

7. Prevalence of a disease is defined as

- A number of old and new cases present in a population during a given time
 - B number of old cases present in a population during a given time
 - C number of new cases present in a population during a given time.
 - D none of these.
-

8. 'Secular Trend' implies

- A changes in the occurrence of disease over a long period of time
 - B changes in the occurrence of disease over a short period of time
 - C changes in the occurrence of disease over different seasons of the year
 - D none of these.
-

9. Statistical average include all except

- A mean
 - B mode
 - C range
 - D median
-

10. In a Primary response to an Immune reaction , the first antibody to appear in the blood is

- A IgG type
 - B IgA type
 - C IgM type
 - D none of these
-

11. In India, which of the following committees recommended the establishment of Primary health centres at rural areas?

- A Mukherjee committee
 - B Kartar Singh Committee
 - C Bhore Committee
 - D Shrivastava Committee
-

12. In India, Filariasis is caused by

- A W.bancrofti
 - B Culex fasciatus
 - C Mansonoides
 - D Anopheles
-

13. The selective inhibitors of Serotonin receptors like Sertraline are

- A less cardiotoxic than tricyclic antidepressants
 - B more cardiotoxic than tricyclic antidepressants
 - C likely to cause agranulocytosis more than clozapine
 - D likely to be addiction prone
-

14. Identify the symptoms which are not present in Amphetamine induced Psychosis?

- A Affective flattening, alogia
 - B Generally appropriate affect
 - C Hyperactivity, Hypersexuality, and other sexual dysfunctions
 - D Visual hallucinations
-

15. Appendicular Mass is treated by

- A Appendectomy
 - B Conservatively
 - C Laproscopic Appendectomy
 - D Ultrasound guided aspiration
-

16. Commonest cause for Acute cholecystitis is

- A Calculous
 - B Infection
 - C Bile stasis
 - D Starvation
-

17. Lumbar sympathectomy is of value in the management of

- A Intermittant claudication
 - B distal ischemia affecting the skin of the toes
 - C arteriovenous fistula
 - D diabetic neuropathy
-

18. Munchausen's syndrome is

- A an endocrine disorder
 - B a factitious disorder
 - C a somatoform disorder
 - D a sleep disorder
-

19. The capacity to formulate concepts and generalize them is called

- A Concretization in thinking B Abstract thinking
C Delusional thinking D Rationalization
-

20. The percentage of Schizophrenic patients who commit suicide is approximately

- A one per cent B five per cent
C ten per cent D twenty per cent.
-

21. Which of the following drugs is effective in Chlorpromazine induced Parkinsonism?

- A Trihexyphenidyl. B Selegiline
C Bromocriptine D Levodopa & Carbidopa.
-

22. Budesonide is a/an

- A non – steroidal anti-inflammatory drug B high ceiling diuretic
C inhalation corticosteroid for asthma D contraceptive.
-

23. Barbiturates exert the following actions except

- A anticonvulsant B analgesic
C sedative D respiratory depression.
-

24. Which of the following is also called British Anti – Lewisite?

- A EDTA B Dimercaprol
C D- pencillamine D Succimer
-

25. The proposed mechanism of action of Tricyclic antidepressants is that they

- A have intrinsic adrenergic activity
 - B block adrenergic receptors
 - C prevent the reuptake of synaptic neurotransmitters
 - D can stimulate dopamine receptors.
-

26. Lidocaine can be used in

- A Supraventricular tachycardia
 - B Ventricular tachycardia
 - C Both A and B
 - D Neither A nor B
-

27. The anti-tubercular drug which is not hepato-toxic is

- A Isoniazid
 - B Rifampicin
 - C Pyrazinamide
 - D Ethambutol
-

28. Metronidazole is used for

- A Round worm infestation
 - B Hook worm infestation
 - C Kala-Azar
 - D Giardiasis
-

29. Which of the following statements is false concerning Heparin?

- A it accelerates inhibition of thrombin
 - B it is administered intravenously
 - C it causes hemorrhage
 - D it crosses the placental barrier
-

30. Which of the following drugs is an inhibitor of Gastric mucosal proton pump?

- A Carbenoxolone sodium
 - B Sucralfate
 - C Famotidine
 - D Lansoprazole
-

31. Renal Osteodystrophy is a disorder

- A associated with Type II autosomal recessive disorder
- B associated with skeletal deformities

