Section 8. Peripheral nervous system

1 Anatomical components of the peripheral part of the autonomic nervous system (pars autonomica systematis nervosa peripherici) are among others:
autonomic/visceral ganglia (gg. autonomici/viscerales)
sympathetic trunks (trunci sympathici)
autonomic/visceral plexuses (plexus autonomici/viscerales)
splanchnic nerves (nervi splanchnici)
spinal nerves (nn. spinales)

2 The main feature of the autonomic reflex arch is that:
its efferent part is bineuronal
its efferent part is unineuronal
its afferent part is bineuronal
its efferent part is bineuronal in sympathetic and unineuronal in parasympathetic divisions
its afferent part is bineuronal in sympathetic and unineuronal in parasympathetic divisions

3 Anatomical structures related to the sympathetic division of the autonomic nervous system (pars sympathica systematis nervosa autonomici) are among others:
white rami communicantes (ramus communicans albus)
great splanchnic nerves (nervus splanchnicus major)
gray rami communicantes (ramus communicans griseus)
lumbar splanchnic nerves (n. splanchnicus lumbalis)
recurrent nerves (n. recurrens)

4 The parasympathetic postganglionic fibers (neurofibrae postganglionicae) originate:
in intramural ganglia (gg. intramurale)
in the near-organ ganglia
in the ganglia of the sympathetic trunk (gg.trunci sympathici)
in the spinal cord (medulla spinalis)
in the autonomic nuclei of the brainstem

5 The nuclei that compose the central part of the autonomic nervous system are among others:
sacral parasympathetic nuclei (nucleus parasympathicus sacralis)
superior salivary nuclei (nucleus salivatorius superior)
inferior salivary nuclei (nucleus salivatorius inferior)
intermediolateral nuclei (nucleus intermediolateralis)
nuclei ambiguous (nucleus ambiguous)

6 The nuclei of the cranial part (pars cranialis) of the parasympathetic nervous system are:
dorsal/posterior nucleus of the vagus nerve (nucleus dorsalis/posterior n. vagi)
inferior salivary nucleus (nucleus salivatorius inferior)
superior salivary nucleus (nucleus salivatorius superior)
accessory nucleus of oculomotor nerve (nucleus accessories n.oculomotorii)
solitary nucleus (nucleus tractus solitarii)

7 The higher (supra-segmental) centers of the autonomic nervous system are among others:
hypothalamus (hypothalamus)
reticular formation (formationreticularis)
geniculate bodies (corpora geniculata)
fornix (fornix)
basal nuclei (nuclei basales)

8 The sympathetic preganglionic fibers originate:
in the lateral horns of the spinal cord (cornu laterale)
in the midbrain (mesencephalon)
in the medulla oblongata (medulla oblongata)
in the sacral segments of the spinal cord (medulla spinalis)
in the anterior horns of the spinal cord (cornu anterius)

9 The parasympathetic preganglionic fibers originate:
in the midbrain (mesencephalon)
in the medulla oblongata (medulla oblongata)
in the sacral segments of the spinal cord (medulla spinalis)
in the lateral horns of the spinal cord (cornu laterale)
in the posterior horns of the spinal cord (cornu posterius)

10 The nerves coming from the superior cervical ganglion (ganglion cervicale superius) of the sympathetic trunk (truncus sympathicus) are:
internal carotid nerve (n.caroticus internus)
superior cervical cardiac nerve (n. cardiacus cervicalis superior)
external carotid nerves (nn. carotici externi)
laryngopharyngeal branches (rr. laryngopharyngei)
vertebral nerve (n. vertebralis)

11 The nerves coming from the middle cervical ganglion (ganglion cervicale medium) of the sympathetic trunk (truncus sympathicus) are:
gray ramus communicans (ramus communicans griseus)
middle cervical cardiac nerve (n.cardiacus cervicalis medius)
jugular nerve (n.jugularis)

laryngopharyngeal branches (rr. laryngopharyngei)
vertebral nerve (n.vertebralis)

12 The nerves coming from the cervicothoracic (stellate) ganglion (ganglion stellatum) of the sympathetic trunk (truncus sympathicus) are:
inferior cardiac nerve (n.cardiacus inferior)
vertebral nerve (n.vertebralis)
superior cardiac nerve (n.cardiacus superior)
external carotid nerve (n. caroticus externus)
internal carotid nerve (n.caroticus internus)

