SURGERY
JUNE PAPER
2013
FCPS PART 1
1. Which artery does not form the blood supply of SCAPL
   (A) Maxillary
   (B) Superficial Temporal
   (C) Occipital
   (D) Supratrochlear
   (E) Supraorbital

2. Location of Sinoatrial node
   (A) Auricle
   (B) Superior portion of sulcus terminalis
   (C) Inferior part of crista terminalis
   (D) Interatrial septum
   (E) Tricuspid valve

3. Mechanism of action of Propyl Thio Uracil (PTU), antithyroid drug
   (A) Inhibits iodide pump
   (B) Blocks the synthesis of thyroid hormone
   (C) Blocks the synthesis of thyroglobulin
   (D) Inhibits hormone release
   (E) Controls hypothalamic temperature set point

4. The most important embryological structure regarding the formation of heart, responsible for separating the aorta and pulmonary artery and also for the division of various heart chambers is,
   (A) Conus septum
   (B) Endocardial cushion
   (C) Aorticopulmonary septum
   (D) Bulbous cordis
   (E) Aortic vestibule
5. A person after the thorn prick presents in the emergency with the localized abscess of left leg. The organism responsible for abscess most likely is
(A) Pseudomonas aeruginosa
(B) Staphylococcus aureus
(C) E. coli
(D) Streptococcus pyogenes
(E) Staphylococcus epidermidis

6. A person has weakness in adduction and medial rotation of arm. Muscle which can perform these actions is most likely
(A) Teres major
(B) Teres minor
(C) Supraspinatus
(D) Subscapularis
(E) Latissimus dorsi

7. Pre-ganglionic autonomic neurons contain which type of fibers
(A) A alpha
(B) A beta
(C) A delta
(D) Beta
(E) C fibers

8. Which statement regarding medulla oblongata is correct
(A) Olives are situated most medially
(B) Upper portion of medulla has relation with fourth ventricle posteriorly
(C) Located between pons and cerebellum
(D) Pyramids cross above medulla
(E) None of them is correct
9. Zinc is important as essential element in
   (A) Carbonic anhydrase
   (B) Cellular oxidation
   (C) Glycolysis
   (D) Glycogenolysis
   (E) Ketogenesis

10. Drug of choice for Gas gangrene
    (A) Ciprofloxacin
    (B) Penicillin
    (C) Aminoglycosides
    (D) Cefhalosporins
    (E) Macrolides

11. Which of the following is nucleotide
    (A) Adenine
    (B) Guanine
    (C) Adenosine
    (D) Ribose 5 Phosphate
    (E) Inosine

12. The slowest developing carcinoma of thyroid is
    (A) Papillary
    (B) Follicular
    (C) Anaplastic
    (D) Medullary
    (E) Lymphoma
13. The structure most likely to be damaged while making incision on Mc Burney point

(A) Ilioinguinal nerve

(B) Genitofemoral nerve

(C) Iliohypogastric nerve

(D) Deep circumflex femoral artery

(E) None of them

14. Diphtheria toxin has most serious effect on

(A) Nerves

(B) Heart

(C) Vessels

(D) Throat

(E) None

15. Which one of the following tissues is not found in teratoma

(A) Muscle

(B) Salivary gland

(C) Fat

(D) Teeth

(E) Hair

16. A 32 year old man presents in the emergency with the bleeding from the left lower lip. At which site you will compress the face to stop bleeding

(A) Angle of left side of mouth

(B) Angles of both sides of mouth

(C) Below the left lower lip

(D) Over the left chin

(E) None of the above
17. After amputation, a patient presents to you with a painful firm nodule over his left leg. On biopsy nerve cells are seen to be arranged in haphazard manner. Your diagnosis is

(A) Ganglion  
(B) Neuroma  
(C) Ganglioneuroma  
(D) Ganglioma  
(E) Neurofibroma

