

Документ подписан простой электронной подписью

Информация о владельце:

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MINISTRY OF SCIENCE AND HIGHER EDUCATION

RUSSIAN FEDERATION

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NORTH-CAUCASUS FEDERAL UNIVERSITY

APPROVED

Assoc. Prof. Kubanov S.I.

PhD in Medical Sciences

Dean Faculty of Medicine and Biology

ASSESSMENT TOOLS FUND FOR THE DISCIPLINE

Anatomy

- Specialty: 31.05.01 General Medicine
- Mode of training: Full-time
- Year of commencement of studies: 2026
- Delivered in Semester 2, 3, 4

Introduction

1. Intended for carrying out current control of academic performance progress and intermediate attestation in the discipline of Anatomy for students of the specialty (majoring in) 31.05.01 General Medicine.

2. The ATF is an appendix to the program of the discipline (module) Anatomy

3. Developer(s): Dzhandarova T.I., Head of the Department of Anatomy and Histology

4. Expert examination of the ATF has been completed.

Expert group:

Chairperson: T.A. Pakhoma, Associate Professor, Department of Anatomy and Histology

Committee members:

L.N. Yushkova, Associate Professor, Department of Anatomy and Histology;

M.A. Mamaeva, Assistant Professor, Department of Anatomy and Histology

Employer organization representative: Vilensky I.L., Chief Physician of Independent CDL, LLC

Expert conclusion – the ATF allows evaluating the level of competency levels and is recommended to be employed in the educational process.

5. The validity period for the ATF shall be determined by the period of implementation of the educational program.

1. Description of Evaluation Criteria at Various Stages of Their Formation, Description of Evaluation Scales

Levels of formation of competence(s), indicator(s)	Descriptors			
	Minimum level not achieved (Unsatisfactory) 2 points	Minimum level (Satisfactory) 3 points	Intermediate level (Good) 4 points	High level (Excellent) 5 points
GPC-5 - Capable of assessing morphofunctional, physiological states, and pathological processes in the human body to solve professional tasks.				
Learning outcomes for the discipline (module): Assesses morphofunctional and physiological states and processes in the human body at the individual, group, and population levels to solve professional challenges. AI-1 GPC-5 Identifies pathological conditions and processes in the human body to solve professional challenges AI-1 GPC-5.	Poorly understands the morphofunctional and physiological states and processes in the human body at the individual, group and population levels to solve professional problems	Does not fully understand the morphofunctional and physiological states and processes in the human body at the individual, group and population levels to solve professional problems	Knows the morphofunctional and physiological states and processes in the human body at the individual, group and population levels to solve professional problems	Has a high level of knowledge of morphofunctional and physiological states and processes in the human body at the individual, group and population levels to solve professional problems

The evaluation of the competency formation level in the discipline is carried out on the basis of the Regulations on conducting current control of academic progress and intermediate attestation of students in higher education educational programs – Bachelor’s programs, Specialist’s programs, Master’s programs – at the Federal State Autonomous Educational Institution of Higher Education NORTH-CAUCASUS FEDERAL UNIVERSITY in its current edition.

ASSESSMENT TOOLS FOR CHECKING THE LEVEL OF COMPETENCY DEVELOPMENT

Task number	Correct answer	Contents of the question	Competence
Semester 2			
1.	3	On which vertebra is the carotid tubercle located? 1) on the 1st cervical;	GPC-5

		2) on the 2nd cervical; 3) on the 6th cervical.	
2.	3	The tubercle of the anterior scalene muscle is located: 1) at the top surface of keys; 2) at the bottom surface 1 – about the ribs; 3) at the top SURFACE 1 - about the ribs.	GPC-5
3.	2	Location of the glenoid cavity of the scapula: 1) a n g u l u s inferior; 2) lateral angles; 3) medial angles.	GPC-5
4.	2	What edges are missing on the shoulder blade: 1) ma r g o s superior; 2) ma r g o inferior; 3) ma r g o mediali s	GPC-5
5.	1	The groove of the radial nerve passes: 1) along the posterior surface of the body of the humerus; 2) along the medial surface of the diaphysis of the humerus; 3) on the proximal epiphysis of the humerus.	GPC-5
6.	2	At which level of the ribs is the scapula located? 1) from I to V – th; 2) from II to VII; 3) from III to VIII.	GPC-5
7.	3	On the lower surface of the sternal end of the clavicle is located: 1) conical tubercle; 2) trapezoid line; 3) depression of the costoclavicular ligament.	GPC-5
8.	3	What anatomical structures does the posterior process of the talus consist of? 1) tuberculum anterior et posterior; 2) tuberculum superior et inferior; 3) tuberculum lateralis et medialis.	GPC-5
9.	1	The tubercle of the rib is located at the transition point: 1) collum costae in corpus costae; 2) caput costae in collum costae; 3) os costale V cartilago costalis;	GPC-5
10.	2	Indicate which carpal bones make up the distal row: 1) lunate, pisiform, trapezoidal, triangular; 2) trapezium bone, capitate, trapezoid, hamate; 3) lunate, pisiform, scaphoid, triquetral.	GPC-5
11.	2	Back scapulae is located: 1) on the costal surface of the scapula; 2) on the dorsal surface of the scapula; 3) on the upper edge of the shoulder blade.	GPC-5
12.	1	Specify the articular surfaces of the calcaneus: 1) talus and cuboid articular surfaces; 2) scaphoid and cuneiform articular surfaces;	GPC-5

