

ANATOMY

S. No.	Topics
Chest and Abdomen	
1.	What are normal laparoscopic/endoscopic anatomical view/ variations of the triangle of doom, triangle of pain, Callot's triangle.
2.	Descriptive study of laparoscopic anatomy of the uterus, ovary and its surroundings.
3.	Comparison of kidney morphometric parameters in adult population of age group 20-60 using Ultrasonography -USG (Here target organ and Radiological modality can be changed).
4.	Descriptive study of endoscopic anatomy of the mediastinum.
Upper and lower limbs	
5.	Descriptive study of endoscopic anatomy of the knee joint.
6.	Estimate the correlation of length of bony segment with respect to height of an individual.
7.	To study changes in weight transmission mechanics after knee replacement.
8.	Comparative Anatomy of the skeletal structures of different vertebrate groups, such as mammals, reptiles, and fish, exploring variations in bone morphology, adaptations for locomotion, and skeletal specialization.
Head and neck	
9.	Describe the endoscopic anatomy of the nose and paranasal sinuses?
10.	Describe the endoscopic anatomy of the vertebral canal/ intervertebral foramina?
11.	Describe the morphometry of the vertebral body, lamina of various vertebral bodies (lumbar, cervical).
12.	Relationship of intervertebral disc and nerve root in the intervertebral foramen of lumbar spine: A comparative cadaveric & magnetic resonance imaging study.
13.	Magnetic Resonance Imaging based study of the volume of Gray Matter of the amygdala in patients with depressive disorder.

14.	To study the morphological and histological changes in the brain as a result of consumption of narcotics (animal model study) (may be done in high resource settings).
15.	What are the morphological, biological or histochemical correlations of evolution of human brain?
16.	Stereological Estimation of Brain Volume Using Cavalieri Principle in Normal Population and Patients Suffering from Neurological Diseases by Radiological Images.
17.	Volumetric analysis of Paranasal air sinuses and mastoid air cells using Computerized Tomography scans.
Microanatomy and histology	
18.	Histological study of the various brain organs with aging e.g. hippocampus.
19.	Cross sectional study of histological & histochemical effect of prolonged use of Non-Steroidal Anti-Inflammatory Drugs on liver of mice.
20.	To study cell migration and histogenesis of human cerebellum (in-vitro study).
21.	Morphological, biological or histochemical based study of aging process and how humans can slow it down.
22.	How exhaustion, injuries, and stress influence muscles and cells and explore role of interventions like Yoga, meditation or aerobics, etc.
23.	What is the role of T-cells/regulatory cells in immunological memory phenomenon?
24.	To study the neural, muscular or conductor network of cardiovascular system.
25.	What are the clinical implications of myocardial bridge over coronary arteries and myocardial coat lining coronary sinus?
26.	Cytomorphometrical analysis of exfoliated buccal mucosal cells in smokers, thyroid, and Hypertensive patients.
Embryology	
27.	Why Anencephaly is very common in certain regions of India?
28.	What are the effects of environmental condition on developing chick embryo?
General	
29.	What are the variations in radiological anatomy of various regions of the body? (bronchial tree, coronary arteries, renal arteries, Computed

	Tomography, Magnetic Resonance Imaging of brain, thorax, abdomen pelvis etc.).
30.	How to do 3Dimensional reconstruction, 3D printing of Computed Tomography or Magnetic Resonance pictures of normal organs of the body? Example: 3D reconstruction of surgical segments of liver.
31.	Morphological changes in organs after treatment with herbal products in mice.
32.	Effects of karela juice (bitter gourd) on rat model of diabetes mellitus.
33.	To investigate the role of technology-enhanced 3D images in students gross and radiological anatomy learning.
34.	What are the effects of peer assisted learning in gross anatomy teaching?
35.	What are the correlations between stress and activity of blood cells?
36.	Histo-anatomical changes in liver following chronic alcohol intake.
37.	Role of interventions like Yoga, meditation, or aerobics, etc in slowing down hippocampal ageing.
38.	Comparative Anatomical study of right and left coronary artery in human cadaveric hearts (Older vs Young Individuals).
39.	How toxic chemicals affect the human health including the teratological effects?
40.	What is the relationship between Standing Static Position, Balance, Muscles, and Anthropometric Measurements in young adult's population.
41.	To evaluate the mitochondrial DNA deletion in cases of infertile male patients.