Quiz Answers : Thomadaki : "Sure you could… although that may not be the best of ideas."

RECEPTOR INTRO

1. Both axons
2. Thermal receptors and pain receptors (exposed nerve)
3. Aδ or C
4. Aα or Aβ
5. Touch, vibration, pressure, touch
6. During onset and removal
7. From onset and during stimulation.
8. Meissner's, Pacinian
9. Merkel's, Ruffani's
10. Skin, skeletal, muscle, and bone
11. Smooth, cardiac, glands, and organs
12. Aα, Aβ, Aδ, C
13. Ia or Ib, II, III, IV

DEEP SENSIBILITY

14. Dorsal columns, medial lemniscus system, spinocerebellar tracts
15. Vibration, discriminatory touch, pressure, and proprioception
16. Stereognosis
17. Stereognosis and graphaethesia
18. Fasciculus cuneatus, Spinocerebellar tracts
19. DR ganglion → Fasciculus gracilis → Nucleus gracilis in the medulla without crossing
20. Sacral contribution
21. DR ganglion → Fasciculus cutaneous → Nucleus cuneatus in the medulla without crossing
22. Unconscious, cuneocerebellar tract
23. Fasciculus gracilis and cuneatus Collaterals to various levels of both horns bilaterally
24. Fasciculus proprius (thin grey matter outline)
25. Dorsal horn, nucleus dorsalis (clarke's column)
26. Dorsal spinocerebellar tract, ascends to medulla without crossing
27. Nucleus Z
28. Cerebellum via the inferior cerebellar peduncle
29. (FG), (VSCT), (FC & DSCT)
30. Nucleus proprius → Ventral White Commissure (cross) → Sup. Cerebellar peduncle (cross)
31. Nuclei Gracilis, Cuneatus, and Z, arcuate fibers, g. sensory decessation, Contralateral ML
32. cervical (dorsal) to sacral (ventral)
33. cervical (medial) to sacral (lateral)

PAIN AND TEMPERATURE

34. Noxious stimuli resulting from skin or soft tissue injury
35. Tissue injury and resultant inflammation
36. Direct insult to the nerve
37. Subjective, nociceptor excitation
38. Fast sharp prickling pain
39. Slow dull pain
40. Thermal and mechanical noxious stimuli
41. High intensity thermal, chemical and mechanical noxious stimuli
42. Pain from the viscera enters the spinal cord the same way somatic pain does
43. sensitization of surrounding nociceptors after injury by inflammation
44. bradykinin, prostaglandins, histamine, acetylcholine, substance P, CGRP, etc.
45. Lower the nociceptor's activation threshold (easier to activate)
46. sensitization of dorsal horn cells after injury
47. persistent activation of NMDA receptors by the glutamate releasing C fibers
48. long-term decrease of the pain threshold
49. Ipsilateral, Two levels up
50. Aδ and C
51. Primary, nucleus proprius, pericornual cells and substantia gelatinosa
52. Pain perception
53. Nucleus proprius, Ventral white commissure
54. Secondary pain and temperature, anterolateral spinothalamic system
55. Reticular formation, periaqueductal grey, nucleus gracilis & cuneatus, and hypothalamus
56. proprioceptive & mechanical stimulation diminishes the perception of pain
57. Aβ, nucleus substantia, nucleus proprius
58. Aδ and C, nucleus proprius, nucleus gelatinosa
59. Turn off, turn on, pain modulation
60. Transcutaneus Electron Nerve Stimulation, pain modulation
61. Periaquiductal gray
62. Feel no pain, feel nothing
63. Blocking of withdraw reflexes in response to painful stimuli
64. Serotoninergic nuclei, Noradenergic locus coeuleus
65. Fasciculus of Lissauer, pericornual cells and nucleus proprius
66. Glutamate secretion of the primary pain afferents
67. Opiods and electrical stimulation
68. No