13 The nerves issuing from the thoracic ganglia (gg. thoracica) of the sympathetic trunk (truncus sympathicus) are:
pulmonary branches (rr. pulmonales thoracici)
oesophageal branches (rr. oesophageales)
thoracic cardiac branches (rr.cardiaci thoracici)
diaphragmatic nerve (n. phrenicus)
jugular nerve (n.jugularis)

14 The preganglionic sympathetic fibers enter the sympathetic trunk (truncus sympathicus) via:
white rami communicantes (rami communicantes albi)
gray rami communicantes (rami communicantes grisei)
intercostal nerves (nn. intercostales)
lesser splanchnic nerves (nn. splanchniciminores)
lumber splanchnic nerves (nn. splanchnicilumbales)

15 The nerves issuing from the sympathetic trunk (truncus sympathicus) are:
gray rami communicantes (rami communicantes grisei)
great splanchnic nerves (n. splanchnicus major)
lumber splanchnic nerves (n. splanchnicus lumbalis)
sacral splanchnic nerves (n. splanchnicus sacralis)
pelvic splanchnic nerves (n. splanchnicus pelvicus)

16 The main source of parasympathetic preganglionic fibers (neurofibrae parasympathicae) to the internal organs are:
vagus nerves (n.vagus)
spinal nerves (n.spinalis)
white rami communicantes (rami communicantes albi)
great splanchnic nerve (n. splanchnicus major)
lesser splanchnic nerve (n. splanchnicus minor)

17 The parasympathetic nucleus of the vagus nerve (n.vagus) is:

dorsal/posterior nucleus (nucleus dorsalis/posterior)
nucleus ambiguus (nucleus ambiguus)
inferior salivatory nucleus (nucleus salivatorius inf.)
superior salivatory nucleus (nucleus salivatorius sup.)
accessory nucleus (nucleus accessorius)

18 Parasympathetic fibers from the sacral parasympathetic nuclei (nuclei parasympathici sacrales) pass later in:
anterior branches of spinal nerves (r.anterior n.spinalis)
pelvic splanchnic nerves (nn. splanchnici pelvici)
inferior hypogastric plexus (plexus hypogastricus inferior)
posterior branches of spinal nerves (r.posterior n.spinalis)
sacral splanchnic nerves (nn. splanchnici sacrales)

19 The sphincter pupillae (m. sphincter pupillae) and the ciliary muscle (m. ciliaris) obtain a parasympathetic innervation from:
ciliary ganglion (ganglion ciliare)
otic ganglion (ganglion oticum)
pterygopalatine ganglion (ganglion pterygopalatininum)
superior cervical ganglion (ganglion cervicale sup.)
trigeminal ganglion (ganglion trigeminale)

20 Preganglionic parasympathetic fibers go to the ciliary ganglion (ganglion ciliare) within the branch of the:
oculomotor nerve (n.oculomotorius)
ophthalmic nerve (n. ophthalmicus)
trochlear nerve (n.trochlearis)
optic nerve (n.opticus)
abducens nerve (n.abducens)

21 Postganglionic parasympathetic fibers leave the ciliary ganglion (ganglion ciliare) within:
short ciliary nerves (nn. ciliares breves)
lacrimal nerve (n. lacrimalis)
lesser petrosal nerve (n. petrosus minor)
greater petrosal nerve (n. petrosus major)
lesser palatine nerves (nn palatini minores)

22 The submandibular gland (glandula submandibularis) receives the parasympathetic innervation from:
submandibular ganglion (ganglion submandibulare)
pterygopalatineganglion (ganglion pterygopalatinum)
superior cervical ganglion (ganglion cervicale sup.)
otic ganglion (ganglion oticum) of the glossopharyngeal nerve (ganglion superior nervi glossopharyngei)

geniculate ganglion (ganglion geniculi)

23 Preganglionic parasympathetic fibers follow to the submandibular and sublingual ganglia (ganglia submandibulare et sublinguale) within:
chorda tympani
greater petrosal nerve (n. petrosus major)
lesser petrosal nerve (n. petrosus minor)
tympanic nerve (n. tympanicus)
auriculotemporal nerve (n. auriculotemporalis)

24 The submandibular salivary gland (glandula submandibularis) receives a parasympathetic innervation from:
superior salivatory nucleus (nucleus salivatorius sup.)
inferior salivatory nucleus (nucleus salivatorius inf.)
dorsal nucleus of vagus nerve (nucleus dorsalis n. vagi)
accessory nucleus (Yakubovich) of oculomotor nerve (nucleus accessorius n. oculomotorii)
nucleus of hypoglossal nerve (nucleus n. hypoglossi)