18. During forced expiration, the most likely statement regarding the physiology of respiratory system

(A) Bronchi collapse during expiration  
(B) There is dynamic collapse of respiratory bronchioles due to thin walls  
(C) The volume after forced expiration is called tidal volume  
(D) Vital capacity is the sum of inspiratory plus expiratory reserve volumes  
(E) None of the above is correct

19. Radiations usually cause cancer after

(A) 1 year  
(B) 2 years  
(C) 5 years  
(D) 5-10 years  
(E) More than 10 years

20. During the late stages of pregnancy the maternal blood passes to the fetus via the following

(A) Syncytiotrophoblasts only  
(B) Cyto trophoblasts only  
(C) Fetal endothelium  
(D) Fetal endothelium + Cyto trophoblasts  
(E) Syncytiotrophoblasts and Cyto trophoblasts

21. Earthquake is
(A) Social crisis

(B) Situational crisis

(C) Emotional crisis

(D) Developmental crisis

(E) None of them

22. The hormone responsible for the brain development in fetal life

(A) Thyroid hormone

(B) Growth hormone

(C) ACTH

(D) Prolactin

(E) TSH

23. The differentiating feature of Kwashiorkor from Marasmus

(A) Muscle wasting is not present

(B) Pitting edema

(C) Fat loss

(D) None of them

24. Which is true regarding Resting Membrane Potential

(A) Depends upon equilibrium potential of K+

(B) Depends upon equilibrium potential of Na+

(C) Is achieved after threshold potential

(D) Is zero in most cases

(E) None of them is correct

25. Lipoproteins synthesized by the liver are poured first into which structure

(A) Biliary canaliculi

(B) Space of Diss
(C) Portan vein
(D) Hepatic sinusoids
(E) Hepatocytes

26. Urorectal septum divides cloaca into
(A) Anus and urinary bladder
(B) Anorectal canal and urogenital sinus
(C) Urachus and bladder
(D) Cloaca and bladder
(E) Rectum and anal canal

27. During the first minute of apnea the PCO2 raises up to
(A) 10 mmHg
(B) 12 mmHg
(C) 8 mmHg
(D) 4 mmHg
(E) 2 mmHg

28. Total number of vascular segments of kidney
(A) 4
(B) 5
(C) 6
(D) 7
(E) 8

29. A vessel is called arteriole when its size approaches
(A) 0.3 mm and just visible with the naked eye
(B) 0.5- 1.0 mm
(C) 1.0-2.0 mm
(D) 3.0-5.0 mm
(E) None of them

30. Which substance is released from sympathetic pre-synaptic neurons mainly
(A) Acetylcholine
(B) Epinephrine
(C) Nor epinephrine
(D) Dopamine

31. Post ganglionic sympathetic neurons are present in
(A) Thoracic spinal nerves
(B) Lumbar spinal nerves
(C) Cervical spinal nerves
(D) Lumbar spinal nerves
(E) Every spinal nerve

32. Which statement regarding CSF is correct
(A) Has cushion like effect
(B) Produced in blood brain barrier
(C) Absorbed in ventricles
(D) Derived from lymph
(E) None is correct

33. Which cell is not present in CNS
(A) Astrocyte
(B) Oligodandroyte
(C) Schwann cell
(D) Neuroglial cell
(E) Microglia
34. The lymphatic drainage from the upper and outer most quadrant is first to
(A) Central axillary
(B) Lateral axillary
(C) Medial axillary
(D) Apical axillary
(E) Posterior axillary
35. The substance which will cross blood brain barrier first
(A) CO
(B) CO2
(C) O2
(D) Blood
(E) None of them
36. Actinomycosis does not produce infection in
(A) Brain
(B) Bone
(C) Skin
(D) Sinus
(E) Soft tissue
37. Most common site of Anthrax infection
(A) Lung
(B) Skin
(C) Liver
(D) Intestine
(E) Nose
38. Buerger’s disease has the most important feature of
(A) Occurs in old age
(B) Common in smokers
(C) Associated with flaccid paralysis
(D) Also called thrombophlebitis obliterans
(E) A and B

