- 170 Match List I with List II
 - List I
 - List II Nephridia
 - Paramoccium II. Contractile vacuole
 - III Flame cells Periplaneta
 - Pheretima IV. Urecose gland Choose the correct answer from the options give below
 - (1) A-I, B-II, C-III, D-IV
 - (2) A-I, B-II, C-IV, D-III
 - (3) -lll, B-ll, C-lVe D-l
 - (4) A-II, B-I, C-IV, D-III
- 171 Which one of the following common sexually transmitted diseases is completely curable when detected early and treated properly?
 - (1) Genital herpes (2) Gonorrhoea
 - (3) Hepatitis-B (4) HIV Infection
- 172 Match List I with List II.
 - List I List II
 - A CCK l. Kidney B. GIP
 - II. Heart C. ANF
 - III. Gastric gland ADH IV. Pancreas
 - Choose the correct answer from the options given below:
 - (1) A-IV, B-III, C-II, D-I
 - (2) A-III, B-II, C-IV, D-I
 - (3) A-II, B-IV, C-I, D-III
 - (4) A-IV, B-II, C-III D-I
- 173 Given below are two statements:

Statement I: Low temperature preserves the enzyme in a temporarily inactive state whereas high temperature destroys enzymatic activity because proteins are denatured by heat.

Statement II: When the inhibitor closely resembles the substrate in its molecular structure and inhibits the activity of the enzyme, it is known as competitive inhibitor. In the light of the above statements, choose the **correct** answer from the options given below:

- (1) Both Statement I and Statement II are true.
- (2) Both Statement I and Statement II are false.
- (3) Statement I is true but Statement II is false.
- (4) Statement I is false but Statement II

- 174 Given below are two statements:
 - Statement I: A protein is imagined as a line the left end represented by first amino acid (C-terminal) and the right end represented by last amino acid (N-terminal)

Statement II: Adult human haemoglobin consists of 4 subunits (two subunits of a type and two subunits of β type.)

In the light of the above statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true.
- (2) Both Statement I and Statement II are false.
- (3) Statement I is true but Statement II is false.
- (4) Statement I is false but Statement II is true.
- Radial symmetry is NOT found in adults of phylum
 - (1) Ctenophora
- (2) Hemichordata
 - (3) Coelenterata
- (4) Echinodermata
- 176 Which one of the following techniques does not serve the purpose of early diagnosis of a disease for its early treatment?
 - (Y) Recombinant DNA Technology
 - (2) Serum and Urine analysis
 - (3) Polymerase Chain Reaction (PCR) technique
 - (4) Enzyme Linked Immuno-Sorbent Assay (ELISA) technique
- Once the undigested and unabsorbed substances enter the caecum, their backflow is prevented by-
 - (Sphincter of Oddi
 - (2) Ileo caecal valve
 - (3) Gastro oesophageal sphincter
 - (4) Pyloric sphincter

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Which of the following are NOT considered the part of endomembrane system?

- Mitochondria B. Endoplasmic Reticulum
- Chloroplasts D. Golgi complex
- Peroxisomes

Choose the most appropriate answer from the options given below:

- (1) B and D only
- (2) A. C and E only
- (3) A and D only
- (4) A. D and E only

179 Broad palm with single palm crease is visible in a person suffering from-

- (الم) Down's syndrome
- (2) Turner's syndrome
- (3) Klinefelter's syndrome
- (4) Thalassemia

180 Given below are statements: one is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Nephrons are of two types: Cortical & Juxta medullary, based on their relative position in cortex and medulla.

Reason R: Juxta medullary nephrons have short loop of Henle whereas, cortical nephrons have longer loop of Henle.

In the light of the above statements, choose the correct answer from the options given

- (1) Both A and R are true and R is the correct explanation of A.
- \mathcal{P} Both **A** and **R** are true but **R** is NOT the correct explanation of A.
- (3) A is true but R is false.
- (4) A is false but R is true.

181 Match List I with List II

Haemophilus influenzae List 1

- A. Ringwerm 1.
- II. Trichophyton
- III. Wuchereria bancrofti B. Filariasis
- D. Pneumonia IV. Plasmodium vivax

Choose the correct answer from the options given below:

- (J)- A-II, B-III, C-IV, D-I
- (2) A-II, B-JII, C-I, D-JV
- (3) A-III, B-II, C-I, D-IV
- (4) A-JII, B-II, C-IV, D-I

Which of the following is not a cloning 182 vector?

- (1) BAC
- (2) YAC
- (3) pBR322
- (4) Probe

Given below are two statements: one is labelled as Assertion A and the other is 183 labelled as Reason R.

Assertion A: Endometrium is necessary for implantation of blastocyst.

Reason R: In the absence of fertilization. the corpus luteum degenerates that causes disintegration of endometrium.

In the light of the above statements, choose the correct answer from the options given

- (1) Both A and R are true and R is the correct explanation of A.
- (2) Both A and R are true but R is NOT the correct explanation of A.
- (3) A is true but R is false.
- (4) A is false but R is true.