25 The ciliary ganglion is controlled by:
accessory nucleus (Yakubovich) of oculomotor nerve (nucleus accessorius n. oculomotorii)
superior salivatory nucleus (nucleus salivatorius sup.)
inferior salivatory nucleus (nucleus salivatorius inf.)
solitary nucleus (nucleus solitarius)
nucleus ambiguus

26 The pterygopalatine ganglion (ganglion pterygopalatinum) is controlled by:
accessory nucleus (Yakubovich) of oculomotor nerve (nucleus accessorius n. oculomotorii)
superior salivatory nucleus (nucleus salivatorius sup.)
inferior salivatory nucleus (nucleus salivatorius inf.)
solitary nucleus (nucleus solitarius)
nucleus ambiguus

27 The submandibular ganglion (ganglion submandibulare) is controlled by:
accessory nucleus (Yakubovich) of oculomotor nerve (nucleus accessorius n. oculomotorii)
superior salivatory nucleus (nucleus salivatorius sup.)
inferior salivatory nucleus (nucleus salivatorius inf.)
solitary nucleus (nucleus solitarius)
nucleus ambiguus

28 The otic ganglion (ganglion oticum) is controlled by:
accessory nucleus (Yakubovich) of oculomotor nerve (nucleus accessorius n. oculomotorii)

superior salivatory nucleus (nucleus salivatorius sup.)
inferior salivatory nucleus (nucleus salivatorius inf.)
solitary nucleus (nucleus solitarius)
nucleus ambiguus

29 The ciliary ganglion (ganglion ciliare):
islocated in the orbit (orbita)
is in connection with the oculomotor nerve (n.oculomotorius)
givesrise to the short ciliary nerves(nn. ciliares breves)
controlssphincter pupillae and ciliary muscle (m.sphincter pupillae, m.ciliaris)
controls the external muscles of the eye

30 The pterygopalatine ganglion (ganglion pterygopalatinum):
is located in the pterygopalatine fossa (fossapterygopalatina)
is in connection with the gteater petrosal nerve (n. petrosus major)
innervatesthe lacrimal gland and the glands of nasal and oral mucosae
innervates the lacrimal gland, the glands of nasal and oral mucosae, the greater salivary glands
is in connection with the glossopharyngeal nerve (n. glossopharyngeus)

31 Parasympathetic postganglionic fibers to the submandibular and sublingual glands originate in:
submandibular ganglion (ganglion submandibulare)
pterygopalatine ganglion (ganglion pterygopalatinum)
otic ganglion (ganglion oticum)
geniculate ganglion (ganglion geniculi)
ciliary ganglion (ganglion ciliare)

32 The superior salivatory nucleus (nucleus salivatorius sup.) is a center for innervation of:
submandibular gland (glandula submandibularis)
lacrimal gland (glandula lacrimalis)
glands of the nasal mucosa
sublingual gland (glandula sublingualis)
parotid gland (glandula parotidea)

33 The chorda tympani (chorda tympani):
is a branch of the intermediate nerve (n. intermedius)
is a branch of the glossopharyngeal nerve (n. glossopharyngeus)
contains the fibers of taste sensitivity and parasympathetic preganglionic fibers to the submandibular ganglion (ganglion submandibulare)
joins the lingual nerve (n.lingualis)
contains the fibers of taste sensitivity and parasympathetic preganglionic fibers to the otic ganglion (ganglion oticum)

34 Postganglionic parasympathetic fibers to the posterior regions of nasal mucosa come from:
pterygopalatine ganglion (ganglionpterygopalatinum)
ciliary ganglion (ganglionciliare)
submandibular ganglion (ganglionsubmandibulare)
otic ganglion (ganglionoticum)
sublingual ganglion (ganglionsublinguale)

35 Parotid gland (glandula parotidea) receives parasympathetic innervation from:
otic ganglion(ganglionoticum)
submandibular ganglion (ganglionsubmandibulare)
ciliary ganglion(ganglionciliare)
pterygopalatine ganglion (ganglionpterygopalatinum)
geniculateganglion (gangliongeniculi)

36 Anatomical structures involved in innervation of the parotid gland (glandula parotidea) are:
otic ganglion (ganglion oticum)
lesser petrosal nerve (n. petrosus minor)
inferior salivary nucleus (nucleus salivatorius inferior)
submandibular ganglion (ganglion submandibulare)
superior salivatory nucleus (nucleus salivatorius superior)