		3) ankle articular surfaces.	
13.	1	The distal row of tarsal bones is formed by: 1) os navicularis, cuboidea et cuneiforme; 2) os talus et calcaneus; 3) os cuboidea , os talus et calcaneus.	GPC-5
14.	2	The transition point of the squama of the frontal bone into the orbital parts: 1) margo infraorbitalis; 2) margo supraorbitalis; 3) glabella.	GPC-5
15.	3	On the inner surface of the parietal bone passes: 1) groove of the inferior and superior sagittal sinuses; 2) groove of the transverse and sigmoid sinuses; 3) groove of the superior sagittal and sigmoid sinuses.	GPC-5
16.	3	What is the name of the bony protrusion in the middle of the inner surface of the squama of the frontal bone? 1) juga cerebrale; 2) protuberantia interna; 3) crista frontalis.	GPC-5
17.	2	Indicate which anatomical structure separates the right and left orbital parts of the frontal bone: 1) supraorbital notch; 2) lattice notch; 3) jugular notch.	GPC-5
18.	1	Indicate the anatomical structure located along the midline of the nasal part of the frontal bone: 1) spina nasalis; 2) crista frontalis; 3) ala cristae galli.	GPC-5
19.	3	Along which edge of the parietal bone does the superior sagittal sinus pass? 1) margo frontalis; 2) margo occipitalis; 3) margo sagittalis .	GPC-5
20.	2	What is the name of the part of the occipital bone located anterior to the foramen magnum? 1) squama occipitalis; 2) clivus; 3) pars basilaris .	GPC-5
21.	1	The jugular notch is limited by: 1) jugular tubercle; 2) intrajugular process; 3) jugular process.	GPC-5
22.	1	What is the name of the depression located behind the frontal ridge: 1) sella turcica; 2) blind hole; 3) pituitary fossa.	GPC-5
23.	2	What is the name of the central point of eminence? cruciatum :	GPC-5

		1) internal occipital crest; 2) internal occipital protuberance; 3) external occipital protuberance.	
24.	2	Which canal passes through the thickness of the condyle of the occipital bone: 1) condylar canal; 2) hypoglossal nerve canal; 3) mammillary canal.	GPC-5
25.	2	The trigeminal impression is located: 1) at the top of the pyramid; 2) on the front surface of the pyramid in the apex area; 3) on the back surface of the pyramid in the apex area; 4) under the zygomatic process on the outer surface of the scales.	GPC-5
26.	1	Hiatus canalis nervi petrosi minores et majoris located: 1) on the front surface of the pyramid; 2) on the back surface of the pyramid; 3) on the lower surface of the pyramid; 4) on the upper surface of the pyramid.	GPC-5
27.	4	What anatomical structure opens on the apex partis petrosae; 1) internal auditory canal; 2) external aperture of the vestibular aqueduct; 3) external opening of the carotid canal; 4) internal opening of the carotid canal.	GPC-5
28.	3	Incisura mastoidea is located: 1) anterior to the mastoid process; 2) behind the mastoid process; 3) medially from the mastoid process; 4) passes along the apex of the mastoid process.	GPC-5
29.	1	Specify which edges are distinguished in the pyramid of the temporal bone: 1) front, back, top; 2) front, upper, lower; 3) anterior, posterior, lateral; 4) anterior, posterior medial.	GPC-5
30.	4	The external aperture of the cochlear canal is located on: 1) margo anterior; 2) margo posterior; 3) Margo Superior; 4) Margo inferior.	GPC-5
31.	3	Which of the processes of the sphenoid bone extend vertically downwards from the body: 1) ala major; 2) ala minor; 3) pterygoid process; 4) hamulus pterygoideus.	GPC-5
32.	2	Medial wall eye sockets formed: 1) the orbital part of the frontal bone, the orbital	GPC-5

