

Botany section

91) - c - Aerobic free living N_2 fixing bacteria

92) - b - consist of nucleoid - single chromosome

93) - a



96) - b

97) - b

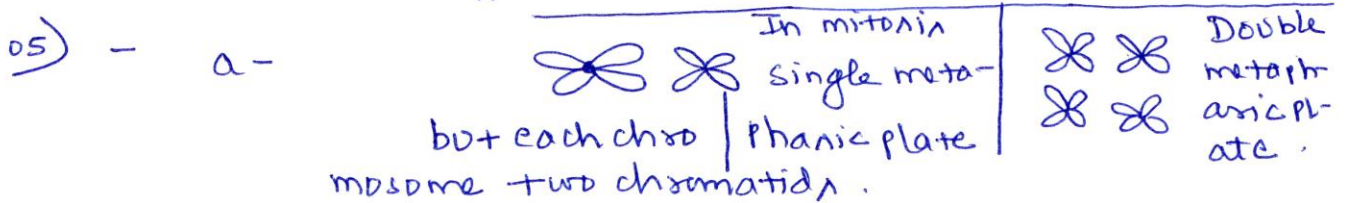
98) - d

101) - d - Inner membrane cristae where E.T.C occurs.

102) - d - They act as receptor site b/c of carbohydrate chain on lipids and proteins

103) - b - cofactors which increase efficiency of enzyme.

104) - c - colchicine prevent polymerization of tubulin protein - part of microtubules and prevent formation of spindle fibres.



106) - a

107) - a

- 108) - b
- 109) - a
- 110) - b - male nuclei - 2 (2 male gametes)
female nuclei - 3 (1 egg + 2 nuclei central cell)
- 111) - d
- 112) - c During night by bats.
- 119) - b haemophilia. x-linked recessive.
- 120) - c XXY from female due to aneuploidy and fuse with normal Y chromosome some.
- 121) - A point mutation glutamic acid replaced by valine. (GAGG - GUG) by
- 122) - a - Total 45 (44 Autosomes and one X chromosome)
- 123) - b - semiconservative mode of replication by meselson and Stahl.
- 124) - d
- 125) - a
- 126) - b
- 127) - b
- 128) - d - chemogeny.
- 129) - c photobiont (cyanobacteria)
- 130) - c protein and nucleic acid (RNA)
- 131) - a
- 136) - c

138) - b

139) - a

140) - b

141) - d - - Not always pathogenic to plants only dicot plants.

142) - d

143) - d

144) - b

145) - b - gene of Interest is Inherited at ovum or egg stage.

146) - a

$$8/20 = 0.4$$

147) - a -

$$NPP = GPP - R$$

148) - c

149) - b

150) d

151) d -

[Biomagnification] weed → herb fish → carnivorous fish → Bird.

152) - a - Eutrophication.

153) - d

154) - d.

155) - A - Calvin cycle - Recall from N.C.E.R.T.

156) - d

157) - a

158) - b

159) - b.

Zoology - solution

①

Q. No. 95 - (A) Both Ascaris & Anopheles show sexual dimorphism i.e. male & female individuals of same sps can be distinguished externally.

Q. No. 113 - (C) see NCERT Graph.

Q. No. 114 - (C) Inguinal canal connects abdominal cavity with scrotal sac through which spermatic cord passage.

Q. No. 115 - (D) The level of -

- hCG
- hPL
- Estrogen
- progesterone
- cortisol
- prolactin
- thyroxine etc. increases during pregnancy.

Q. No. 117 - (C) Natural method of contraception includes -

- LAM method
- Rhythm method
- withdrawal method.

Q. No. 118 (b) MTP is not a method of contraception. It could be used to get rid of unwanted pregnancies due to failure of contraception or Rape.

NO-128 (D)

10-129 (C)

0-131 (A)

10-132 (B)

D

0-133 (D)

10-134 (C) During Blood transfusion the compatible Antigen and antibodies should not come contact otherwise there will be clumping.

