

જીયાનું નામ: ટ્યુટર એનાટોમી (ખાસ ભરતી) ,વર્ગ-૨ (જાહેરાત ક્રમાંક.૧૧૬/૧૮-૧૯)

કુલ પ્રશ્નો:૩૦૦	પ્રાથમિક કસોટીનો અભ્યાસક્રમ	કુલ ગુણ -૩૦૦
Part-I		
માધ્યમ: ગુજરાતી	સામાન્ય અભ્યાસ	ગુણ -૧૦૦
૧	ભારતની ભૂગોળ- ભૌગોલિક, આર્થિક, સામાજિક, કુદરતી સંસાધન અને વસ્તી અંગેની બાબતો- ગુજરાતના ખાસ સંદર્ભ સાથે	
૨	ભારતનો સાંસ્કૃતિક વારસો- સાહિત્ય, કલા, ધર્મ અને સ્થાપત્યો- ગુજરાતના ખાસ સંદર્ભ સાથે	
૩	ભારતનો ઇતિહાસ - ગુજરાતના ખાસ સંદર્ભ સાથે	
૪	ભારતની અર્થવ્યવસ્થા અને આયોજન	
૫	ભારતીય રાજનીતિ અને ભારતનું બંધારણ: (૧) આમુખ (૨) મૂળભૂત અધિકારો અને ફરજો (૩) રાજ્યનીતિના માર્ગદર્શક સિદ્ધાંતો (૪) સંસદની રચના (૫) રાષ્ટ્રપતિની સત્તા (૬) રાજ્યપાલની સત્તા (૭) ન્યાયતંત્ર (૮) અનુસૂચિત જાતિ, અનુસૂચિત જનજાતિ અને સમાજના પછાત વર્ગો માટેની જોગવાઈઓ (૯) એટર્ની જનરલ (૧૦) નીતિ આયોગ (૧૧) પંચાયતી રાજ (૧૨) નાણા પંચ (૧૩) બંધારણીય તથા વૈધનિક સંસ્થાઓ- ભારતનું ચૂંટણી પંચ, સંઘ લોક સેવા આયોગ, રાજ્ય લોક સેવા આયોગ, કોમ્પ્રોલર એન્ડ ઓડિટર જનરલ; કેન્દ્રીય સતર્કતા આયોગ, લોકપાલ તથા લોકાયુક્ત અને કેન્દ્રીય માહિતી આયોગ	
૬	સામાન્ય બૌદ્ધિક ક્ષમતા કસોટી	
૭	સામાન્ય વિજ્ઞાન, પર્યાવરણ અને ઈન્ફર્મેશન એન્ડ કોમ્યુનિકેશન ટેકનોલોજી	
૮	ખેલ જગત સહિત રોજબરોજના પ્રાદેશિક, રાષ્ટ્રીય અને આંતરરાષ્ટ્રીય મહત્વના બનાવો	

Post: Tutor Anatomy (Special Drive) , Class –II (Advt.No.116/18-19)

Total Questions:300 Syllabus of Preliminary Test Total Marks-300

Part-I

Medium: Gujarati

General Study

Marks- 100

1	Geography of India- Physical, Economic, Social, Natural Resources and population related topics- with special reference to Gujarat
2	Cultural heritage of India- Literature, Art, Religion and Architecture- with special reference to Gujarat
3	History of India with special reference to Gujarat
4	Indian Economy and Planning
5	<u>Indian Polity and the Constitution of India:</u> (1) Preamble (2) Fundamental Rights and Fundamental Duties (3) Directive Principles of State Policy (4) Composition of Parliament (5) Powers of the President of India (6) Powers of Governor (7) Judiciary (8) Provisions for Scheduled Castes, Scheduled Tribes and backward classes of the society (9) Attorney General (10) NITI Aayog (11) Panchayati Raj Institutions (12) Finance Commission (13) Constitutional and Statutory Bodies: Election Commission of India, Union Public Service Commission, State Public Service Commission, Comptroller and Auditor General; Central Vigilance Commission, Lokpal and Lokayukta, Central Information Commission
6	General Mental Ability
7	General Science, Environment and Information & Communication Technology
8	Daily events of Regional, National and International Importance including Sports

Post: Tutor Anatomy (Special Drive), Class –II (Advt.No.116/18-19)

Part-II Syllabus of Concerned Subject

(Anatomy)

Medium: English

Questions: 200

Marks: 200

1. Gross Anatomy

Introduction to Anatomy, nomenclature, anatomical position, planes, tissues and movements.

Osteology

Names of the bones of the body and their position; classification of the bones with examples; general features of the bone and normal development; microscopic anatomy of bone; general pattern of blood supply; ossification of the bones of the limbs for age determination. X-rays of bones. Process of repair of bone.

Muscular System

Classification and identification of the muscles of the body: main attachments, nerve supply and action(s), microscopic anatomy of muscles and the nerve terminations. Details of attachments of the muscles; ultrastructural features of muscle; mechanism of the movement caused by the muscle/muscles and various forces exerted by them and their detailed action(s).