		surface of the lesser wings of the sphenoid bone; 2) orbital plate of the ethmoid bone, body of the sphenoid bone, lacrimal bone, frontal process of the maxilla; 3) orbital surface of the zygomatic bone and maxilla, orbital process of the palatine bone; 4) the orbital surface of the zygomatic bone and the greater wings of the sphenoid bone.	
33.	1	What movements in the hip joint are possible around the frontal axis: 1) flexio et extensio; 2) adductio et abductio; 3) rotatio et circumductio.	GPC-5
34.	4	The sternoclavicular joint, according to the shape of its articular surfaces, is: 1) flat; 2) spherical; 3) elliptical; 4) saddle-shaped.	GPC-5
35.	1	Indicate which of the joints of the upper limb does not have additional joint elements: 1) art. cubiti; 2) art. humeri; 3) art. radiocarpea; 4) art. Sternoclavicularis .	GPC-5
36.	4	Which of the following structures limit the superficial inguinal ring medially: 1) crus laterale ; 2) crus mediale ; 3) lig.intercruralis ; 4) lig reflexum .	GPC-5
37.	1	What is the name of the area of the neck that is bounded in front by the posterior edge of the sternocleidomastoid muscle, behind by the lateral edge of the trapezius muscle, and below by the clavicle? 1) lateral region of the neck; 2) nuchal region; 3) anterior region of the neck 4) sternocleidomastoid region.	GPC-5
38.	4	Which muscle of the shoulder girdle forms the upper border of the three- and four-sided opening: 1) m.deltoideus ; 2) m. teres major, m. supraspinatus; 3) m. infraspinatus; 4) m.subscapularis , m. teres minor.	GPC-5
39.	2	Which muscle passes through the greater sciatic foramen? 1) iliopsoas; 2) pear-shaped; 3) internal obturator; 4) superior and inferior gemellus muscles.	GPC-5
40.	1	The superficial femoral ring corresponds to:	GPC-5

		1) hiatus saphenus; 2) hiatus tendineus; 3) for. suprapiriforme; 4) for. Infrapiriforme.	
41.	4	Which fascia of the neck forms a sheath for the muscles of the hyoid bone? 1) superficial fascia of the neck; 2) superficial layer of the proper fascia of the neck; 3) deep layer of the proper fascia of the neck; 4) prevertebral fascia	GPC-5
42.	2	The inguinal ligament is formed by: 1) the lower free edge of the aponeurosis of the m. obliquus internus abdominis; 2) the lower free edge of the aponeurosis of the m. obliquus externus abdominis; 3) the lower free edge of the aponeurosis of m. transversus abdominis; m.obliquus fascia externus abdominis.	GPC-5
43.	1	Name the structures that limit the muscular lacuna: 1) lig.inguinale , arcus iliopectinus , os ilium; 2) tractus iliotibialis , lig . pectineale , lamina vastoadductoria ; 3) lig . lacunare , v. femoralis, margo falciformis .	GPC-5
44.	4	The group of broad abdominal muscles does not include: 1) m.obliquus externus abdominis; 2) m. obliquus internus abdominis; 3) m.transversus abdominis; 4) m. rectus abdominis.	GPC-5
45.	2	Which muscles of the shoulder girdle form the posterior wall of the armpit: 1) m. deltoideus, m. supraspinatus; 2) m. teres major, m.subscapularis; 3) m. infraspinatus, m. teres minor.	GPC-5
46.	Musculotubular canal (canalis musculotubarius) begins at the apex of the pyramid, between its anterior edge and the squama of the temporal bone.	Which canal of the temporal bone begins between the squama and the anterior margin of the pyramid?	GPC-5
47.	sulcus sinus petrosi superiores, - a trace of the venous sinus of the same name.	What anatomical structure is located on the superior edge of the pyramid of the temporal bone?	GPC-5
48.	sinus sagittalis superior, sinus	Furrows, what kind sinuses solid cerebral shells Not pass on temporal bones?	GPC-5

	sagittalis inferior, sinus rectus		
49.	visual channels, canales optici	What anatomical structure is located at the base of the lesser wings of the sphenoid bone?	GPC-5
50.	Submandibular triangle, trigonum submandibulare	What is the name of the triangle of the neck limited by the edge of the lower jaw and the bellies of the digastric muscle?	GPC-5
51.	Superior musculofibular canal, canalis musculoperoneus superior	What topographic formation of the leg is located in the upper third of the leg between the lateral surface of the fibula and m. peroneus longus?	GPC-5
52.	m. subscapularis and the wide flat tendon of the latissimus dorsi.	Which muscles of the shoulder girdle form the posterior wall of the armpit?	GPC-5
53.	Superior musculofibular canal, canalis musculoperoneus superior	What topographic formation of the leg is located in the upper third of the leg between the lateral surface of the fibula and m. peroneus longus?	GPC-5
54.	m. pronator quadratus	What muscles make up the fourth layer of forearm flexors?	GPC-5
55.	m. triceps marriages	Which shoulder muscle is involved in forming the posterior wall of the shoulder canal?	GPC-5
		Semester 3	
56.	3	Skeletotomy of the pharynx: 1) from the base of the skull to the 1st cervical vertebra; 2) from 1 to V11 cervical vertebrae; 3) from the base of the skull to the V1-V11 cervical vertebra; 4) from the occipital bone to the V-V1 cervical vertebra; 5) from the base of the skull to the 1st thoracic vertebra.	GPC-5
57.	3	In the nasal part of the pharynx are located: 1) pharyngeal opening of the auditory canal, tubal ridge, palatine tonsils; 2) pharyngeal opening of the auditory tube, pharyngeal, tubal, palatine tonsils; 3) pharyngeal and tubal tonsils, pharyngeal opening of the auditory tube, tubal ridge; 4) tubal ridge, pharyngeal opening of the auditory tube, tubal, palatine and pharyngeal tonsils; 5) pharyngeal and palatine tonsils, tubal roller.	GPC-5
58.	3	The lymphoepithelial ring of the pharynx is formed by: 1) pharyngeal, tubal, palatine tonsils and submandibular gland;	GPC-5