NO-135 (B)

NO-136 (C) During somatic hybridization electrofusion is used for protoplast fusion.

NO-137 (A) - see NERT.

NO-138 (B)

NO-139 (A)

NO-140 (B)

NO-141 (D)

NO-142 (D)

NO-143 (D) - Restriction endonuclease cut the DNA molecules phosphodiester bond within palindromic sequences.

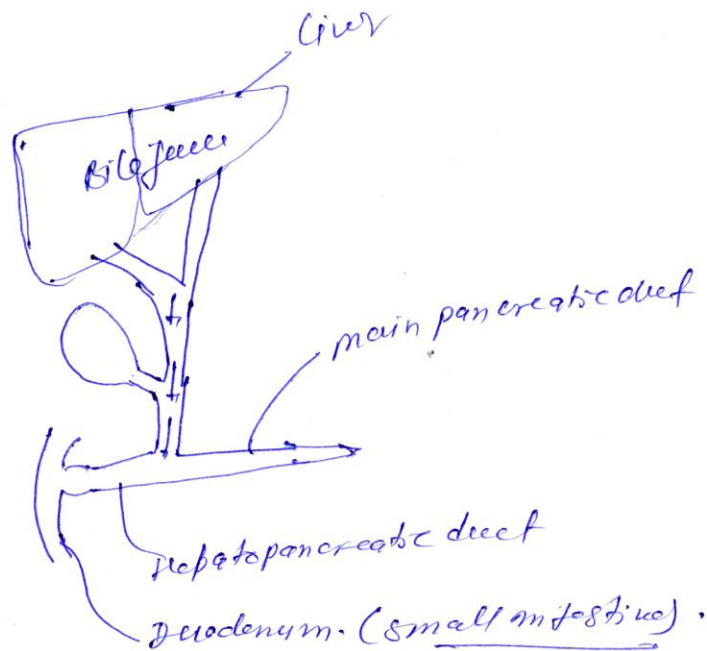
Q-144 (B) Gene therapy in case of SCID could be a permanent cure if it is done in zygote or in early blastomeres. (3)

Q-145 - (B)

Q-159 - (B)

Q-161 - (D)

Q-162 - (A) -



- Bile juice contain Bile pigment & Bile salt -
- Bile salt cause emulsification of fat.

