Dglucan in the CSF imples that the underlying infectious agent is which of the following?
 - a) bacterial
 - b) carcinomatous
 - c) fungal
 - d) protozoal
- 65. A 33 year old woman with acquired immunodeficiency syndrome presents with a 3 weeks course of progressive weakness, numbness and pain in both lowere limbs. Examination is consistent with a lumbo sacral polyradiculopathy. Which of the following viral infections is most likely responsible for this presentation?
 - a) A)cytomegalovirus
 - b) B)Epstein Barr virus
 - c) C)Human herpes virus 6
 - d) D)human immounodeficiency virus
- 66. HHV 6 most often causes which of the following clinical syndromes?
 - a) acute inflammatory demyelinating polyradiculoneuropathy (AIDP)
 - b) chronic lymphocytic inflammation with pontine perivascular enhancement responsive to steroids
 - c) dural venous sinus thrombosis
 - d) post transplantation acute limbic encephalitis
- 67. Which of the following disease process is the most common cause of bilateral facial nerve palsy in children?
 - a) herpes simplex virus infection
 - b) neuroborreliosis
 - c) neurosarcoidosis
 - d) varicella zoster virus infection
- 68. An enzyme linked immunoelectrotransfer blot of a sample from which of the following sources is the most sensitive and specific test for past or present neurocysticercosis?
 - a) CSF
 - b) saliva

- c) serum
- d) stool
- 69. A 72 year old man is seen in the emergency, 1 day after the onset of progressive left arm and leg weakness. 3 days earlier he had a febrile illness with headache, nausea and myalgia.examination shows flaccid weakness of the proximal muscles on the left with absent deep tendon reflexes. Brain MRI is normal and spinal cord MRI shows T2 hyperinetnsity in the grey matter of the anterior spinal cord. Infection with which of the following arboviruses is most likely?
 - a) dengue virus
 - b) West Nile virus
 - c) St Louis encephalitis
 - d) Zika virus
- 70. Which of the following medicines has been most commonly implicated in the development of non infectious chronic meningitis?
 - a) acetaminophen
 - b) acyclovir
 - c) ibuprofen
 - d) beta lactam antibiotics
- 71. Abductor pollucis Brevis is a thenar muscle
 - a) Innervated by recurrent branch of median nerve with root value of C8 & T1
 - b) Innervated by deep branch of ulnar nerve with root value of C8 & T1
 - c) Innervated by recurrent branch of median nerve with root value of C4 & C5
 - d) Is always spared in carpal tunnel syndrome as the nerve exits the median nerve before it enters the carpal tunnel
- 72. Medial Winging of scapula is due to
 - a) weakness of serratus anterior which is innervated by long thoracic nerve
 - b) weakness of serratus anterior which is innervated by thoracodorsal nerve
 - c) weakness of latissiumus dorsi which is innervated by long thoracic nerve
 - d) weakness of latissiumus dorsi which is innervated by thoracodorsal nerve
- 73. Quadriceps femoris muscle
 - a) is innervated by L2, L3 and L4 roots through the femoral nerve
 - b) Is innervated by L1 and L2 roots through femoral nerve
 - c) Is innervated by L2, L3 and L4 roots through Obturator nerve
 - d) is innervated by L5 and S1 roots through the femoral nerve
- 74. Extensor digitorum brevis
 - a) is innervated by L4, L5 and S1 roots through the deep peroneal nerve
 - b) is innervated by L4, L5 and S1 roots through the superficial peroneal nerve
 - c) is innervated by L4, L5 and S1 roots through the tibial nerve
 - d) is innervated by L4, L5 and S1 roots through the safeneous nerve
- 75. Klinefelter's syndrome is a chromosomal abnormality associated with increased predisposition to develop which malignancy?
 - a) Lymphoproliferative disorders

- b) Breast cancer
- c) Wilm's tumor
- d) Soft tissue sarcoma
- 76. The region of the kidney with the highest vulnerability to ischemic injury is
 - a) Renal cortex
 - b) Outer medulla
 - c) Inner medulla
 - d) Renal interstitium
- 77. Which among the following statements is FALSE regarding antibiotic induced renal injury?
 - a) Aminoglycosides commonly produce oliguric renal failure
 - b) Amphotericin B nephrotoxicity produces polyuria and non-anion gap metabolic acidosis
 - c) Acyclovir induced renal injury occurs due to tubular obstruction
 - d) Interstitial injury occurs with penicillins and cephalosporins
- 78. Creatinine Clearance = [[140 age(yr)]*X]/[72*serum Cr(mg/dL)] (multiply by 0.85 for women) where X is equal to
 - a) weight(kg)
 - b) Height in Meters
 - c) Height in centimeters
 - d) Urine output in 24 hour (Liters)
- 79. What is the commonest cause of mortality in end stage renal disease?
 - a) Cardiovascular disease
 - b) Sepsis
 - c) Azotemia and hyperkalemia
 - d) Complications of dialysis
- 80. Which of the following statements is TRUE regarding renal angiomyolipomas in tuberous sclerosis?
 - a) They are commonly solitary
 - b) Risk of bleeding is inversely related to the size of the tumour
 - c) There is no increased risk of renal cell carcinoma
 - d) Surgical removal is indicated when the size exceeds 4 cm diameter
- 81. Which among the following drugs is effective in the treatment of lithium induced nephrogenic diabetes insipidus?
 - a) Vasopressin
 - b) Ofloxacin
 - c) Amiloride
 - d) Telmisartan
- 82. All the following metabolic disorders can lead to chronic kidney disease EXCEPT
 - a) Hypokalemia
 - b) Hypercalcemia
 - c) Hyperuricemia
 - d) Hypophosphatemia