39. The most common vascular mediator of acute inflammation
(A) Prostaglandin (PGI2)
(B) serotonin
(C) Substance P
(D) Lipoxins
(E) None of them

40. Correct statement regarding Frequency distribution
(A) Gives percentages of values
(B) Has importance only in demography
(C) Mean can be expressed with this
(D) Limited to a specific value
(E) All are true

41. The most sensitive indicator of diabetic nephropathy
(A) Albuminuria
(B) Raised BUN
(C) Glycosuria
(D) Hematuria
(E) Kenoneuria

42. Source of creatinine
(A) Fat
(B) Muscle
(C) Spleen
(D) Liver
(E) kidney

43. The most important clinical feature of pure water intoxication

(A) Edema
(B) Engorged neck vein
(C) Thirst
(D) Alert behavior
(E) Slow pulse

44. In a patient of pure water depletion, the fluid most likely to be administered

(A) Normal saline
(B) 5% Dextrose water
(C) Hypotonic saline
(D) Hypertonic saline
(E) 5% Dextrose saline

45. Slow pain is not transmitted via

(A) Lateral laminiscus
(B) Dorsal column
(C) Spinal cord fibers
(D) Substance P
(E) Any of them

46. A lady after surgery presents in the ward with the swollen legs bilaterally. DVT is suspected. The pathology is

(A) Endothelial injury
(B) Endothelial injury + Blood stasis
(C) Blood stasis

(D) Coagulopathy + Blood stasis

(E) Coagulopathy

47. The muscle forming the inferior relation with hip joint

(A) Piriformis

(B) Obturator externus

(C) Obturator internus

(D) Gemmilus inferior

(E) Quadratous femoris

48. Triglycerides are maximum in

(A) VLDL

(B) LDL

(C) Chylomicron

(D) HDL

(E) IDL

49. Anterior choroidal artery is branch of

(A) External carotid artery

(B) Internal carotid artery

(C) Anterior cerebral artery

(D) Middle cerebral artery

(E) Anterior communicating artery

50. Standard deviation means

(A) Difference of mean

(B) Difference of each value from mean

(C) Percentage of each value
51. The structure pass just posterior to the medial malleolus

(A) Posterior tibial artery

(B) Tibial nerve

(C) Tibialis posterior

(D) Flexor hallucis longus

52. Which part of brachial plexus is found on the borders of axilla

(A) Roots

(B) Divisions

(C) Cords

(D) Trunks

(E) Suprascapular nerve

53. Which is correct regarding parathyroid gland

(A) Superior parathyroid gland is supplied via superior thyroid artery

(B) Inferior parathyroid gland is supplied via superior thyroid artery

(C) Thymus develops with superior parathyroid gland

(D) Thymus develops with inferior parathyroid gland

(E) A and D

54. Parathyroid hormone may increase during pregnancy. Pick the correct mechanism

(A) Low levels of free serum calcium level

(B) Effect of estrogen in pregnancy

(C) Hypomagnesaemia

(D) Metabolic alkalosis

(E) May be any of them
55. Patient presents with hematuria and hemoptysis, the likelt diagnosis is
(A) Good pasture syndrome
(B) Lung abscess
(C) Nephrotic syndrome
(D) Wegener granuloma
(E) None of them

56. Regarding stomach the correct statement is
(A) It’s the most dilated part of GIT
(B) Its volume is 1 liter
(C) Is a retroperitoneal organ
(D) Supplied mainly via superior pancreaticoduodenal artery
(E) All of them are correct

57. Least likely statement regarding cardiogenic shock
(A) Hypovolemia
(B) Decreased cardiac contractility
(C) Decrease stroke volume
(D) Increase in HR
(E) Decrease BP

58. If the movement of glucose molecule across a membrane is dependent on concentration gradient, it’s an example of
(A) Facilitated diffusion
(B) Primary active transport
(C) Secondary active transport
(D) Simple diffusion

