TESTS ON HUMAN ANATOMY FOR PRE-EXAM TESTING OF STUDENTS

CENTRAL NERVOUS SYSTEM

1. During phylogenesis the nodal nervous system has appeared:

1. At the coelenterates;
2. At worms;
3. At fishes;
4. At mammals;

2. During phylogenesis the tubular nervous system for the first time has appeared:

1. At the coelenterates;
2. At molluscums;
3. At chordates;
4. At fishes;

3. Specify, which part of the brain develops under influence of the olfactory receptor:

1. Prosencephalon;
2. Mesencephalon;
3. Metencephalon;
4. Myelencephalon;

4. Which part of the brain develops under influence of the visual receptor?

1. Prosencephalon;
2. Mesencephalon;
3. Rhombencephalon;
4. Myelencephalon;

5. **Which part of the brain develops under influence of the acoustical analyzer?** Telencephalon;
   Diencephalon;
   Mesencephalon;
   Rhombencephalon;

6. **From which medullary vesicle does the diencephalon develop?**

1. Telencephalon;
2. Diencephalon;
3. Mesencephalon;

1.
2.
3.
4.
4. Rhombencephalon;

7. From which medullary vesicle does the mesencephalon develop?

1. Telencephalon;
2. Diencephalon;
3. Mesencephalon;
4. Rhombencephalon;

8. From which medullary vesicle does the telencephalon develop?

1. Telencephalon;
2. Diencephalon;
3. Mesencephalon;
4. Rhombencephalon;

9. The aqueductus cerebri is the cavity of:

1. Telencephalon;
2. Diencephalon;
3. Mesencephalon;
4. Rhombencephalon;

10. The lateral ventricles are the cavity of:

1. Telencephalon;
2. Diencephalon;
3. Mesencephalon;
4. Rhombencephalon;

11. Specify, in which part of nervous tube the internuncial neurons of the simple reflex arc develop:

1. Dorsal part;
2. Ventral part;
3. Lateral part of the gray matter of nervous tube;
4. Brainstaim;

12. Specify, from which part of nervous tube the neurones for formation of nervous ganglion develop:

1. Dorsal part;
2. Ventral part;
3. Lateral part of the gray matter of nervous tube;
4. Brainstaim;

13. Which parts of the spinal cord have thickenings?

1. Cervical;
2. Thoracal;
3. Lumbosacral;
4. Coccygeal;

14. Specify anatomical structures on surface of the spinal cord:

1. Sulcus posterolateralis;
2. Sulcus anterolateralis;
3. Sulcus medianus posterior;
4. Fissura medina anterior;

15. What is the level of lumbar pucture?

1. Between spinous processes of I and II lumbar vertebrae;
2. Between spinous processes of IV and V lumbar vertebrae;
3. Between spinous processes of III and IV lumbar vertebrae;
4. Between spinous processes of II and III lumbar vertebrae;

16. What are the parts of the white matter of the spinal cord?

1. Funiculus anterior;
2. Funiculus lateralis;
3. Funiculus posterior;
4. Comissura alba;

17. Specify anatomical formations of the spinal cord, which are the remnants of the cavity of nervous tube:

1. Filum terminale;
2. Ventriculus terminalis;
3. Canalis centralis;
4. Cavitas subarachnoidalis;

18. Specify nuclei of the anterior horns of the spinal cord:

1. Nucleus intermediolateralis;
2. Nucleus thoracicus;
3. Anteromedial nuclei;
4. Anterolateral nuclei;

1.
2.
3. 4.

1.