DIENCEPHALON: THALAMUS

69. Thalamus, Hypothalamus, Subthalamus, and epithalamus
70. Autonomic maintenance of consciousness
71. Interthalamic adhesion
72. Forms the floor of the lateral ventricles and the superior lateral wall of the 3rd ventricle
73. Nuclei and associated laminae
74. The roof of the 3rd ventricle
75. External medullary lamina
76. White matter, internal medullary lamina
77. Smell, interpreted
78. Motor information, motor cortex
79. Thalamus allows you to start and stop motion correctly
80. Anterior, Medial, Ventrolateral, Reticular, Intralaminar, and Midline
81. Anterior tubercle, interventricular foramen of Monro
82. Limbic system information, mamillary bodies via the mammillothalamic tract
83. Memory and emotion
84. Thiamin deficiency due to alcoholism causing destruction around the third ventricle
85. Medial or anterior thalamic nuclei and the mamillary bodies
86. Short term anterograde memory loss with confabulation
87. Basal ganglia, amygdala, midbrain, and some spinothalamic fibers
88. Prefrontal lobe
89. Memory and behavior
90. Symptoms parallel those of prefrontal lobotomy
91. Basal ganglia and dentate nucleus
92. Motor and premotor cortices
93. Motor integration and in maintenance of consciousness
94. Parkisonian rigidity and tremor, ameliorate Parkisonian symptoms
95. Ventral posterior nucleus
96. Ventral posterior medial nucleus
97. Ventral posterior lateral nucleus
98. Anesthesia, or Thalamic syndrome
99. Loss of all sensation except for a pain hypersensitivity
100. Inferior brachium (from inferior colliculus)
101. Auditory cortex via the auditory radiation
102. Bilateral hearing loss with a greater loss to the contralateral side
103. Optic tract

104. Visual cortex via the optic radiation
105. Contralateral homonymous hemianopsia visual loss
106. Limbic system areas
107. Emotional expression
108. Sensory association cortex of the parietal lobe
109. Integration of sensory information
110. Retina and superior colliculus
111. Parietal, occipital, and temporal lobes, Visual reflexes and eye movement
112. Thalamus and cortex
113. Modulation of thalamic activity. Tells each nuclei what the others are doing
114. Maintaining consciousness and alertness, integrating emotional responses to pain
115. Midline nuclei

DIENCEPHALON: HYPO, SUB, EPI

116. Inf. part of the lateral wall and floor of third ventricle. Mam bodies and tuber cinereum
117. Anterior, intermediate, and posterior zones
118. Endocrine and Limbic system, autonomic responses
119. Endocrine control, neurosecretion, general autonomic effects, temperature, sexual behavior/ reproduction, biological clock, emotional expression, blood pressure/osmollarity
120. Regulation of food and water intake
121. Hyperphagia, Hypophagia
122. Anterior pituitary
123. Oxytocin (Paraventricular nucleus), Antidiuretic Hormone (supraoptic nucleus)
124. Lowers body temps via cutaneous vasodilatation and sweating
125. Raises body temps via cutaneous vasoconstriction and shivering
126. Gonadotropic production by the anterior pituitary
127. Gametogenesis, cyclic variation, maturation and maintenance of secondary characteristics
128. Suprachaismatic nucleus
129. Midbrain and thalamus
130. Subthalamic nucleus, basal ganglia
131. Hemiballismus (uncontrollable violent torsonal movement)
132. Habenula, stria medullaris thalami, pineal gland, posterior and habenular commisures
133. Olfactory reflexes
134. Two superior colliculi, visual reflexes
135. Antigonadotropin (inhibit gonadotropin), melatonin (circadian rhythms)
136. Delayed puberty, precocious puberty