Arthrology

Definition and classification of joints, general features of different types of joints; detailed study of major joints of the limbs and movements performed at various joints in the body. Microscopic anatomy of articular cartilage; maintenance of articular cartilages; blood supply and nerve supply of the joints.

Cardio Vascular System

Normal position, external features and parts of the heart; internal features of the chambers of heart, names of the blood vessels and venous drainage of the organs, structures and body as a whole, conducting system of heart, fibroskeleton of heart. Variation(s), developmental anomalies of heart and blood vessels, valvular defects and their effects in pathogenesis of the anomalies.

Respiratory System

Position, parts, relations, blood supply of upper and lower respiratory tract. Pleura, its reflection, nerve supply, pleural recesses and their significance, bronchopulmonary segments, their importance. Mechanism of respiration

Digestive System

Position, extent, parts, relations, blood supply, nerve supply, lymphatic drainage and sphincters of the gastrointestinal system. Sphincteric action including functional implications.

Genito-Urinary System

Parts, position, relations, blood supply, nerve supply and lymphatic drainage of uterus, cervix, vagina, ovary, ovarian duct, testes, epididymis, seminal vesicle, ductus deferens, prostate, kidney, ureter, urinary bladder and urethra. Innervation of urinary bladder in detail

Endocrine System and Individual Endocrine Glands

Various endocrine glands, their location, relations, blood supply, nerve supply and lymphatic drainage. Clinical manifestations of common endocrine disorders.

Nervous System and its components

Parts of nervous system, neuron meninges, nerve terminals, neuroglia, myelination, degeneration and regeneration, ventricles, CSF, spinal cord and its blood supply. Motor and sensory pathways, cranial nerves, thalamus, cerebellum, limbic and autonomic pathways. Functional cortical areas, motor and sensory cortex and their blood supply.

Special Sensory Organs

(a) Gross Anatomy of : (i) eye ball, extra ocular muscles their nerve supply and actions (s) (ii) ear (iii) nose (iv) tongue, its musculature blood supply and lymphatic drainage.

Lymphatic System

Location of the major groups of the lymphnodes of the body and their drainage areas. Gross anatomy of the major lymphatics specially thoracic duct and its tributaries.

Surface Anatomy

Surface features of the body and projection of the outline of heart, its borders, surfaces and valves, lungs, their borders, fissures and hila, pleura, liver, kidneys and various abdominal and pelvic organs and important vessels and nerves

Cross Sectional Anatomy

Cross sections of thorax, abdomen and pelvis to understand the interrelationship of organs and structures.

2. Microanatomy

Microscope and basic principles of microscopy, commonly used stains, basophilic and acidophilic staining reactions and their significance. Commonly encountered artifacts. Brief principle of electron microscopy and interpretation of ultrastructural features.

General Histology

Cell. Four primary tissues. Histology of various organs/organ systems: Exocrine glands, Circulatory system, Respiratory system, Skin and nerve-end-organs, Immune system and lymphoid organs, Digestive system (GIT), Endocrine glands, Urinary system, Female reproductive system, Male reproductive system.

3. Embryology

- (a) **A General Embryology:** Definition of embryology; gestation period: definition of gamete sperm, Ovum; gametogenesis, migration of primordial germ cells into gonadal ridge; spermatogenesis; structure of sperm, oogenesis; structure of ovum; growth of ovarian follicles, ovarian and uterine cycles. Sperm in the male genital tract; sperm in the female genital tract, activation and capacitation of sperm in the female genital tract. First Week of Development. Second Week of Development. Third Week of Development. Fourth To Eighth week of Development (Embryonic period). Development from third month to birth (Fetal period). Placenta. Umbilical Cord. Amniotic Cavity. Teratology.

- (b) **Systemic Embryology:** Development of the individual organs of digestive system, genital system, urinary system, respiratory system, cardiovascular system. Nervous system, special sensory organs, endocrine glands and mammary gland. Developmental abnormalities of individual organs/systems, pathogenesis of the anomalies. Histogenesis of various organs. Development of skeletal system, muscular system and derivatives of coelomic cavities. Development of face and the pharyngeal arches and the associated congenital anomalies.
- (c) **Human Genetics:** Cell, cell division, mitosis and meiosis, nucleus, DNA, chromosomes, classification, karyotype, chromosomal aberrations (Klinefelter, Turner and Down's Syndrome) Prenatal diagnosis for congenital abnormalities, sex determination. Pedigree chart, pathogenesis of chromosomal aberrations and their effects, recombinant DNA, genetic inheritance, genetic counselling, inborn errors of metabolism.

4. Physiology

General Physiology. Nerve-Muscle. Blood. Respiratory System. Cardiovascular System. Gastrointestinal System. Nutrition. Environmental Physiology. Reproduction. Kidney. Neurophysiology.

5. Current Trends and Recent Advancements in the field of Human Anatomy.