		2) pharyngeal, two tubal, two palatine tonsils and parotid gland; 3) lingual, pharyngeal, tubal and palatine tonsils; 4) pharyngeal, lingual, palatine tonsils and choanae; 5) pharyngeal, palatine, tubal, lingual tonsils and palatopharyngeal arch.	
59.	2	Syntopy of the esophagus in the lower third of the thoracic region: 1) in front - trachea, aorta, behind - spinal column, on the right - right vagus nerve, on the left - mediastinal pleura; 2) behind and on the right - the descending aorta, in front - the pericardium and the left vagus nerve, on the right - the right vagus nerve, which then moves backwards, on the left - the left mediastinal pleura; 3) behind - the spinal column, on the right - the descending aorta, the right vagus nerve, on the left - the left mediastinal pleura and the left vagus nerve, in front - the pericardium 4) in front - pericardium, on the left - left vagus nerve, on the right - right vagus nerve, azygos vein, behind - descending aorta.	GPC-5
60.	4	The anterior surface of the stomach is in contact with: 1) with the diaphragm, left lobe of the liver, anterior abdominal wall; 2) with the diaphragm, right lobe of the liver, spleen; 3) with the transverse colon, anterior abdominal wall; 4) with the diaphragm, pancreas, anterior abdominal wall; 5) with the anterior abdominal wall, with the spleen, pancreas.	GPC-5
61.	2	Grouped lymphoid nodules (Peyer's patches) are located: 1) in the jejunum; 2) in the ileum; 3) in the sigmoid colon; 4) in the transverse colon; 5) in the duodenum.	GPC-5
62.	2	Meckel's diverticulum is: 1) the remnant of an unclosed venous duct; 2) the remnant of an unclosed yolk duct; 3) the blind part of the caudal part of the primary intestine; 4) vermiform appendix	GPC-5
63.	4	Holotopy of the liver: 1) mesogastrium; 2) epigastrium; 3) hypogastrium; 4) all of the above	GPC-5

64.	2	Skeletotopy of the fundus of the gallbladder: 1) is projected at the level of the intercostal linea medioclavicularis dextra 2) is projected at the junction of the cartilages of the V111 and IX ribs on the right; 3) is projected at the junction of the V11 rib to the sternum; 4) is projected at the junction of the cartilages of the V111 and IX ribs on the right	GPC-5
65.	3	Holotopy of the pancreas: 1) umbilical and right abdominal regions; 2) right and left hypochondrium; 3) epigastric and left hypochondrium regions; 4) epigastric right hypochondrium	GPC-5
66.	2	What organs are located intraperitoneally: 1) cecum, transverse colon, spleen, stomach, kidneys, pancreas; 2) cecum, transverse colon, sigmoid colon, spleen, stomach, small intestine; 3) rectum, liver, ureters, spleen, duodenum; 4) ascending and descending colon; 5) kidneys, adrenal glands, pancreas, bladder	GPC-5
67.	3	The following ligaments are represented by the duplication of the peritoneum: 1) coronary, falcate ligament of the liver, round ligament of the liver, triangular ligaments of the liver, gastro -diaphragmatic; 2) venous ligament, falciform, hepatogastric, coronary ligament of the liver; 3) falciform ligament of the liver, triangular ligaments of the liver: hepatoduodenal, hepatogastric, gastrosplenic; 4) gastro -renal, gastro -splenic, coronary, gastro -diaphragmatic	GPC-5
68.	3	The right mesenteric sinus is limited by: 1) the ascending colon, descending colon, mesentery of the transverse colon, root of the mesentery of the small intestine; 2) the root of the mesentery of the small intestine, the mesentery of the transverse colon, the mesentery of the sigmoid colon; 3) the root of the mesentery of the small intestine, the mesentery of the transverse colon, the ascending colon 4) the root of the mesentery of the small intestine, the mesentery of the transverse colon, the descending colon, the mesentery of the sigmoid colon	GPC-5
69.	2	The middle floor of the abdominal cavity is limited by: 1) from the diaphragmatic surface of the liver to the mesentery of the transverse colon;	GPC-5