19. Specify nuclei of the posterior horns of the spinal cord:

Nucleus thoracicus;
Nuclei proprii;
Nucleus intermediomedialis;
Nucleus intermediolateralis;

20. On which level the lateral horn of spinal cord can be found? II-IV Cervical;

2. Thoracic;
3. II-IV sacral;
4. Coccygeal;

21. At what level does the conus medullaris terminate in adult?

1. Level of X thoracic;
2. Level of II lumbar;
3. Level of XII thoracic;
4. Level of II sacral;

22. **At what level does the conus medullaris terminate in newborn?**

1. Level of XII thoracic;
2. Level of II lumbar;
3. Level of III lumbar;
4. Level of II sacral;

23. What is in the epidural space of the spinal cord?

1. Liquor cerebrospinalis;
2. Plexus venosi vertebrales interni;
3. Fatty tissue;
4. Cartilage;

24. Specify the locating of lig. denticulatum:

1. Between anterior and posterior roots of the spinal cord;
2. Between arachnoid and pia matter of the spinal cord;
3. In subarachnoid space;
4. In the subdural space;

25. Which parts of the brain develop from the rhombencephalon?

1. Telencephalon;

2. Diencephalon;
3. Medulla oblongata;
4. Metencephalon;

26. Specify departments of the brain, to which pedunculi cerebri concern:

1. Mesencephalon;
2. Diencephalon;
3. Telencephalon;
4. Rhombencephalon;

27. What are the parts of the cerebrum?

1. Insula;
2. Corpus callosum;
3. Rhinencephalon;
4. Basal nuclei;

28. What are the parts of the telencephalon?

1. Hemispheria cerebri;
2. Basal nuclei;
3. Capsula interna;
4. Fornix;

29. Specify structures, which connect the hemispheres of the cerebrum?

1. Comissura cerebri anterior;
2. Comissura cerebri posterior;
3. Corpus callosum;
4. Comissura interthalamica;

30. Which sulcuses can be present on superolateral surface of the hemispheres of cerebrum?

1. Sulcus rhinalis;
2. Sulcus centralis;
3. Sulcus frontalis interior;
4. Sulcus cinguli;

31. Which anatomical structures are on the medial surface of hemispheres of cerebrum present?

1. Precuneus;
2. Gyrus cinguli;
3. Sulcus carcarinus;
4. Gyrus angularis;

1.
2.
3. 4.

1.

32. Which gyruses are on the medial surface of hemispheres of cerebrum present?

1. Precuneus;
2. Lobulus paracentralis;
3. Gyrus parahippocampalis;
4. Gyrus angularis;

33. What is belonging to the frontal lobe of hemispheres of cerebrum?

1. Operculum;
2. Pars triangularis;
3. Uncus;
4. Gyrus precentralis;

34. Where is the cortical center of motor analyzer situated?

Lobulus paracentralis;
Gyrus postcentralis;
Gyrus parahippocampalis;
Gyrus precentralis;

35. Where is the cortical center of the skin analyzer situated? Gyrus precentralis;

2. Lobulus parietalis superior;
3. Gyrus postcentralis;
4. Sulcus calcarinus;

36. Where is the cortical center of the visual analyzer situated?

1. Cuneus;
2. Gyrus lingualis;
3. Gyrus parahippocampalis;
4. Gyri occipitales laterales;

37. Where is the cortical center of the acoustical analyzer situated?

1. Operculum;
2. Gyrus temporalis superior;
3. Gyrus temporalis medius;
4. Lobulus parietalis superior;

38. Where is the cortical center of the olfactory analyzer situated?

1. Gyrus temporalis superior;
2. Gyrus frontalis medius;
3. Uncus gyrus parahippocampalis;
4. Gyrus occipitotemporalis medialis;

39. Where is the cortical center of the taste analyzer situated?

1. Gyrus fornicatus;
2. Uncus gyrus parahippocampalis;
3. Gyrus occipitotemporalis lateralis;
4. Gyrus postcentralis;

40. Where is the cortical center of the motor analyzer responding for combined turn of the head and eyes situated?

1. Gyrus postcentralis;
2. Gyrus precentralis;
3. Gyrus frontalis medius;
4. Gyrus angularis;

41. Where is the cortical center of the motor analyzer responding for complex professional and sports locomotions situated?

1. Gyrus angularis;
2. Gyrus supramarginalis;
3. Gyrus frontalis inferior;
4. Gyrus temporalis superior;

42. Where is the cortical center of the interoceptive analyzer situated?

1. Gyrus angularis;
2. Lobulus parietalis inferior;
3. Gyrus precentralis;
4. Gyrus postcentralis;

43. Where is the cortical center of the motor analyzer of the articulation of oral speech situated?

1. Gyrus frontalis medius;
2. Gyrus frontalis inferior;
3. Pars opercularis;
4. Pars triangularis;

44. Where is the cortical center of the motor analyzer of written speech situated?

1. Gyrus frontalis medius;
2. Gyrus frontalis inferior;

1.
2.
3. 4.