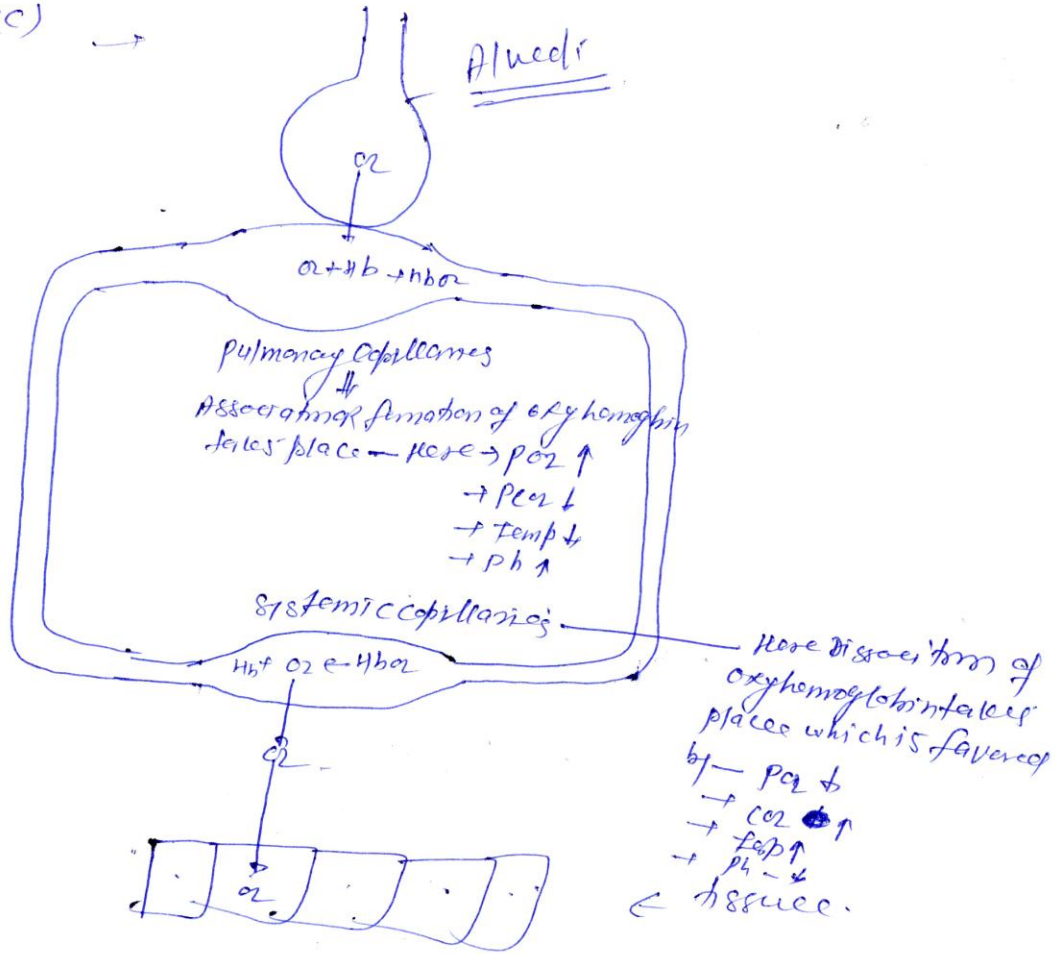
Q-163 (B) - Respiratory centers are stimulated in response to Increase in Arterial blood CO₂ & H⁺ conc.

- Bc. chemoreceptors are present in carotid artery & Aortic arch. both carry oxygenated blood.

NO-164-(B)

④

16-165-(C)



NO-166-(D)

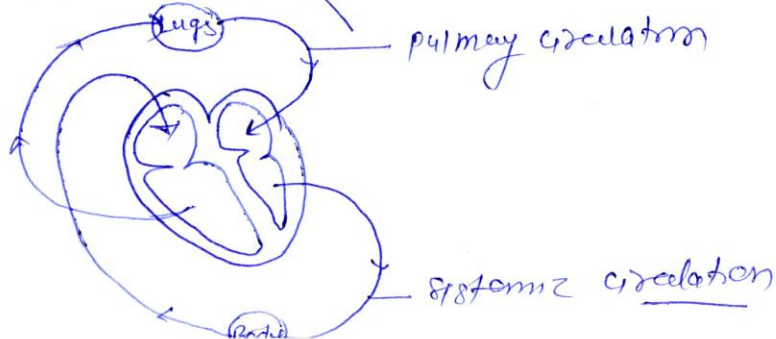
NO-167-(B)

NO-168-(A)

$$SV = EDV - ESV$$

$$CO = SV \times HR$$

? NO-169-(C)



10-170 (A)