		2) from the mesentery of the transverse colon to the superior aperture of the pelvis; 3) from the ascending colon to the descending colon; 4) from the mesentery of the transverse colon to the mesentery of the sigmoid colon	
70.	3	In the middle floor of the abdominal cavity, the peritoneum forms: 1) recessus intersigmoideus, bursa hepatica, recessus duodenalis dexter et sinister; 2) recessus ileocecalis superior et inferior, recessus duodenalis superior et inferior 3) sinus mesentericus dexter et sinister, canalis abdominis lateralis dexter et sinister; 4) bursa hepatica, bursa omentalis , bursa pregastrica	GPC-5
71.	2	Which sinuses open into the middle nasal passage: 1) sphenoid, frontal, maxillary sinuses; 2) the middle and anterior cells of the ethmoid bone, the frontal and maxillary sinuses; 3) sphenoid and maxillary sinuses, posterior cells of the ethmoid bone; 4) frontal, maxillary sinuses, posterior cells of the ethmoid bone; 5) anterior, middle, posterior cells of the ethmoid bone, nasolacrimal canal.	GPC-5
72.	2	Holotopy and skeletotopy of the larynx: 1) is located in the middle region of the neck at the level from the 1V to the 11th cervical vertebrae; 2) is located in the anterior region of the neck at the level from the 1V to the 11th cervical vertebrae; 3) is located in the back of the neck at the level from the 1V to the 11th cervical vertebrae.	GPC-5
73.	2	The superior mediastinum contains: 1) thymus gland, inferior vena cava, trachea, pericardium; 2) azygos and hemiazygos veins, thoracic duct, phrenic nerves; 3) the thymus gland, the right and left brachiocephalic veins, the superior vena cava, the aortic arch with the vessels extending from it, the trachea, the thoracic duct, the sympathetic trunks of the vagus and phrenic nerves; 4) the thoracic part of the descending aorta, azygos and hemiazygos veins, sympathetic trunks, splanchnic and vagus nerves, thoracic duct, esophagus.	GPC-5
74.	3	List the muscles fornical apparatus: 1) m. detrusor urinary, urethral sphincter m., fornicus m., longitudinal m. chalice; 2) m. fornix sphincter, m. lifter calyx, sphincter pupillae muscle, levator ani muscle;	GPC-5

		3) m.longitudinale calycis, m. sphincter fornicis, m. levator fornicis , m spiralis calycis ; 4) m spiralis calycis, m. detrussor urinae, m. sphincter ani internus	
75.	3	In the radiant part of the kidney are located: 1) renal corpuscles of the nephron; 2) convoluted parts of the proximal and distal parts of the nephron; 3) straight renal tubules and initial sections of collecting ducts; 4) renal corpuscles of the nephron and the initial sections of the collecting ducts; 5) renal corpuscles and convoluted tubules of the proximal and distal parts of the nephrons.	GPC-5
76.	1	What functions does the fornical apparatus not perform: 1) promotes the filtration of primary urine into the capsule of the renal corpuscle 2) regulates intra-pelvic pressure 3) promotes the secretion of urine from the renal papilla 4) prevents the backflow of urine into the papillary ducts	GPC-5
77.	3	Layers of the bladder wall in the area of the vesical triangle: 1) mucous, muscular, serous membranes; 2) mucous, submucous, muscular, adventitial membranes; 3) mucous, muscular, adventitial membranes; 4) mucous, submucous, muscular, serous membranes.	GPC-5
78.	2	What does the anteflexio position of the uterus mean? 1) forward tilt of the uterus; 2) the angle between the uterus and the cervix is open anteriorly; 3) the uterus is curved backwards; 4) posterior tilt of the uterus	GPC-5
79.	3	the parametrium represented by: 1) the outer serous membrane of the uterus; 2) the internal mucous membrane of the uterus; 3) parauterine cellular space; 4) functional layer of the endometrium	GPC-5
80.	3	What opens into the vaginal vestibule: 1) external os of the uterus, Douglas' pouch; 2) cervical canal, uterine glands; 3) external opening of the urethra, opening of the vagina, Bartholin's glands	GPC-5
81.	4	Where are the bulbourethral glands located: 1) on the upper surface of the deep transverse perineal muscle;	GPC-5