1.
3. Pars opercularis;
4. Pars triangularis;

45. Where is the cortical center of the acoustical analyzer of oral speech situated?

1. Gyrus temporalis superior;
2. Gyrus temporalis medius;
3. Gyrus frontalis medius;
4. Gyrus frontalis inferior;

46. Where is the cortical center of the visual analyzer of written speech situated?

1. Gyrus temporalis superior;
2. Gyrus frontalis inferior;
3. Lobulus parietalis inferior;
4. Gyrus angularis;

47. Which gyruses can be found in the inferior parietal lobulus?

1. Gyrus supramarginalis;
2. Gyrus fornicatus;
3. Gyrus angularis;
4. Gyrus postcentralis;

1.
2.
3. 4.

1.

48. What are the parts of the fornix?

Corpus fornicis;
Crura fornicis;
Genu couporis callosi;
Columnae fornicis;

49. What are the parts of the gyrus fornicates? Gyrus dentatus;

2. Gyrus cinguli;
3. Istmus;
4. Gyrus parhippocampalis;

50. Which gyruses can be found in the temporal lobe of hemispheres?

1. Gyrus supramarginalis;
2. Gyri transversi;
3. Gyrus angularis;
4. Pars triangularis;

51. Specify anatomical formations limiting internal capsula of the brain:

1. Caput n. caudati;
2. Thalamus;
3. N. lentiformis;
4. Claustrum;

52. Which anatomical structures concern to the basal nuclei of hemispheres?

1. N.n. rubri;
2. Corpus stuiatum;
3. Corpus amygdaloideum;
4. Claustrum;

53. What is concern to the central part of the rhinencephalon?

1. Gyrus dentatus;
2. Trigonum olfactorium;
3. Gyrus fornicatus;
4. Bulbus olfactorius;

1. 2.
3.
4.

1. 2.
3. 4.

1.

54. Specify parts of the corpus collosum:

1. Truncus;
2. Splenium;
3. Genu;
4. Rostrum;

55. Specify anatomical structures, which participate in formation of the medial and lateral walls of anterior horn of the lateral ventricle:

Hippocampus;
Septum pellucidum;
Caput nuclei caudati;
Calcar avis;

56. Which anatomical structures take part in formation of walls of the central part of the lateral ventricle?

1. Thalamus;
2. Corpus fornicis;
3. Corpus callosum;
4. Nucleus caudatus;

57. Which anatomical structures take part in formation of walls of the inferior horn of the lateral ventricle?

1. Fibria hippocampi;
2. Corpus callosum;
3. Crura fornicis;
4. Hippocamp;

58. What is concern to the diencephalon?

1. Oliva;
2. Thalamus;
3. Corpus mamillaris;
4. Chiasma opticum;

59. What is concern to the hypothalamus?

1. Tuber cinereum;
2. Corpora mamillaria;

1. 2.
3.
4.

3. Infundibulum;
4. Corpus geniculatum laterale;

60. Which parts of the brain participate in formation of walls of the third ventricle? 1. Hypothalamus;
2. Columnae fornicis;
3. Thalamus;
4. Corpus callosum;

61. What is concern to the limbic system?
1. Gyrus dentatus;
2. Substantia perforata anterior;
3. Hippocampus;
4. Bulbus olfactorius;

62. What is concern to the mesencephalon?
1. Substantia nigra;
2. Pedunculi cerebri;
3. Corpus trapezoideum;
4. Velum medullare superius;

63. Specify nuclei locating in tegmentum of the mesencephalon:
Nucleus of VI pair of cranial nerves (n. abducens);
Nuclei rubri;
Nucleus mesencephalicus n. trigemini;
Nucleus of IV pair of cranial nerves (n. trochlearis);

64. Which conducting tracts pass through the basis pedunculi cerebri? Tr. frontopontinus;
2. Tr. spinothalamicus anterior;
3. Tr. corticospinalis (pyramidalis);
4. Tr. cochlearis;

65. What are the subcortical centers of hearing?
1. Corpola geniculata lateralia;
2. Thalamus;
3. Corpola geniculata medialia;

1. 2.
3. 4.