CEREBRAL CORTEX

137. 52
138. 4, primary motor cortex, motion of a joint along a vector
139. Homunculus
140. Motor homunculus
141. Motor intergration, judgment, and language production
142. Posterior portion of the inferior frontal gyrus, expressive aphasia
143. Transverse temporal gyri of Heschl
144. Insula, Auditory integration and taste
145. Perception of contrast color and shape
146. Agnosia, Prosopognosia
147. Parahippocampal gyrus, underline hippocampal formation, and amygdale
148. Primary somatosensory 3,1,2
149. Sensory association area
150. Lack of knowledge, Inability to differentiate faces
151. Postcentral gyrus
152. Visual, auditory, and limbic inputs concerning three dimensional perception
153. Astereognosis, personal neglect syndrome, and spatial neglect syndrome
154. Pos. portion of the sup. Temporal gyrus with adjoining inf. Parietal lobe
155. Inability to recognize 3D objects through touch
156. Ignoring the left side of one's body
157. Ignoring the left visual field
158. Receptive aphasia (fluent speech with impaired repetition and comprehension)
159. Primary and association visual cortices
160. Anopsia

AUTONOMIC NERVOUS SYSTEM

161. Involuntary
162. Sympathetic, Parasympathetic
163. Blood vessels of the periphery
164. Sympathetic
165. Somatic, Sympathetic and Parasympathetic preganglion
166. Norepiniephrine
167. Muscarinic Ach
168. 1:10
169. 1:3

170. Neurotransmitters may diffuse for great distances before reaching their target
171. Neuropetides
172. α1, α2, β1, β2, and β3
173. M1, M2, M3
174. Autonomy, digestive reflexes
175. Motor and sensory
176. LMN's and Sympathetic preganglion fibers
177. Intermediolateral gray of T1-L2
178. Sacral and cervical spine
179. Everywhere
180. White rami → Sympathetic chain → Grey rami → Spinal nerve → Dorsal/Ventral Rami
181. Sympathetic trunk, paravertebral sympathetic ganglia
182. Extremities and Front (peripheral blood vessels, sweat glands, and arrectores pilorum)
183. Back only (peripheral blood vessels, sweat glands, and arrectores pilorum)
184. White rami → Sympathetic chain → Grey rami → Spinal nerve → Plexus or Cranial Nerves
185. Horner's syndrome (Ptosis, meiosis, anhydrosis, and enophthalmos)
186. Sunken in eye
187. Lack of sweating
188. Pin point pupil
189. White rami → Sympathetic chain (no synapse)→ Splanchnic nerves → Prevertebral ganglia
190. GI tract, pancreas, liver, kidney, bladder, and genitalia
191. Coeliac, superior mesenteric, inferior mesenteric
192. Greater, lesser, least, and lumbar
193. Some splanchnic nerves bypass prevertebral and directly innervate adrenal medulla
194. Adrenal medulla, epinephrine and norepinephrine
195. Cranial nerves III, VII, IX, X, and intermediolateral gray of S2-4.
196. Edinger Westphal (III), Sup. Salivatory (VII), Inf. Salivatory (IX), Dorsal Motor (X)
197. Ciliary Ganglion
198. Pterygopalatine and Submandibular
199. Otic ganglion
200. Diffuse thoracic and abdominal
201. Sphincter papillae, Ciliary muscles
202. Lacrimal gland, serous and mucous glands of the nasopharynx
203. Submandibular and sublingual salivary glands
204. Parotid salivatory gland
205. Heart, lungs, and digestive systems

206. Pelvic splanchnic nerves, descending & sigmoid colon and pelvic viscera
207. Control GI tract, pancreas, and gallbladder
208. Gut wall tension, chemical change input
209. Smooth muscle, vasculature, and secretion of the gut
210. Myenteric & Submucosal, highly autonomous
211. Visceral chemosensory info about taste
212. Info from head and neck viscera
213. Info from thoracic and abdominal viscera
214. Solitary nucleus
215. Hypothalamus → thalamus, amygdale, and cingulated cortex
216. Reticular formation and Periaqueductal gray
217. Autonomic function, reflexes

TRIGEMINAL NERVE

218. Opthalmic (Sup. Orbital Foramen), Maxillary (F. Rotuntum), Mandibular (F. Ovale)
219. IPSE Loss of P&T and touch of the face
220. IPSE Loss of P&T, touch, temperature, proprioception and mastication
221. IPSE Loss of P&T
222. IPSE Loss of touch of the face
223. CONTRA loss of P&T
224. CONTRA loss of P&T, touch, and proprioception
225. IPSE loss of mastication