		2) on the lateral surface of the bulbocavernous muscle; 3) in the thickness of the bulbocavernous muscle; 4) in the thickness of the deep transverse perineal muscle	
82.	4	In what order are the membranes of the testicle arranged: 1) vaginal, internal spermatic, external spermatic; muscle that lifts the testicle; fascia of this muscle; dartos, skin; 2) vaginal, internal spermatic, muscle that lifts the testicle, external spermatic fascia, dartos, skin; 3) protein, vaginal, internal spermatic, fascia of the muscle that lifts the testicle, fleshy, skin; 4) vaginal, internal spermatic fascia, muscle that lifts the testicle, fascia of this muscle, external spermatic, fleshy, skin.	GPC-5
83.	3	Where is the serous cavity of the testicle located: 1) the cavity between the lateral surface of the testicle and the epididymis lined with the visceral layer of the serous membrane of the testicle; 2) a slit-like space between the medial surfaces of the testicles; 3) the cavity between the visceral and parietal layers of the processus vaginalis; 4) the space between the processus vaginalis and the internal spermatic fascia	GPC-5
84.	1	What principles does the structure of the arterial system correspond to? 1) general principles of the structure of the human body (bilateral symmetry of the body, the presence of an axial skeleton, the presence of paired limbs, the asymmetrical position of most internal organs); 2) are directed to the organ by the shortest route, passing as part of the vascular-nerve bundles; 3) corresponds to the location of the structural and functional units of the organ or body parts.	GPC-5
85.	2	What cells form the cardiac conduction system? 1) typical cardiomyocytes; 2) atypical cardiomyocytes; 3) nerve cells.	GPC-5
86.	3	What conducting structures does the cardiac conduction system consist of? 1) nodes; 2) from bunches; 3) from nodes, bundles and internodal paths.	GPC-5
87.	2	Where is the sinoatrial node located? 1) in the myocardium of the right atrium; 2) under the epicardium of the right atrium between the opening of the superior vena cava and the right auricle; 3) under the endocardium of the right atrium.	GPC-5
88.	1	Where is the atrioventricular node located?	GPC-5

		1) on the right fibrous triangle under the endocardium of the right atrium 0.8–1 mm from the septal leaflet of the tricuspid valve; 2) under the epicardium of the right atrium; 3) in the myocardium of the lower part of the interatrial septum.	
89.	mucous, submucosa, muscular, adventitia	Name the membranes of the esophagus wall in the cervical and thoracic regions	GPC-5
90.	kidneys, ureters, pancreas and most of the duodenum	What organs are located retroperitoneally?	GPC-5
91.	relaxing and tensing the vocal cords	What muscles provide movement in the cricothyroid joint?	GPC-5
92.	follicles of varying degrees of maturity, yellow and whitish bodies	What structures are found in the ovarian cortex?	GPC-5
93.	mucous, muscular, subserosal, serous membranes	What membranes form the wall of the fallopian tube?	GPC-5
94.	interstitial cells of Leydig, rete testis	What structures are located in the testicular mediastinum?	GPC-5
95.	in the posterolateral sections by glandular tissue, in the anterior section and in the isthmus by smooth muscle tissue	What does the prostate parenchyma consist of?	GPC-5
96.	arterioles, precapillary arterioles, capillaries, postcapillary venules, venules	Which vessels are classified as microcirculatory vessels?	GPC-5
97.	loose	What principle of vessel distribution is characteristic of the venous system?	GPC-5
98.	lobar-segmental-lobular	What types of intraorgan angioarchitecture are characteristic of parenchymal organs?	GPC-5
99.	superior thyroid, lingual, facial	What branches belong to the anterior group of the external carotid artery?	GPC-5
100.	brachiocephalic trunk, left common carotid artery, left subclavian artery	What vessels branch off from the aortic arch?	GPC-5

101.	with angular (terminal branch of the facial artery - external carotid)	With which artery does the ophthalmic artery (a branch of the internal carotid artery) anastomose in the region of the medial angle of the eye?	GPC-5
		Semester _4_	
102.	1	What structures does the somatic nervous system innervate? 1) skin, skeletal muscles, bones, joints; 2) internal organs, glands, blood vessels; 3) glands, skin, internal organs, smooth muscles; 4) striated muscles, glands, vessels.	GPC-5
103.	3	What structures does the autonomic nervous system innervate? 1) skin, skeletal muscles, bones, joints; 2) internal organs, glands, blood vessels; 3) glands, smooth muscles of internal organs; 4) striated muscles, glands, vessels.	GPC-5
104.	1	List the anatomical structures of the peripheral nervous system: 1) nerves, nerve plexuses, nerve nodes, nerve trunks; 2) the brain and spinal cord, cranial nerves; 3) spinal cord, spinal nerves; 4) the brain and spinal cord.	GPC-5
105.	3	Name the parts of the spinal cord: 1) central, peripheral, initial, caudal, rudimentary; 2) front, rear, side, central; 3) cervical, thoracic, lumbar, sacral, coccygeal; 4) initial, intermediate, final, central.	GPC-5
106.	2	Name the parts of the brain: 1) occipital, bridge, intermediate, terminal; 2) terminal, intermediate, trunk, cerebellum; 3) cortex, basal ganglia, midbrain, cerebellum; 4) medulla oblongata, pons, midbrain, cortex, cerebellum.	GPC-5
107.	4	Where are the neurons located whose axons form the anterior root of the spinal nerve: 1) in the central canal of the spinal cord; 2) in the posterior horns of the gray matter of the spinal cord; 3) in the spongy zone of the spinal cord; 4) in the anterior horns of the spinal cord.	GPC-5
108.	1	Where are the neurons located whose axons form the posterior root of the spinal nerve: 1) in the spinal ganglia; 2) in the posterior horns of the gray matter of the spinal cord; 3) in the lateral horns of the spinal cord; 4) in the anterior horns of the spinal cord.	GPC-5
109.	1	The gray matter of the medulla oblongata is represented by:	GPC-5