59. A child comes in the emergency with cough and respiratory obstruction. Emergency tracheostomy is planned. You will confirm the diagnosis with
60. Mechanism of action of aspirin
(A) Aggravates thromboxanes
(B) Activates platelets
(C) Stabilizes the vascular endothelium
(D) Irreversibly blocks COX
(E) All of them

61. Which is correct statement regarding the anaesthetic agents
(A) Thiopental decreases heart rate
(B) Ketamine is bronchodilator
(C) Thiopental increases heart rate
(D) Halothane is safe in CLD
(E) None of the is correct

62. Dependence does not develop to which one of the followings effects of opioids
(A) Pupillary constriction
(B) Pupillary dilatation
(C) Effect on CVS
(D) Respiratory depression
(E) Both C and D

63. Which is true regarding esophageal opening in diaphragm
(A) Located at T8 vertebral level
(B) Present in the left crus of diaphragm with a sling from right sided crus

(C) Transmits right phrenic nerve

(D) Present in right crus

(E) Can act as a sphincter

64. Which is example of secondary cartilaginous joint

(A) Inferior tibio fibular joint

(B) Costochondral joint

(C) Radio ulnar joint

(D) Pubic symphysis

(E) None of them

65. Lumbar puncture is done at which level

(A) L2- L3

(B) L4-L5

(C) S1-S2

(D) L5-S1

66. Which is correct statement regarding CSF picture in bacterial meningitis

(A) Protein count remains near normal

(B) Sugar is elevated

(C) Sugar count remains normal

(D) Neutrophils are the main cells visible

(E) None of them

67. GFR decreases as the result of

(A) Constriction of efferent arteriole

(B) Constriction of afferent arteriole

(C) Dilatation of afferent arteriole
68. Which structure doesn’t form the anterior relation of left kidney
(A) Stomach
(B) Spleen
(C) Rib
(D) Pancrease
(E) Colic flexure

69. Correct statement regarding Oogenesis
(A) First meiotic division starts during fetal life
(B) Graffian follicle contains primary oocyte
(C) Secondary meiotic division completes just before fertilization
(D) Adult ovary has columnar epithelium
(E) None of them is true

70. Vitamin K deficiency increases
(A) PT
(B) APTT
(C) Both
(D) None
(E) Platelet counr

71. Prothrombin times increases in all except
(A) Aspirin toxicity
(B) Functional platelets defect
(C) HS purpura
(D) None of them
(E) All of them

72. An old lady presents to your office with three month history of pallor, increased respiratory rate, mild to moderate edema. On investigations, creatinine is 3.8 mg/dl, urea is 180 mg/dl and Hb is 7.3 g/dl. The most likely cause in your opinion

(A) Acute renal failure
(B) CCF
(C) Erythropoietin deficiency
(D) Nephritic syndrome
(E) None of them

73. A child after valvular surgery presents with mucosal bleeding. His Hb is 6.8 mg/dl. The most likely diagnosis is

(A) Idiopathic
(B) Trauma
(C) Purpura
(D) Thrombocytopenia
(E) Hypersensitivity

74. Most important diagnostic feature of ileum on biopsy

(A) Brunners glands
(B) Langerhans cells
(C) Paneths cells
(D) Lymphoid tissue in submucosa
(E) Lymphoid tissue in mucosa

75. Mechanism of diarrhea after jejunostomy

(A) Increased CCK
(B) Secretory diarrhea
(C) Osmotic diarrhea
(D) Secretory + Osmotic both

(E) Increased Secretin

76. Upper GI endoscopy taking up to 28cm distance. The most likely type of cancer is

(A) Adenocarcinoma esophagus

(B) Squamous cell carcinoma esophagus

(C) Adenocarcinoma stomach

(D) Small cell carcinoma

(E) None of them

77. Damage to mandibular foramen causes injury to which structure

(A) Inferior alveolar nerve

(B) Mandibular nerve

(C) Nerve to mylohyoid

(D) Facial nerve

(E) None of them

78. Broder classification of tumor is based on

(A) Degree of mitosis

(B) Structure of stroma

(C) Tissue of origin

(D) Grading on histopathology

(E) Total number of mitosis and grading

79. Correct statement regarding inguinal canal

(A) Absent in infants

(B) Conjoint tendon makes superior border
(C) Inguinal ligament forms superior boundary