- C associated with extensive bone turn over
 - D associated with decrease in PTH.
-

32. Increased serum magnesium concentration has been observed in all of the following except

- A Lactation
 - B Dehydration
 - C Severe diabetic acidosis
 - D Addison's disease.
-

33. Clearance of substance depends on

- A its plasma concentration
 - B its excretory rate
 - C the renal plasma flow
 - D all of these
-

34. Normal renal plasma flow in health adult averages about

- A 125ml/min
 - B 200 ml/min
 - C 450ml/min
 - D 574 ml/min.
-

35. Ammonia is formed by the kidney from

- A Glutamate
 - B Aspartate
 - C Glutamine
 - D Aneurine
-

36. In patients with renal failure, all the following are typically elevated in serum except

- A Urea, nitrogen
 - B Phosphate
 - C Creatinine
 - D Albumin
-

37. In Hemolytic anemia, all of the following features are observed except

- A elevation of unconjugated bilirubin
 - B presence of urine bilirubin
 - C increased urobilinogen
 - D increased fecal urobilinogen.
-

38. The enzyme involved in Porphyria Cutanea Tarda is

- A Uroporphyrinogen decarboxylase B Coproporphyrinogen oxidase
C Ferrochelatase D all of these
-

39. Which of the following is not a feature of Obstructive Jaundice?

- A clay coloured stools
B increased excretion of urobilinogen in urine
C increased level of conjugated bilirubin in blood
D presence of bile salts in urine.
-

40. In a case of Jaundice, there is no trace of pigments in urine. The most probable diagnosis is

- A Infectious hepatitis B Obstructive jaundice
C Serum hepatitis D Hemolytic jaundice
-

41. Hydrogen ion secretion in the distal nephron is enhanced by all of the following except

- A Increase in the level of plasma aldosterone B hyperkalemia
C metabolic acidosis D Respiratory acidosis
-

42. Which of the following has clearance equal to GFR?

- A Creatinine B Urea
C Inulin D none of these
-

43. Total vital capacity is decreased but times vital capacity is normal in

- A Bronchial asthma B Scoliosis
C Chronic Bronchitis D all of these
-

44. Spirometer cannot measure

- A tidal volume B vital capacity

- C Expiratory reserve volume D Residual volume
-

45. For surfactant lining the alveoli all are true except

- A helps prevent alveolar collapse B is a mixture of protein and lipids
C is decreased in hyaline membrane disease D is secreted by alveolar macrophages.
-

46. Which is the immediate source of high energy phosphage in skeletal muscle?

- A Guanosine phosphate B Carbonyl phosphate
C Creatine phosphate D Glycerophosphate
-

47. Neurotransmitter released at the skeletal neurotransmitter junction is

- A Adrenaline B Noradrenaline
C Acetyl choline D Atropine
-

48. Idioventricular Rhythm is usually

- A faster than sinus rhythm B slower than sinus rhythm
C originates in the AV node D originates in the Bundle of His
-

49. Force of contraction of the heart

- A increases with sympathetic stimulation B decreases by atheletic training
C is unaffected by nutrition D decreases by increased filling.
-

50. Cardiac index is the ratio of

- A cardiac output and body weight B Cardiac output and body surface area
C Cardiac output and work of heart D Stroke volume and surface area.
-

51. The ideal fluid to be administered in Hypovolaemic shock is

- A Blood
C Normal saline
- B Plasma
D Ringer lactate
-

52. Antibodies most commonly found in Pernicious anemia is

- A Anti – Intrinsic antibody
C anti – parietal cell antibody
- B Anti – nuclear antibody
D none of these
-

53. Conjugated Hyperbilirubinemia is seen in

- A Gilbert syndrome
C Down syndrome
- B Crigler – Najjar syndrome
D Dubin – Johnson syndrome.
-

54. In an unconscious patient due to head injury, or alcoholic intoxication, or drug abuse, when clinical assessment of abdomen injury may not be such useful, the ideal investigation is

- A Ultrasound scan abdomen.
C Peritoneal lavage
- B CT scan abdomen
D MRI.
-

55. Treatment of choice for Renal Cell Carcinoma is

- A high voltage radiotherapy
C radical nephrectomy
- B therapeutic embolisation of renal artery
D renal vein ligation and chemotherapy.
-