[Contd...



184 Given below are two statements

Statement 1: In prokatyotes, the positively charged DNA is held with some negatively charged proteins in a region called nucleoid.

Statement II: In eukaryotes, the negatively charged DNA is wrapped around the positively charged histone octamer to form nucleosome.

In the light of the above statements, choose the **correct** answer from the options given below:

- Both Statement I and Statement II are true.
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false.
- (4) Statement I incorrect but Statement II is true.

185 Match List I with List II.

List I List II
(Interacting Species) List II (Name of Interaction)

- A. A Leopard and a Competition Lion in a forest/ Competition grassland
- B. A Cuckoo laying and III Brood egg in a Crow's nest array parasitism
- C. Fungi and root of a H: Mutualism higher plant in H: Mycorrtizae
- D. A cattle egret and 1/2. IV: Commensalism a Cattle in a field

Choose the **correct** answer from the options given below:

- A-I, B-II, C-III, D-IV
- (2) A-I, B-II, C-IV, D-III
- (3) A-III, B-IV, C-I, D-II
- (4) A-II, B-III, C-I, D-ÌV

Zoology : Section-B (Q. No. 186 to 200)

- 186 Which of the following are NOT under the control of the roid hormone?
 - A. Maintenance of water and electrolyte balance
 - B. Regulation of basal metabolic rate
 - C. Normal rhythm of sleep-wake cycle
 - D. Development of immune system
 - II. Support the process of R.B.Cs formation Choose the **correct** answer from the options given below:
 - (1) A and D only
 - (2) B and C only
 - (3) C and D only
 - (4) D and E only
- 187 In cockroach, excretion is brought about by-
 - A. Phallic gland B. Urecose gland
 - C. Nephrocytes D. Fat body
 - E. Collaterial glands

Choose the **correct** answer from the options given below:

- (1) A and E only
- (2) A, B and E only
- (3) B, C and D only
- (4) B and D only

188 Match List I with List II.

List II List I Ciliated epithelium A. Mast cells I. II. Areolar B. Inner surface of bronchiole connective tissue III. Cuboidal epithelium C. Blood D. Tubular parts IV. specialised connective tissue of nephron Choose the correct answer from the options give below:

- (1) A-I, B-II, C-IV, D-III
- (2) A-II, B-III, C-I, D-IV
- (3) A-II, B-I, C-IV, D-III
- (4) A-III, B-IV, C-II, D-I

- 189 The unique mammalian characteristics are:
 - (1) hairs, tympanic membrane and mammary glands
 - (2) hairs, pinna and mammary glands
 - (3) hairs, pinna and indirect development
 - (4) pinna, monocondylic skull and mammary glands
- 190 Select the correct statements with reference to chordates.
 - Presence of a mid-dorsal, solid and double nerve cord.
 - Presence of closed circulatory system.
 - C. Presence of paired pharyngeal gillslits.
 - D. Presence of dorsal heart
 - E. Triploblastic pseudocoelomate animals. Choose the **correct** answer from the options given below:
 - (1) A, C and D only
 - (2) B and C only
 - (3) B, D and E only
 - (4) C, D and E only
- 191 Select the correct statements.
 - A. Tetrad formation is seen during Leptotene.
 - B. During Anaphase, the centromeres split and chromatids separate.
 - Terminalization takes place during Pachytene.
 - D. Nucleolus, Golgi complex and ER are reformed during Telophase.
 - E. Crossing over takes place between sister chromatids of homologous chromosome.

Choose the **correct** answer from the options given below:

- (1) A and C only
- (2) B and D only
- (3) A, C and E only
- (4) B and E only

- 192 The parts of human brain that helps in regulation of sexual behaviour, expression of excitement, pleasure, rage, fear etc. are:
 - (1) Limbic system & hypothalamus
 - (2) Corpora quadrigemina & hippocampus
 - (3) Brain stem & epithalamus
 - (4) Corpus callosum and thalamus
- 193 Given below are two statements:

Statement I: During G_0 phase of cell cycle, the cell is metabolically inactive.

Statement II: The centrosome undergoes duplication during S phase of interphase.

In the light of the above statements, choose the *most appropriate* answer from the options given below:

- (1) Both **Statement I** and **Statement II** are correct.
- (2) Both Statement I and Statement II are incorrect.
- (3) Statement I is correct but Statement II is incorrect.
- (4) Statement I is incorrect but Statement II is correct.
- 194 Which one of the following is the sequence on corresponding coding strand, if the sequence on mRNA formed is as follows
 - 5' AUCGAUCGAUCGAUCGAUCG AUCG AUCG 3'?
 - (1) 5' UAGCUAGCUAGCUAGCUA GCUAGC UAGC 3'
 - (2) 3' UAGCUAGCUAGCUAGCUA GCUAGCUAGC 5'
 - (3) 5' ATCGATCGATCGATCG ATCGATCG 3'
 - (4) 3' ATCGATCGATCGATCG ATCGATCG 5'