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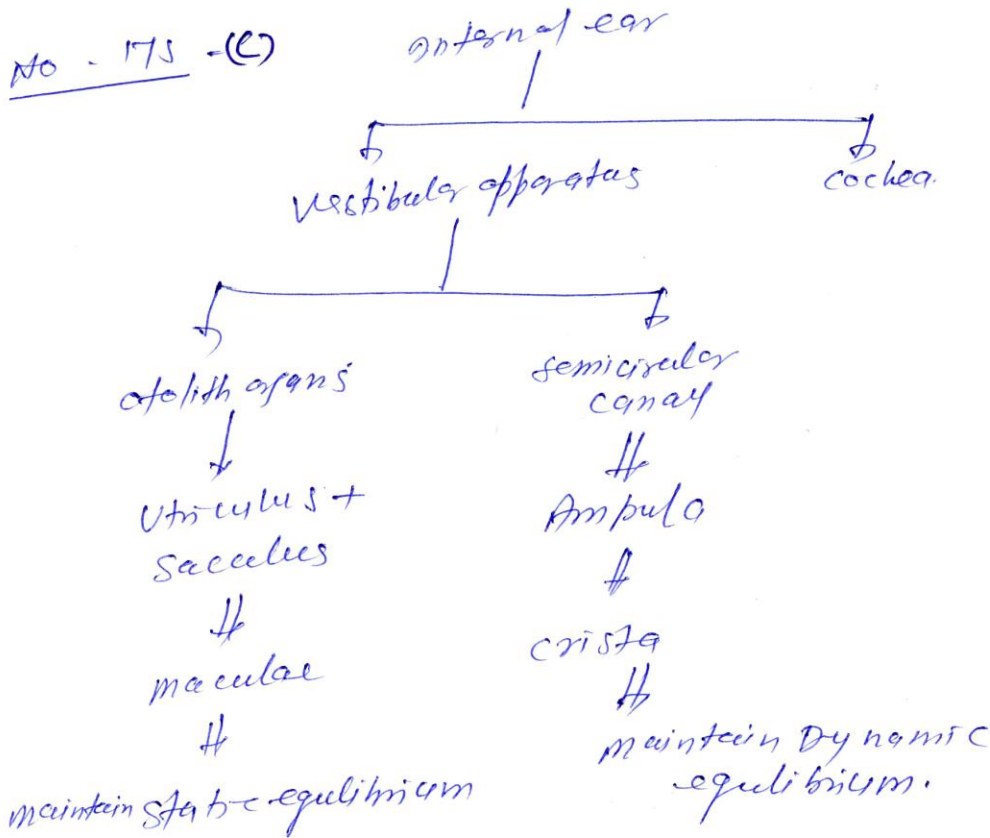
10-171 (D)

10-172 (B)

10-173 - D

10-174 (D) Saroplasmic Reticulum stores Ca^{++} .

10-175 (C)



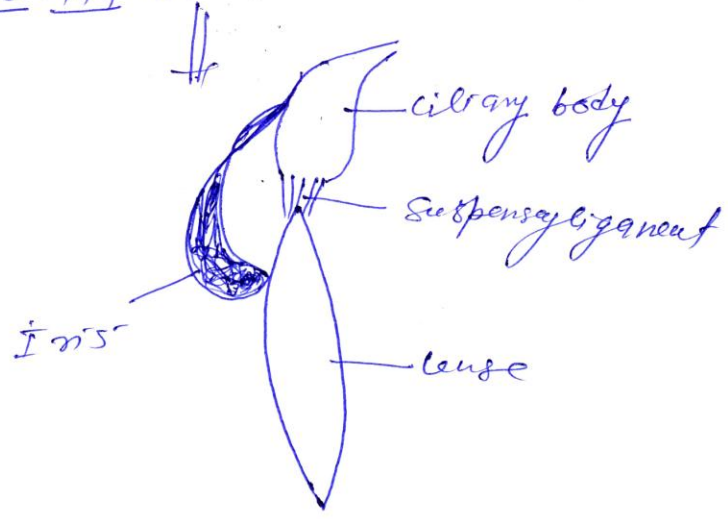
10-176 (D) there are 12 ^{pairs} cranial Nerves are present in human.

- I - olfactory
- II - optic
- III - oculomotor
- IV - trochlear
- V - trigeminal
- VI - Abducens
- VII - facial

- VIII - Auditory
- IX - ~~Vagus~~ Glossopharyngeal
- X - Vagus
- XI - spinal accessory
- XII - hypoglossal

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Q-177-(C)



Q-178-(D)

Q-179-(B)

Q-180-(A)