37 Postganglionic parasympathetic fibers reach the parotid gland (glandula parotidea) via:
auriculotemporal nerve (n. auriculotemporalis)
maxillary nerve (n. maxillaris)
lesser petrosal nerve (n. petrosus minor)
greater petrosal nerve (n. petrosus major)
chorda tympani

38 Preganglionic parasympathetic fibers reach the otic ganglion (ganglion oticum) passing in:
glossopharyngeal nerve (n. glossopharyngeus)
tympanic nerve (n. tympanicus)
lesser petrosal nerve (n. petrosus minor)
auriculotemporal nerve (n. auriculotemporalis)
mandibular nerve (n. mandibularis)

39 The nerves entering the abdominal aortic plexus (plexus aorticus abdominalis) are:
greater splanchnic nerves (nn. splanchnici majores)
lesser splanchnic nerves (nn. splanchnici minores)

lumbar splanchnic nerves (nn. splanchnici lumbales)
posterior vagal trunk (truncus vagalis post.)
lower intercoistal nerves (nn. intercostales)

40 The coeliac plexus (plexus coeliacus):
is one of the somatic plexuses
lies on the abdominal aorta (aorta abdominalis)
surrounds the coeliac trunk (truncus coeliacus)
extendsalong the branches of the coeliac trunk (truncus coeliacus)
containsthecoeliac ganglia (ganglia coeliaca)

41 The coeliac plexus (plexus coeliacus) contains:
sensory nerve fibers (neurofibrae sensoriae)
preganglionicparasympathetic fibers (neurofibrae parasympatheticae preganglionicae)
preganglionic sympathetic fibers (neurofibrae sympatheticae preganglionicae)
postganglionic sympathetic fibers (neurofibrae sympatheticae postganglionicae)
postganglionic parasympathetic fibers (neurofibrae parasympatheticae postganglionicae)

42 Principally the bodies of sympathetic visceral motor neurons are located in:
paravertebral ganglia
prevertebral ganglia
spinal ganglia
intramuralganglia
insidethe central nervous system

43 Principally the bodies of parasympathetic visceral motor neurons are located in:
paravertebral ganglia
prevertebral ganglia
spinal ganglia
intramural ganglia
inside the central nervous system

44 The formations innervated directly via coeliac plexus (plexus coeliacus) are mostly:
organs of the upper storey of the abdominal cavity
organs of the lower storey of the abdominal cavity
pelvic organs
thoracic organs
abdominal walls

45 The bodies of neurons providing the sensory innervation of the stomach (gaster) are located in:
spinal ganglia (ganglia spinalia)
ganglia of vagus nerve
coeliac ganglia (ganglia coeliaca)
gangliaof sympathetic trunk (truncus sympaticus)
intramural ganglia

46 The bodies of visceral motor neurons providing the sympathetic innervation of the liver (hepar) are located in:
ganglia of sympathetic trunk (truncus sympaticus)
ganglia of vagus nerve
coeliac ganglia (ganglia coeliaca)
spinal ganglia (ganglia spinalia)
intramural ganglia

47 The dorsal/posterior nucleus of the vagus nerve (nucleus dorsalis/posterior n. vagi) provides the parasympathetic innervation among other organs of:
pharynx (pharynx)
heart (cor)
stomach (gaster)
transverse colon (colon transversum)
sigmoid colon (colonsigmoideum)

48 Sources of sympathetic and parasympathetic innervation of the heart are:
dorsal/posterior nucleus of the vagus nerve (nucleus dorsalis/posterior n. vagi)
intermediolateral nucleus (nucleus intermediolateralis)
superior salivatory nucleus (nucleus salivatorius superior)
inferior salivatory nucleus (nucleus salivatorius inferior)
intermediomedial nucleus (nucleus intermediomedialis)

49 Preganglionic parasympathetic fibers for the innervation of the pelvic organs compose:
pelvic splanchnic nerves (nn. splanchnici pelvici)
lumbar splanchnic nerves (nn. splanchnici lumbales)
sacral splanchnic nerves (nn. splanchnici sacrales)
greater splanchnic nerves (nn. splanchnici majores)
lesser splanchnic nerves (nn. splanchnici minores)

50 Intermediolateral nucleus (nucleus intermedio lateralis):
composes the lateral column of the spinal cord (columna lateralis medullae spinalis)
extends from C8 up to L2,3

provides the sympathetic innervation of all of the internal organs
is the only sympathetic center
contains the bodies of the visceral motor neurons