1.
4. Colliculi inferiores;

66. Which anatomical structures, which concern to the isthmus of the rhombencephalon:

1. Velum medullare superius;
2. Trigonum lemnisci;
3. Pedunculi cerebelli superiores;
4. Brachii collicules inferiores;

67. Which conducting paths form the trapezoid body?

1. Tr. corticospinalis (pyramidalis);
2. Tr. cochlearis;
3. Lemniscus medialis;
4. Tr. pontocerebellaris;

68. Which anatomical structures are in the ventral part of the pons situated?

1. Tr. corticospinalis;
2. Tr. pontocerebellaris;
3. Nuclei proprii;
4. N. pontinus n. trigemini;

69. The nuclei of which cranial nerves are in the pons situated?

1. VII pair (n. facialis);
2. IX pair (n. glossopharyngeus);
3. VI (n. abducens);
4. X pair (n. vagus);

70. Specify nuclei of the cerebellum:

Nucl. emboliformis;
Nuclei reticulares;
Nucl. fastigii;
Nucl. dorsalis corporis trapezoidei;

1. 2.
3.
4.

1. 2.
3. 4.

1.

71. To which part of the brain do the superior cerebellar pedunculi belong?
Mesencephalon;
Medulla oblongata;
Thalamus;
Pons;

72. To which part of the brain do the inferior cerebellar pedunculi pass? Pons;
2. Medulla oblongata;
3. Cerebellum;
4. Mesencephalon;

73. Specify nuclei locating in myelencephalon:
1. Nucl. olivaris;
2. Nucl. gracilis;
3. Nuclei trapezoidei;
4. Nucl. cuneiformis;

74. Where is the motor nucleus of accessory nerve situated?
1. Mesencephalon;
2. Medulla oblongata;
3. Pons;
4. Upper segments of the spinal cord;

75. Specify nuclei of the trigeminal nerve:
1. Nucl. solitarius;
2. Nucl. mesencephalicus;
3. Nucl. spinalis;
4. Nucl. motorius;

76. For which cranial nerves the solitarius nucleus is the common?
1. N. hypoglossus;
2. N. glossopharingeus;
3. N. acessorius;

1. 2.
3. 4.

1.
4. N. vagus;

77. Where is the superior salivatorius nucleus situated?

1. Pons;
2. Diencephalon;
3. Mesencephalon;
4. Medulla oblongata;

78. Where is the inferior salivatorius nucleus situated?

1. Pons;
2. Mesencephalon;
3. Medulla oblongata;
4. Diencephalon;

79. Specify nuclei of vagus nerve:

Nucl. ambiguous;
Nucl. solitarius;
Nucl. spinalis;
Nucl. dorsalis n. vagi;

80. Through which anatomical structures do the commissural fibers pass? Corpus callosum;

2. Comissura cerebri anterior;
3. Capsula interna;
4. Comissura fornicis;

81. Specify long associative fibers:

1. Fasciculus longitudinalis superior;
2. Fasciculus longitudinalis interior;
3. Fasciculus uncinatus;
4. Fasciculi medullae spinalis;

82. Which conducting tracts pass through the posterior funiculi of the spinal cord?

1. Fasciculus longitudinalis posterior;
2. Fasciculus gracilis;
3. Tr. Spinocerebellaris posterior;
4. Fasciculus cuneatus;

1. 2.
3.
4.

