

1. Describe cardiac cycle and its events with diagram (20 marks)
2. Describe in Brief (4x5 = 20 marks)
- (a) Disorder of growth Hormones (b) Hormones involved in blood sugar regulation
- (c) Cardiac output & its regulations (d) Mechanism of action of Oral contraceptive pills
3. Multiple choice questions (One mark per question: total 10 marks )
- (a) Most potent vaspressor is
- A) Angiotensin II      B) Nor -epinephrine      C) Aldosterone      D) Cortisol
- (b) Dilatation of capillaries result due to
- A) 5- HT      B) Nor-epinephrine      C) Low temperature      D) Axon reflex
- (c) Heart rate is maximum in normal
- A) Foetus      B) New born      C) Adult      D) Old age
- (d) Thyroid hormones belongs to which class
- A) Steroid      B) Proteins      C) Polypeptides      D) Amino acid derivative
- (e) Weight of normal pituitary gland is
- A) 0.5 gm      B) 1 gm      C) 1.5 gm      D) 2 gm
- (f) Acromegaly is characterized by
- A) Prognathism      B) Acromegalic facies      C) Hypertrophy of body soft tissues      D) All of above
- (g) Calcitonin is produced by
- A) Thyroid gland      B) Parathyroid gland      C) Adrenal gland      D) Pitutary gland
- (h) The thyroid hormone mainly effective at tissue level
- A) Free T3      B) Free T4      C) Both are equally effective      D) MIT
- (I) Oogonia is derived from
- A) Amnion      B) Yolk sac      C) Stroma of ovary      D) Germinal epithelium
- (j) PH range of semen is
- A) 6.2-6.5      B) 7.0-7.3      C) 7.3-7.5      D) 7.5-7.9

1. Describe the image formation in eye and various type of refractory errors & their corrections (20)
2. Describe in brief (5x4=20)
- (a) Parkinson disease (b) Conductive deafness  
(c) Aphasia (d) Brown- sequard syndrome
3. Multiple choice questions ( Each question carries one mark: Total 10 marks )
- (a) Which is NOT an EEG rhythm
- A) Alpha B) Beta C) Gamma D) Delta
- (b) Basal ganglia includes
- A) Putamen B) Caudate C) Globus pallidus D) All of above
- (c) Neurotransmitter in Nigrostriatal pathways, is
- A) Dopamine B) GABA C) Acetyl choline D) Nor epinephrine
- (d) The cells in cerebral cortex are organized in how many layers
- A) 2 B) 4 C) 6 D) 8
- (e) Total number of Brodmann's area in each cerebral hemisphere, is
- A) 13 B) 24 C) 32 D) 47
- (f) Number of receptor cells contained within olfactory mucous membrane
- A) 1-2 million B) 3-5 million C) 5-10 million D) 10-20 million
- (g) Smell receptors are located in
- A) Lower 1/3 of nasal mucosa B) Upper 1/3 of nasal mucosa  
C) Olfactory bulb D) Cribriform plate
- (h) Foot plate of stapes covers
- A) Round window B) Oval window C) Tympanic membrane D) Basilar membrane
- (i) Site where endolymph is seen
- A) Scala vestibule B) Scala media C) Tunnel of Corti D) Scala tympani
- (j) Photo receptors in eye refers to
- A) Rods only B) Cones only C) Both of above D) None of above