(D) Lacunar ligament do form a border

(E) None of them is correct

80. Injury to the neck of fibula cause damage to

(A) Common fibular nerve

(B) Deep fibular nerve

(C) Tibial nerve

(D) All of them

(E) None of them

81. A patient presents in the emergency with loss of sensations over the fingertips of lateral 2 fingers. The most likely nerve to be damaged is

(A) Ulnar nerve

(B) Radial nerve

(C) Median nerve

(D) Deep branch of radial nerve

(E) Palmer cutaneous nerve

82. At which level spinal cord injury does not affect respiration

(A) At C5

(B) Above C5

(C) Below C5

(D) Above C3

(E) Below C3

83. Extravasation of urine in case of rupture of penile urethra

(A) Deep perineal pouch

(B) Superficial perineal pouch

(C) Thigh
84. Which statement is correct
(A) Lower limit of rectum is defined by mucosal folds
(B) Anal canal starts from levator ani level and ends into anus
(C) Upper part anal canal is drained to systemic veins
(D) All are correct

85. Regarding pudendal canal
(A) Anal sphincter forms medial relation
(B) Is same as obturator canal
(C) Fat here is richly supplied with blood
(D) Obturator internus forms posterior relation
(E) All above are correct

86. In which portion of bladder/urethra maximum number of alpha receptors are present
(A) Neck
(B) Trigone
(C) External urethral sphincter
(D) Membranous urethra
(E) prostate

87. Gastric lymphoma is most strongly associated with
(A) H. pylori
(B) Peptic ulcer disease
(C) Curling ulcers
(D) Gastritis
(E) None of them
88. Natural anticoagulant in body
(A) Warfarin
(B) Heparin
(C) Herudin
(D) Heparin and Warfarin
(E) All of them

89. Diagnostic feature of Measles
(A) Maculopapular rash
(B) Koplicks spots
(C) Coryza
(D) Post auricular lymphadenopathy
(E) None of them

90. Basophilia is due to which cellular organelle
(A) Golgi apparatus
(B) Mitochondria
(C) Ribosomes
(D) Lysosomes
(E) Chromatids

91. Which of the followings is Autosomal recessive
(A) Achondroplasia
(B) Marfan syndrome
(C) Alpha 1 antitrypsin deficiency
(D) Neurofibromatosis
(E) None of them

92. Structure found with nuclear membrane
93. The structure which prevents muscle from tearing under a constant pressure
(A) Ruffinis endings
(B) Golgi tendon organ
(C) Merkle cells
(D) Muscle spindle
(E) Pacinians corpuscles

94. Which is not a direct effect of Cushing syndrome
(A) Thin limbs
(B) Buffalo hump
(C) Muscular weakness
(D) Facial hair growth
(E) None of them

95. The drug used most likely in acute pulmonary which has also some effect on smooth muscles
(A) Thiazide diuretic
(B) Spironolactone
(C) Loop diuretics
(D) Triamtrine
(E) Acetazolamide

96. A virus can cause cancer with the underlying mechanism of
(A) Having oncogenes
97. Which of the following does not drain into internal jugular vein

(A) Lingual vein
(B) Facial vein
(C) External jugular vein
(D) Thyroid veins
(E) None of them

98. An unconscious patient brought to hospital after 1 hour of severe hemorrhage. His BP is 50 mmHg, pulse is rapid, cool and clammy skin, which mechanism is most active at this stage

(A) Chemoreceptor reflex
(B) Baroreceptor reflex
(C) Both of them simultaneously
(D) Both of them at different times

99. Hand muscles are supplied by

(A) C1
(B) T1
(C) T2
(D) T1 and T2
(E) T1, T2 and T3

100. The structure arches over the root of left lung

(A) Azygous vein
(B) Left recurrent laryngeal nerve
(C) Phrenic nerve
(D) Arch of aorta
(E) None of them