83. Which conducting tracts pass through the lateral funiculi of the spinal cord?

1. Tr. spinothalamicus lateralis;
2. Tr. spinocerebellaris anterior;
3. Tr. vestibulospinalis;
4. Tr. rubrospinalis;

84. Which conducting tracts pass through the anterior funiculi of the spinal cord?

1. Tr. spinothalamicus anterior;
2. Tr. tectospinalis;
3. Tr. corticospinalis anterior;
4. Tr. vestibulospinalis;

85. Which conducting tracts pass through the tegmentum of mesencephalon?

1. Tr. corticospinalis (pyramidalis);
2. Lemniscus medialis;
3. Tr. spinocerebellaris anterior;
4. Tr. corticonuclearis;

86. Which conducting tracts pass through the inferior cerebellar pedunculi? Tr. spinocerebellaris posterior;
Fasciculus longitudinalis posterior;
Fibrae arcuatae interni;
Fibrae arcuatae externi;

87. Which tracts form the ventral decussation of tegmentum of the mesencephalon?

1. Fasciculus longitudinalis posterior;
2. Tr. corticospinalis;
3. Tr. rubrospinalis;
4. Lemniscus medialis;

88. Which tracts form the dorsal decussation of tegmentum of the mesencephalon?

1. Tr. rubrospinalis;
2. Tr. tectospinalis;
3. Tr. corticospinalis (pyramidalis);
4. Tr. spinothalamicus lateralis;

89. Specify conducting tracts passing through the genu of internal capsula:

1. 2.
3. 4.

1.

1. Tr. spinothalamicus anterior;
2. Tr. corticothalamicus;
3. Tr. frontopontinus;
4. Tr. corticonuclearis;

90. Specify conducting tracts passing through posterior crus of internal capsula:

1. Tr. cochlearis;
2. Tr. corticospinalis;
3. Tr. frontopontinus;
4. Tr. spinothalamicus lateralis;

91. Specify conducting tracts passing through anterior crus of internal capsula:

1. Tr. spinothalamicus anterior;
2. Tr. corticothalamicus;
3. Tr. frontopontinus;
4. Tr. cochlearis;

92. Through which anatomical structures does the corticospinal tract pass?

1. Capsula interna;
2. Basis pedunculi cerebri;
3. Tegmentum;
4. Pedunculi cerebelli inferiores;

93. Through which parts of the spinal cord does the corticospinal tract pass?

1. Funiculus lateralis;
2. Funiculus anterior;
3. Funiculus posterior;
4. Comissura alba;

1. 2.
3.
4.

1.
2.
3.
4.

1.

94. Specify second neurones of pyramidal tracts:

Vegetative nuclei of the brainstem;
Motor nuclei of the brainstem (nuclei anteriores);
Nuclei of lateral horns of the spinal cord;
Nuclei of anterior horns of the spinal cord;

95. The medial lemniscus is formed by the processes of: Nuclei proprii;

2. Nucl. cuneatus;
3. Nucl. gracilis;
4. Nucl. motorius n. trigemini;

96. Where does the lateral lemniscus terminate?

1. Corpus geniculatum mediale;
2. Nuclei colliculi superiores;
3. Motor nucleus of the n. oculomotorius;
4. Nuclei colliculi inferiores;

97. Specify structures of the brain, secreting the cerebrospinal fluid:

1. Arachnoidea;
2. Lamina choroidea epithelialis of the lateral ventricles;
3. Lamina choroidea epithelialis of the third ventricle;
4. Lamina choroidea epithelialis of the fourth ventricle;

98. From which cavity of the brain does the cerebrospinal fluid flow out in subarachnoid space?

1. From the fourth ventricle (ventriculus quartus);
2. From the third ventricle (ventriculus tertius);
3. From lateral ventricles (ventriculi laterales);
4. From aqueductus cerebri;

99. Specify foramens connecting the cavity of the fourth ventricle and subarachnoid space: 1. Apertura aqueductus cerebri;

2. Aperturae laterales;
3. Apertura mediana;
4. Foramina interventricularia;

100. Specify subarachnoid cysterns locating on the basal surface of the brain:

1. Cisterna interpeduncularis;
2. Cisterna cerebellomedullaris;
3. Cisterna fossae lateralis cerebra;
4. Cisterna chiasmatis;

101. What is true for the dura mater of the brain?

1. Close fusing with bones of the base of skull;
2. Presence of sinus venosus;
3. Presence of processes;
4. Presence of ligamenta dentata;