56. Ectopic hormone is produced as tumor marker in

- A Ca. Lung
C Ca. Kidney
- B Ca. Breast
D in all of these.
-

57. Raspberry tumor is

- A Cavernous hemangioma
C Pigmented basal cell carcinoma
- B Umbilical adenoma
D none of these

- A found below the nipple level B found in pregnancy
C found in liver disease D consists of central arteriole with radiating
small vessels.
-

65. Following associations are correct except

- A Iodine deficiency – endemic goiter
B Fluoride excess – Dental caries
C Keshan disease – Selenium responsive cardiomyopathy
D Acrodermatitis enteropathica – zinc deficiency.
-

66. All statements below are true except

- A in gout great toe is affected in early stages
B in psoriasis distal joints are affected
C in ankylosing spondylitis larger joints are affected early
D in rheumatoid arthritis, proximal metacarpophalangeal joints are affected early.
-

67. Acute ascending paralysis is seen in all except

- A Diabetes B Porphyria
C infectious mononucleosis D Diphtheria
-

68. Parkinsonism features occur in all conditions except

- A Hepatolenticular degeneration B Hemochromatosis
C Jakob – Creutzfeldt disease D Friedreich's ataxia
-

69. Recognised clinical features of anorexia nervosa include the following except

- A amenorrhea B Hypotension
C Lanugo hair D Tachycardia.
-

70. Down's syndrome is due to

- A Trisomy 9 B Trisomy 13

90. In patients with Diabetes mellitus, which one of the following occurs frequently?

- A Chronic narrow angle glaucoma B Congenital glaucoma
C Secondary glaucoma D Closed angle glaucoma
-

91. At birth, Umbilical cord contains

- A two umbilical veins B vitelline duct
C ductus venosus D two umbilical arteries
-

92. The single gene defect causing deficiency of a single enzyme is

- A Trisomy B Klinefelter's syndrome
C Turner's syndrome D Alkaptonuria
-

93. The following statements concerning the Stomach are true except

- A fundus is supplied by short gastric arteries B the lesser curvature contains
the right and left gastroepiploic arteries.
C it develops from foregut D lesser sac lies posteriorly.
-

94. The mesonephric duct in female gives rise to

- A Uterus B Vagina
C Uterine tubes D none of these
-

95. Lesser omentum connects

- A Liver and stomach B Liver, gall bladder and stomach
C Liver, stomach and duodenum D Liver, stomach, duodenum and transverse
colon.
-

- A Mucinous cystadenoma ovary B Endometrial adenocarcinoma
C Serous cyst adenocarcinoma ovary D Clear cell adenocarcinoma.
-

103. Kimmelsteil – Wilsons lesion is diagnostic of

- A benign hypertension B Diabetic glomerulosclerosis
C Amyloidosis of kidney D Malignant hypertensive change in kidney.
-

104. Pheochromocytoma is a tumor of

- A Adrenal cortex B Adrenal medulla
C Pituitary D Parathyroid
-

105. Kartagener's syndrome results from

- A Granulomatous inflammatory process B Recurrent Staphylococcal infection
C Defect in ciliary structure and function D Mechanical factors due to situs
inversus.
-

106. Which one of the following Pneumoconiosis has increased risk of developing tuberculosis ?

- A Silicosis B Berylliosis
C Asbestosis D Anthracosis.
-

107. The Classic diagnostic histology of Poststreptococcal Glomerulonephritis includes all except

- A Destroyed Glomeruli B Infiltration of Glomeruli with neutrophils
and monocytes
C Normal endothelial cells D Crescents in the Glomeruli.
-

108. Lepromatous Leprosy are all except

- A lesions contain large aggregates of lepra cells B patients lack B
cell mediated immunity

C patients are less infectious than those with tuberculoid form. D patients show a strongly positive 48 hour Lepromin skin test.