		1) nuclei: cranial nerves, olives, reticular formation, thin and cuneate fasciculi; 2) nuclei of the reticular formation, pyramids, olivary nuclei, medial lemniscus; 3) pyramids, cerebellar peduncles, motor neurons , intermediate nuclei; 4) reticular formation, thin and cuneate bundles, olive nuclei.	
110.	2	Where is the bridge located: 1) in the cranial cavity on the greater wings of the sphenoid bone; 2) in the posterior cranial fossa on the clivus; 3) in the sella turcica, middle cranial fossa; 4) in the groove of the occipital sinus.	GPC-5
111.	1	The structural organization of the bridge includes: 1) roof, tire, base; 2) cover, base and intermediate zone; 3) ventral, dorsal, and central parts; 4) anterior, posterior and lateral sections.	GPC-5
112.	1	The cavity of the diencephalon is: 1) 3rd ventricle; 2) 4th ventricle; 3) water supply; 4) central channel.	GPC-5
113.	1	The structures of the diencephalon include: 1) thalamic brain, hypothalamic region, 3rd ventricle; 2) 3rd ventricle, thalami, pineal body; 3) optic chiasm, optic tract, pituitary gland; 4) basal ganglia, mantle, olfactory brain.	GPC-5
114.	4	The anatomical structures of the telencephalon include: 1) thalamic brain, hypothalamic region, 3rd ventricle; 2) 3rd ventricle, thalami, pineal body; 3) optic chiasm, optic tract, pituitary gland; 4) basal ganglia, mantle, olfactory brain.	GPC-5
115.	2	The first order furrows include: 1) central, precentral, postcentral; 2) lateral, central, occipito-parietal; 3) superior and inferior frontal sulci, superior and inferior temporal sulci; 4) central, intraparietal, transverse occipital.	GPC-5
116.	1	Commissural fibers connect: 1) identical areas of both hemispheres; 2) different parts of the same hemisphere; 3) the cerebral cortex with underlying structures; 4) adjacent convolutions between themselves.	GPC-5
117.	2	Association fibers connect: 1) identical areas of the two hemispheres of the brain; 2) different parts of the same hemisphere;	GPC-5

		3) the cerebral cortex with underlying structures; 4) adjacent convolutions between themselves.	
118.	3	Projection fibers connect: 1) identical areas of both hemispheres; 2) different parts of the same hemisphere; 3) the cerebral cortex with underlying structures; 4) adjacent convolutions between themselves.	GPC-5
119.	3	Name the basal ganglia of the telencephalon: 1) proper, thoracic, intermediate medial and lateral; 2) lenticular, spherical, cork-shaped, almond-shaped; 3) caudate, amygdala, lenticular, enclosure; 4) caudate, fence, capsule, dentate.	GPC-5
120.	3	List the lobes of the cerebral hemispheres: 1) paracentral, central, superior and inferior parietal, insula; 2) insula, temporal, parietal, occipital, superior and inferior parietal; 3) frontal, parietal, occipital, temporal, insula; 4) front, middle, back, lower, central.	GPC-5
121.	4	Pyramidal tracts provide: 1) analysis of the body's motor reactions; 2) unconditional reflex reactions aimed at maintaining the body's balance in space; 3) reflex muscle contractions and vascular-muscular tone; 4) conscious control of the body's muscles.	GPC-5
122.	2	The receptors that perceive interoceptive sensitivity are located: 1) in muscles, ligaments, fascia; 2) in the walls of internal organs; 3) in the skin; 4) in the mucous membrane of the nasal cavity and mouth.	GPC-5
123.	2	Which of the cerebellar proprioceptive sensitivity tracts does not cross (runs on its own side): 1) anterior spinocerebellar tract; 2) posterior spinocerebellar tract; 3) pontocerebellar tract; 4) rubrosteocerebellar tract.	GPC-5
124.	3	Pavlov's analyzer consists of: 1) receptor, conductor, effector; 2) receptor, subcortical center, effector; 3) receptor, conductors, cortical center; 4) receptor, effector.	GPC-5
125.	4	Parts of the fibrous membrane: 1) iris, cornea and sclera; 2) choroid, iris, sheath of the eyeball; 3) back, middle, front; 4) sclera, cornea.	GPC-5