102. Specify sinuses of the dura mater, which form confluens sinuum:

1. Sinus transversus;
2. Sinus sigmoideus;
3. Sinus sagittalis superior;
4. Sinus rectus;

103. Specify processes of the dura materl of the brain:

1. Tentorium cerebelli;
2. Falx cerebelli;
3. Falx cerebri;
4. Diaphragma sellae;

104. Specify parameters describing age features of the brain:

1. Mass of the brain in relation to mass of the body at neonatal makes 1:8;
2. Mass of the brain in relation to mass of the body at neonatal makes 1:40;
3. The fine gyruses at neonatal are advanced weakly;
4. The myelination of efferent fibers terminates until 7 years;

105. Specify parameters describing age features of the dura mater of the brain in newborn:

1. The dura mater thin, is dense fised with bones of the skull;
2. The processes of the dura materl are advanced weakly;
3. Sinuses rather wide;
4. Sinuses project the same as at the adult;

106. Which fibers pass through superior pedunculi of the cerebellum?

1. Tr. spinocerebellaris anterior;
2. Tr. cerebellotegmentalis;
3. Tr. pontocerebellaris;
4. Fibrae arcuatae externae;

107. Specify fibers passing through the middle pedunculi of the cerebellum:

1. Tr. spinocerebellaris anterior;
2. Tr. cerebellotegmentalis;
3. Tr. pontocerebellaris;
4. Fibrae arcuatae externae;

108. Specify fibers passing through inferior pedunculi of the cerebellum:

1. Tr. spinocerebellaris posterior;
2. Fibrae arcuatae externae;
3. Fibrae arcuatae internae;
4. Fibrae olivocerebellares;

Key to the test on "Central nervous system"

1.	*2*	**24.**	*123*	**47.**	*13*	**70.**	*13*	**93.**	*124*
2.	*3*	**25.**	*34*	**48.**	*124*	**71.**	*4*	**94.**	*4*
3.	*1*	**26.**	*1*	**49.**	*234*	**72.**	*23*	**95.**	*23*
4.	*2*	**27.**	*1234*	**50.**	*2*	**73.**	*124*	**96.**	*14*
5.	*3*	**28.**	*1234*	**51.**	*123*	**74.**	*24*	**97.**	*234*
6.	*2*	**29.**	*123*	**52.**	*234*	**75.**	*234*	**98.**	*1*
7.	*3*	**30.**	*23*	**53.**	*13*	**76.**	*24*	**99.**	*2*
8.	*1*	**31.**	*123*	**54.**	*1234*	**77.**	*1*	**100.**	*1234*
9.	*3*	**32.**	*12*	**55.**	*23*	**78.**	*3*	**101.**	*123*
10.	*1*	**33.**	*124*	**56.**	*134*	**79.**	*124*	**102.**	*34*
11.	*1*	**34.**	*14*	**57.**	*1234*	**80.**	*124*	**103.**	*1234*
12.	*1*	**35.**	*23*	**58.**	*234*	**81.**	*123*	**104.**	*134*
13.	*13*	**36.**	*12*	**59.**	*123*	**82.**	*24*	**105.**	*1234*
14.	*1234*	**37.**	*2*	**60.**	*123*	**83.**	*124*	**106.**	*12*
15.	*3*	**38.**	*3*	**61.**	*1234*	**84.**	*234*	**107.**	*3*
16.	*1234*	**39.**	*2*	**62.**	*12*	**85.**	*2*	**108.**	*124*
17.	*23*	**40.**	*3*	**63.**	*234*	**86.**	*14*		
18.	*34*	**41.**	*2*	**64.**	*13*	**87.**	*3*		
19.	*123*	**42.**	*34*	**65.**	*34*	**88.**	*2*		
20.	*23*	**43.**	*234*	**66.**	*123*	**89.**	*4*		
21.	*2*	**44.**	*1*	**67.**	*2*	**90.**	*124*		

22.	*3*	**45.**	*1*	**68.**	*123*	**91.**	*23*
23.	*23*	**46.**	*34*	**69.**	*13*	**92.**	*12*