109. Which one of the following is correctly matched?

- A abl – CML. B N myc – Small cell carcinoma of lung.
C L – myc – Carcinoma colon. D ras – Neuroblastoma.
-

110. The anticoagulant of choice for ESR estimation (Westergren's method) is

- A Double oxalate B 3 – 8% sodium citrate
C Heparin D EDTA.
-

111. Serial Interval is defined as

- A the gap between the onset of primary case and the secondary case
B the gap between the receipt of infection and maximum infectivity of host.
C the gap between the onset of the disease and the cure of the disease.
D none of these.
-

112. Syndromic approach is used for which of the following?

- A ARI control B STD control
C Diarrheal control D Leprosy control.
-

113. We have four National Health Programmes. Identify the correct order in which they were started.

- A NMEP, NFPC, RCH, RNTCP. B NFPC, NMEP, RNTCP, RCH
C NMEP, RNTCP, RCH, NFPC. D NFPC, RCH, NMEP, RNTCP.
-

114. Hypokalemia occurs in

- A Pyloric obstruction B Continuous saline infusion
C Small bowel fistulae D All of these.

115. In India, the level of iodization fixed under the Prevention of Food Adulteration(PFA) Act , at the production point and the consumer level is

- A 30 PPM and 15 PPM respectively. B 20PPM and 10PPM respectively.
C 25 PPM and 15 PPM respectively D 40 PPM and 20 PPM respectively.
-

116. Consider the following statements. Assertion (A) : Presence of Coliform organism are chosen as indicator of fecal pollution of water. Reason (R) : The colifom organisms are constantly present in great abundance in the human intestine. Of these statments:

- A Both (A) and (R) are true, but (R) is not the correct explanation of (A).
B Both (A) and (R) are true, and (R) is the correct explanation of (A).
C (A) is true, but (R) is false
D (A) is false, but (R) is true.
-

117. Osteomyelitis of terminal phalanx may be sequel of

- A Acute paronychia B Chronic paronychia
C Terminal pulp space infection. D Apical sublingual infection
-

118. Which of the following is the least toxic Lead compound?

- A Lead arsenate B Lead oxide
C Lead sulphide D Lead carbonate.
-

119. The sampling technique used in U.I.P and C.S.S.M coverage evaluation surveys is

- A Stratified sampling B Quota sampling
C Multistage sampling D Cluster sampling.
-

120. In a Standard normal curve, the area between 2 standard deviations on either side of mean ($X \pm 2 \sigma$) will include approximately

- A 68% of the values in the distribution. B 95% of the values in the distribution
C 99% of the values in the distribution D 99.7% of the values in the distribution
-

121. Acrodermatitis enteropathica is characterized by all of the following except

- A Chronic diarrhea B Denuded skin around mucocutaneous junction
C Protein malabsorption D Zinc deficiency a possible aetiology
-

122. Wide splitting of the second heart sound is noted all of the following except

- A Pulmonary stenosis B RBBB
C Ebstein anomaly D Aortic stenosis.
-

123. Which is the commonest virus causing Acute Bronchiolitis in infancy?

- A Adenovirus B Rhinovirus
C Respiratory Syncytial virus D Rota virus.
-

124. The commonest agent causing Acute Epiglottitis in a child is

- A Hemophilus influenza B Staphylococcus aureus
C Streptococcus pyogenes D Sterptococcus pneumoniae.
-

125. The drug of choice to treat Trichuriasis is

- A Mebendazole B Pyrantel pamoate
C Nidosamide D Diethyl carbamazine.
-

126. The commonest cause of Hypertension in Children is

- A Coarctation of Aorta B Acute Glomerular nephritis
C Essential hypertension D Pheochromocytoma.
-

127. The diagnosis of all intracranial lesions is made best by

- A X ray skull
C MRI
- B Carotid angiogram
D CT scan
-

128. Kayser – Fleischer ring in the Iris is pathognomonic of

- A Osteogenesis imperfecta
C Ehlers – Danlos syndrome
- B Wilson’s disease
D Hurler’s syndrome.
-

129. Automatism is a characteristic feature of

- A Absence seizure
C myoclonic seizure
- B Generalised tonic clonic seizure
D Complex partial seizure
-

130. Which of the following can cause Thymic enlargement?

- A Teratoma
C Lymphosarcoma
- B Leukemia
D Hodgkins disease.
-

131. Ideally, iodine concentration in iodised common salt should be

- A 15 PPM
C 25 PPM
- B 20 PPM
D 30 PPM
-

132. The following investigation should urgently be done for a pneumonia patient except

- A X ray of chest PA view
C Full Blood count (leucocyte, RBC)
- B Oxygen saturation of blood
D ECG
-