126.	3	The cortical center of the visual analyzer of written speech is located: 1) in the optic convolutions; 2) in the lingual gyrus; 3) in the angular gyrus; 4) in the inferior temporal gyrus.	GPC-5
127.	1	The fibers of the eardrum are oriented: 1) radially outside, circularly inside; 2) only radially located fibers; 3) only circularly arranged fibers; 4) outside circular, inside radial.	GPC-5
128.	2	The receptor that perceives sound vibrations and converts them into a nerve impulse is represented by: 1) the tectorial membrane of the organ of Corti; 2) hair cells of the organ of Corti; 3) hair cells of the maculae; 4) the eardrum and auditory ossicles.	GPC-5
129.	3	Name the location of the bodies of 2 neurons in the olfactory analyzer pathway: 1) in the olfactory triangle; 2) in the subcallosal field; 3) in the olfactory bulb; 4) all of the above is suitable.	GPC-5
130.	a distinct neural plate in the dorsal part of the embryo's body	What does the development of the nervous system look like in the 3rd week of intrauterine development?	GPC-5
131.	wedge-shaped and thin bundles	What conduction pathways run through the posterior funiculi of the spinal cord?	GPC-5
132.	tegmental-spinal, corticospinal, vestibulospinal, reticulospinal, spinothalamic	What conducting pathways are found in the anterior funiculi of the spinal cord?	GPC-5
133.	spinocerebellar, corticospinal, spinothalamic, rubrospinal, olivospinal	What conducting pathways are found in the lateral funiculi of the spinal cord?	GPC-5
134.	pyramidal beats provide conscious control of the body's skeletal muscles	Name the functional difference between the pyramidal and extrapyramidal tracts.	GPC-5
135.	adrenal medulla	Which endocrine gland is a derivative of the sympathetic division of the autonomic nervous system?	GPC-5
136.	into the blood, lymph and other tissue fluids;	Where do the secreted products of the endocrine glands go?	GPC-5

137.	Effector nerve endings	What are the nerve endings that terminate in the working organ called?	GPC-5
138.	muscles of the eyeball, lacrimal apparatus; protective apparatus	What does the accessory apparatus of the eye consist of?	GPC-5
139.	the vestibule scala and the tympanic scala	What sections is the perilymphatic space of the cochlear canal divided into?	GPC-5
140.	geniculate ganglion, nucleus of the solitary tract, thalamus, parahippocampal gyrus, and uncus	In what order are the neurons of the gustatory analyzer pathway located (from the anterior 2/3 of the tongue).	GPC-5

2. Description of the Evaluation Scale

Within the framework of the rating system, students' academic progress in each discipline is evaluated during current control and intermediate attestation. The rating system for assessing students' knowledge is based on the use of a combination of control activities to check the covered material (checkpoints), optimally located throughout the entire time interval of studying the discipline. The principles of the rating system for assessing students' knowledge are based on the requirements described in the Regulations on the organization of the educational process based on the rating system for assessing students' knowledge at NCFU.

3. Criteria for Evaluating Competencies

The grade **Excellent** shall be awarded to a student if the theoretical content of the course has been mastered completely, without gaps; the material is presented exhaustively, consistently, clearly, and logically; the student freely copes with tasks, questions, and other types of knowledge application; uses additional material in the answer; all tasks provided for by the program are completed, and the quality of their execution is evaluated by a number of points close to the maximum; analyzes the obtained results; demonstrates independence when performing tasks.

The grade **Good** is to be awarded to a student if the theoretical content of the course is mastered completely, the necessary practical competencies are mainly formed, all educational tasks provided for by the training program are completed, and the quality of their execution is sufficiently high. The student firmly knows the material, presents it competently and strictly on the merits of the matter, without allowing significant inaccuracies in answering the question.

The grade **Satisfactory** is awarded to a student in case the theoretical content of the course has been mastered in part only, but the gaps are not of a significant nature, most of the tasks provided for by the program are completed, but contain errors, the student allows inaccuracies and insufficiently correct wording when answering the question, and violations of logical sequence are observed in the presentation of the program material.

The grade **Unsatisfactory** is awarded to a student if they do not know a significant part of the program material, allow significant errors, perform practical works with great difficulty and uncertainty, the necessary practical competencies are not formed, most of the educational tasks provided for by the training program are not completed, and the quality of their execution is evaluated by a number of points close to the minimum.