- 83. Acute kidney injury is defined as
 - a) Doubling of serum creatinine in 7 days
 - b) Reduction in urine output to less than 0.3 ml/kg/hour for more than 12 hours
 - c) Rise of serum creatinine by at least 0.3 mg/dl from baseline in 48 hours
 - d) Rise of serum creatinine by at least 0.4 mg/dl from baseline in 24 hours
- 84. Which is the most common cause of cancer death-worldwide?
 - a) Leukemia
 - b) Lung cancer
 - c) Prostatic carcinoma
 - d) Breast cancer
- 85. Molecular target of anticancer drug Everolimus is
 - a) Epidermal growth factor receptor(EGFR)
 - b) Mammalian target of Rapamycin(m TOR)
 - c) Vascular endothelial growth factor(VEGF)
 - d) CD 20
- 86. Infection associated mortality in patients undergoing treatment of cancer has come down in the past 2 decades due to
 - a) Practice of initiating appropriate antibiotics as per culture sensitivity reports
 - b) Early administration of Granulocyte -colony stimulating factor(G-CSF) in neutropenic patients
 - c) Practice of using early empirical antibiotic therapy in febrile neutropenic patients.
 - d) Early empirical antifungal therapy along with broad spectrum antibiotics in febrile neutropenic patients.
- 87. Which 2 cytokeratin staining in adenocarcinoma is useful in identifying source of carcinoma with unknown primary?
 - a) CK 7 and CK 20
 - b) CK 7 and CK 9
 - c) CK 8 and CK 20
 - d) CK 12 and CK 22
- 88. Which among the following ectopic hormone is commonly implicated in development of hypercalcemia of malignancy?
 - a) Calcitonin
 - b) Parathormone related peptide PTH-rp
 - c) 24,25 Dihydroxy Vitamin D3
 - d) Prostaglandin F2
- 89. Which among the following lymphoma is associated with best survival with treatment at 5 years?
 - a) Mantle cell lymphoma
 - b) B-cell CLL
 - c) Burkitt's lymphoma
 - d) Anaplastic T large cell lymphoma

- 90. Increased expression of "Transient Receptor Potential Vanilloid 1" (TRPV1) receptor is seen in patients with:
 - a) Neurogenic Pulmonary oedema
 - b) High altitude pulmonary edema
 - c) Chronic Cough
 - d) Idiopathic Pulmonary Fibrosis
- 91. The "reversed halo sign" or "atoll sign" is seen in High Resolution CT scan of the chest in:
 - a. Cryptogenic Organizing Pneumonia
 - b. Interstitial Lung Disease associated with Rheumatoid arthritis
 - c. Hamman Rich Syndrome
 - d. Respiratory bronchiolitis with Interstitial Lung Disease
- 92. Roflumilast, used in the treatment of Chronic Obstructive Pulmonary Disease, inhibits which of the following enzymes?
 - a) Thromboxane A Synthase
 - b) Xanthine oxidase
 - c) Cyclo-oxigenase
 - d) Phosphodiesterase
- 93. Hypoperfusion of respiratory muscles in patients in shock results in:
 - a) Type I Respiratory Failure
 - b) Type II Respiratory Failure
 - c) Type III Respiratory Failure
 - d) Type IV Respiratory Failure
- 94. Insulin binds to a 400 kDa glycoprotein which sits on the cell membrane of many cells and exerts much of its peripiheral effects through action at its receptor. The expression of which GLUT is upregulated by insulin binding at this receptor site?
 - a) GLUT-1
 - b) GLUT-2
 - c) GLUT-3
 - d) GLUT-4
- 95. A 21 year old with a weight of 35 kg presents with global weakness, lethargy and numbness of her extremities, which has worsened over the past 6 weeks. Blood testing reveals hypokalemia, raised chloride levels, low serum bicarbonate and pH of 7.31. Which of the following diagnoses seems most likely in this case?
 - a) Bartter's syndrome
 - b) Diuretic abuse
 - c) Gitleman's syndrome
 - d) Laxative abuse
- 96. Causes of hypoadrenalism include:
 - a) Hughe's syndrome
 - b) MEN type 2 a
 - c) Pendered's syndrome
 - d) McArdles' syndrome

- 97. Which of the following conditions is MOST likely to cause hyperthyroidism associated with high thyroidal radioactive iodine uptake?
 - a) Choriocarcinoma
 - b) Subacute thyroiditis
 - c) Exogenous ingestion of L-thyroxine
 - d) Recent intravenous pyelography
- 98. In which of the following porphyria syndromes may the diagnosis be made on the basis of a positive urinary porphobilinogen?
 - a) Intermittent acute porphyria
 - b) Congenital erythropoietic porphyria
 - c) Porphyria cutanea tarda
 - d) X-linked sideroblastic anemia
- 99. Anovulatory cycles are characterized by which of the following characteristics?
 - a) Elevated levels of plasma progesterone
 - b) Dysmenorrhea
 - c) A shortened luteal phase
 - d) Lack of a normal LH and FSH surge
- 100. Which of the following statements about Gestational diabetes mellitus is TRUE?
 - a) Recommended fasting sugar above which insulin therapy shold be initiated is 126mg/dl
 - b) >50% of women go on to develop diabetes mellitus within 2 years of delivery.
 - c) Exercise, dietary modification and Metformin can delay development of diabetes
 - d) <10% develop diabetes in future.