133. When the diagnosis of Pneumothorax is confirmed, the most immediate procedure to be done is

- A chest drainage tube to be put in on right lower chest. B chest drainage tube to be put in upper chest.
C strapping of right chest wall. D none of these.
-

134. In young patient, taking treatment for pulmonary tuberculosis, complains of blurred vision, one should

- A look for jaundice B stop one of the anti-tubercular drug
C give corticosteroid D revise diagnosis
-

135. In a patient admitted with high fever, splenomegaly and dry cough, if the X ray chest shows military shadows, the most likely diagnosis is

- A Carcinomatosis Lymphangiosarcoma B Tropical Pulmonary eosinophilia
C Pneumoconiosis D Miliary tuberculosis.
-

136. Half of all adult population in which one of the following countries is infected with TB?

- A South Africa B India
C Burma(Myanmar) D Malaysia
-

137. In Pulmonary Tuberculosis, the sputum smear test positive for AFB when the bacterial concentration in sputum is

- A 50,000 to 1,00,000 per mm B below 50,000 per mm
C above 1,00,000 per mm D both A and C.
-

138. In Anginal Pectoris, which one of the following is not true?

- A Chest pain is localized on either side of chest B Pain is referable to neck, left arm
C Does not exacerbate with chest wall movement D Sweating is present
-

139. In a young patient with stroke and hemiplegia, one should examine,

- A Left vein for deep venous thrombosis B Heart for valvular disease
C Pulse for irregular beats. D Both B and C.
-

140. Collapsing pulse is present when

- A pulse pressure is over 60 mmHg B systolic blood pressure is high
C Diastolic pressure is low D all of these.
-

141. Which one of following statements about Cholera is false?

- A incubation period is only few hours B sudden onset of profuse diarrhea followed by vomiting
C severe abdominal pain accompanying diarrhea D rapidly progressive metabolic acidosis.
-

142. Breast reconstruction following Mastectomy is best achieved by

- A Silastic implants with or without tissue expansion B Latissimus dorsi Myocutaneous flap.
C Rectus abdominis Myocutaneous flap. D All of these.
-

143. The best shunt operation for portal hypertension is

- A Selective splenorenal shunt B Splenorenal shunt
C Mesocaval shunt D Portocaval shunt.
-

144. Best management option for elective treatment of Repeated Variceal Bleed in child is

- A Shunt operation B Devascularisation procedure
C Repeated Sclerotherapy. D Sengstaken – Blackmore tube.
-

145. A 10 year old boy with mild fever, suddenly develops severe pain in the right testis. What do you suspect the boy is suffering from?

- A Mumps orchitis
B Acute Epididymo – orchitis
C Torsion of testis
D Teratoma of testes with sudden bleeding into the tumour
-

146. Best method of diagnosing Upper GI Hemorrhage is

- A Upper GI contrast study
B Selective angiography
C Esophagogastroduodenoscopy.
D Technitium Sulphur scan.
-

147. Rate of recurrence of ulcer is highest in

- A Vagotomy antrectomy
B Highly selective vagotomy
C Vagotomy pyloroplasty
D Gastrectomy.
-

148. For 'Strip test' for sugar in urine, all of the following facts are true except

- A container contamination is absent
B artifacts are excluded
C drug interference is excluded
D shelf – life of chemical is not a factor.
-

149. 25 gram or 25 full chips of potato provides

- A 200 calories, 0 fat.
B 200 calories, 1gm fat
C 0 calorie, 200 gm fat
D 100 calories, 100 gm fat
-

150. One tablespoonful of common salt provides

- A 2300 mgms of sodium
B 2000 mgms of sodium
C 1500 mgms of sodium
D 1000 mgms of sodium.
-

151. Which of the following is NOT an inclusion body of RBCs?

- A Dohle body
B Heinz body
C Howell – Jolly body
D Pappenheimer body.