101. Maxillary artery is the artery of
(A) Ist brachial arch
(B) Second brachial arch
(C) Third brachial arch
(D) Fourth brachial arch
(E) Sixth arch

102. Aneurysm of the arch of aorta does not compress
(A) Phrenic nerve
(B) Azygous vein
(C) Recurrent laryngeal nerve
(D) Subclavian artery
(E) None of them

103. Foreign body in supine position will go in respiratory segment
(A) Left lower lobe
(B) Right lower lobe
(C) Left upper lobe
104. Which statement is correct about cyanosis

(A) When deoxygenated hemoglobin exceeds 2 mg %
(B) When deoxygenated hemoglobin exceeds 5 mg %
(C) When deoxygenated hemoglobin exceeds 10 mg %
(D) When carboxyhemoglobin is present in blood
(E) None of them is correct

105. ADH acts on

(A) PCT
(B) DCT
(C) Macula densa
(D) Medullary collecting tubule
(E) Cortical collecting tubule

106. Inside nephron tube, least concentrated urine is found at

(A) PCT
(B) DCT
(C) Macula densa
(D) Medullary collecting tubule

107. The most effective mechanism of prevention of heat loss

(A) Shivering
(B) Vasoconstriction
(C) Vasodilatation
(D) Conduction
(E) Vaporization
108. Patient presenting with enlarged tongue, joint problems and impaired glucose tolerance.

The problem in pituitary is in

(A) Acidophils
(B) Basophils
(C) Both of them
(D) Panhyper pituitarism
(E) None of them

109. Nerve accompanies with superior thyroid artery is

(A) External laryngeal nerve
(B) Internal laryngeal nerve
(C) Superior laryngeal nerve
(D) Recurrent laryngeal nerve
(E) None of them

110. Pseudogout has following one type of crystals

(A) Needle shapes
(B) Sodium pyro phosphate
(C) Calcium pyrophosphate
(D) Calcium hydroxyappatite
(E) None of them
111. Which is best as skin antiseptic
(A) Soap
(B) Alcohol
(C) Pyodine
(D) Chlohexidine
(E) None of them

112. In second degree heart block, which statement is correct
(A) Stroke volume is decreased
(B) Ventricular rate is greater than atrial rate
(C) Atrium has greater rate than ventricle
(D) Cardiac contractility is increased
(E) None of them is correct

113. The last thing to be returned to normal on hemorrhagic shock
(A) Heart rate
(B) Blood pressure
(C) Cardiac contractility
(D) RBCs in peripheral smear
(E) Pulse pressure

114. Internal spermatic fascia is derived from
(A) Cremasteric fascia
(B) External oblique
(C) Internal oblique
(D) Fascia transversalis

115. 8 years old child presents to you with recurrent opportunistic infection with Klebsiella.
Most likely immune deficiency state is

(A) Severe combined immunodeficiency syndrome

(B) A gammaglobulinemia

(C) Chronic granulomatous disease

(D) Pseudohypoparathyroidism

(E) None of them

116. The structure which connects pons with cerebellum

(A) Middle cerebellar peduncle

(B) Superior cerebellar peduncle

(C) Inferior cerebellar peduncle

(D) Cerebral peduncle

(E) None of them

117. In which one of the followings, confidentiality of the patient can be breeched

(A) Patient allows you

(B) Insurance claim

(C) Serious disease like cancer

(D) Patient is psychotic

(E) Non organic disease

118. Smooth muscle are characterized by having

(A) Outer circular layer
(B) Multiple nuclei

(C) Inner circular and outer longitudinal

(D) All of them

(E) None of them

119. Which is correct for the time of appearance of ossification centre in elbow

(A) Capitulum -11 years

(B) Radius - 9 years

(C) Medial epicondyle - 5 years

(D) Trochlea - 2 years

(E) Olecranon – 1 year