- A Coagulation necrosis B Caseous necrosis
C Gangrenous necrosis D Liquefaction necrosis
-

159. Rhabdomyosarcoma is a malignant tumor of

- A Bone B Smooth muscle
C Lung D Striated muscle
-

160. The following are precancerous conditions except

- A Submucous fibrosis B Compound naevus
C Fibrocystic disease of breast D Carcinoid tumor.
-

161. Prothrombin time in obstructive jaundice

- A is normal B decreases
C becomes normal after vitamin K injection D increases after Vitamin K injection
-

162. Dubin – Johnson syndrome is caused by

- A defect in bilirubin uptake by liver
B deficiency of UDP glucuronosyl transferase
C defect in the hepatic secretion of conjugated bilirubin into bile.
D hemolytic anemia
-

163. In liver cells, bilirubin is conjugated with

- A Cholic acid B Glycine
C Glucuronic acid D Iduronic acid
-

164. Increase in level of sodium levels leads to retention of

- A Potassium B Phosphate
C Water D All of these

- A increases cardiac output B decreased systemic blood pressure
C decreased heart rate D decreases intra-thoracic pressure.
-

172. Direct Fick method of measuring Cardiac output requires estimation of

- A O₂ content of arterial blood B O₂ consumption per unit time
C Arteriovenous O₂ difference D All of these.
-

173. Hypovolemia due to hemorrhage is compensated by

- A ADH mechanism in the kidney. B Renin – angiotensin system
C Both A and B D neither A nor B
-

174. In the refracting system of the eye

- A the lens can double the refracting power of the eye during accommodation.
B the back and front surfaces of lens contribute equally during accommodation
C the back surface of the lens contributes more to accommodation than the front.
D the cornea causes more refraction than the lens.
-

175. On accommodation to a near object

- A pupillary constriction occurs B increased anterior curvature of the lens occurs
C convergence of the eyeball occurs D all of these.
-

176. The neuron responsible for Post-synaptic inhibition is

- A Sensory neuron B Golgi bottle neuron
C Renshaw cell D Neuroglia
-

177. Cutaneous pain

- A can be caused by overstimulation of touch receptors
 - B can be caused by excitation of receptors by chemicals released in injured tissue
 - C can cause receptors to adapt to stimulation more quickly than touch receptors
 - D transmission at spinal cord level is facilitated by opening of potassium channels in the postsynaptic membrane.
-

178. A patient who presents with an intention tremor, scanning speech, past pointing, and a 'drunken gait', might be expected to have a lesion involving the

- A cerebellum
 - B medulla
 - C cortical motor strip
 - D basal ganglia
-

179. An aphasia is most likely to be associated with a lesion of

- A The hippocampus
 - B Broca's area
 - C The parietal lobe
 - D The limbic system
-

180. The most likely humoral mediator of painful sensation from most tissue is

- A acetylcholine
 - B histamine
 - C released by normal tissue following exposure to excess water
 - D Bradykinin, a polypeptide released from uninjured tissue.
-

181. The diuretic agent which produces inhibition of Carbonic anhydrase is

- A Spironolactone
 - B Acetazolamide
 - C Mersalyl
 - D Frusemide.
-

182. The drug of choice for suppressing febrile convulsions is

- A Intramuscular Phenobarbitone
 - B Intravenous Phenytoin
 - C Rectal Diazepam
 - D Oral Sodium Valproate.
-

183. In Parkinson's disease, which of the following inhibits MAO-B, a major degradative pathway of dopamine?

- A Selegiline
- B Pergolide

189. Which of the following is a false statement concerning Buspirone?

- A shows cross-tolerance with benzodiazepines. B does not produce side effects associated with CNS depression
C is a 5HT antagonist D has delayed onset of action.
-

190. Pencillin induced anaphylaxis is mediated by

- A IgM B IgE
C sensitized T cells D none of these
-

191. Meniscal tear of the knee joint usually results from which of the following circumstances?

- A Compression B Hyperextension
C Rotation in partial flexion D Rotation in full extension
-

192. Structure lying in the lateral wall of cavernous sinus from above downwards are

- A Oculomotor nerve, Trochlear nerve, Ophthalmic nerve, Maxillary nerve.
B Trochlear nerve, Oculomotor nerve, Ophthalmic nerve, Maxillary nerve.
C Trochlear nerve, Ophthalmic nerve, Maxillary nerve, Oculomotor nerve.
D Oculomotor nerve, Ophthalmic nerve, Maxillary nerve, Trochlear nerve
-

193. The thick filament of Sarcomere is

- A Actin B Myosin
C Fibrin D Troponin.
-

194. Right lung has

- A no horizontal fissure B cardiac notch
C nine bronchopulmonary segments D an eparterial bronchus
-

195. Eustachian valve is present at the opening of

- A SVC B IVC