51 Postganglionic sympathetic fibers innervating dilater pupillae (m. dilatator pupillae) originate in:
superior cervical ganglion (g.cervicale superius)
trigeminal ganglion (g.trigeminale)
stellate ganglion (g.stellatum)
pterygopalatine ganglion (g.pterygopalatinum)
ciliary ganglion (g.ciliare)

52 Postganglionic parasympathetic fibers innervating sphincter pupillae (m. sphincter pupillae) originate in:
ciliary ganglion (g.ciliare)
trigeminal ganglion (g.trigeminale)
stellate ganglion (g.stellatum)
pterygopalatine ganglion (g.pterygopalatinum)
superior cervical ganglion (g.cervicale superius)

53 Ciliary muscle contraction (m. ciliaris) is controlled by postganglionic parasympathetic fibers originating in:
ciliary ganglion (g. ciliare)
trigeminal ganglion (g. trigeminale)
stellate ganglion (g. stellatum)
pterygopalatine ganglion (g. pterygopalatinum)
superior cervical ganglion (g. cervicale superius)

54 Preganglionic parasympathetic fibers go to the submandibular ganglion (ganglion submandibulare) in:
chorda tympani (chorda tympani)
lesser petrosal nerve (n. petrosus minor)
greater petrosal nerve (n. petrosus major)
deep petrosal nerve (n. petrosus profundus)
buccal nerve (n. buccalis)

55 The preganglionic parasympathetic fibers of the chorda tympani are destined to:
sublingual ganglion (ganglion sublinguale)
submandibular ganglion (ganglion submandibulare)
otic ganglion (ganglion oticum)
pterygopalatine ganglion (ganglion pterygopalatinum)
ciliary ganglion (ganglion ciliare)

56 The intermediate nerve (n.intermedius) is associated with the secretory innervation of:
submandibular gland (glandula submsndibularis)
sublingual gland (glandula sublingualis)
lacrimal gland (glandula lacrimalis)
glands of nasal mucosa
parotid gland (glandula parotidea)

57 The greater petrosal nerve (n. petrosus major):
is a branch of intermediate nerve (n.intermedius)
originates in the bony facial canal (canalis nervi facialis)
penetrates into the pterygopalatine fossa (fossa pterygopalatina)
contains the preganglionic parasympathetic fibers to the pterygopalatine ganglion (ganglion pterygopalatinum)
gives rise to the infraorbital nerve (n.infraorbitalis)

58 Preganglionic parasympathetic fibers follow to the otic ganglion (ganglion oticum) as the components of:
lesser petrosal nerve (n. petrosus minor)
tympanic nerve (n. tympanicus)
greater petrosal nerve (n. petrosus major)
chorda tympani (chorda tympani)
glossopharyngeal nerve (n. glossopharyngeus)

59 The glossopharyngeal nerve (n. glossopharyngeus) provides the secretory innervation of:
parotid gland (glandula parotis)
lacrimal gland (glandula lacrimalis)
submandibular gland (glandula submsndibularis)
sublingual gland (glandula sublingualis)
glands of nasal mucosa

60 The branches of the thoracic part of the vagus nerve (n. vagus):
thoracic cardiac branches (rr. cardiaci thoracici)
bronchial branches (rr. bronchiales)
oesophageal branches (rr. oesophageales)
participate in formation of the visceral autonomic plexuses
participate in innervation of the thoracic walls

61 The cardiac branches of the vagus nerve (n. vagus):
are variable in their number
originate from the cervical part of the nerve only
originate from the thoracic part of the nerve only

originate from both cervical and thoracic parts of the nerve
participate in cardiac plexuses

62 The thoracic spinal nerves (nn. thoracici) contain:
sensory fibers
somatic motor fibers
preganglionic sympathetic fibers
postganglionic sympathetic fibers
postganglionic parasympathetic fibers

63 Principally every of the thoracic spinal nerves (n. spinalis thoracicus) innervates:
total half of its trunk segment together with the included internal organs
all muscles and skin of back and thorax located at the level of its segment
skin of the anterolateral thoracic wall and autochthonous muscles of thorax (mm. thoracis proprii)
skin of the back and autochthonous muscles of back (mm. dorsi proprii)
spinal meninges (meninges spinales)

64 The anterior branches of the thoracic spinal nerves (nn. thoracici) are represented by:
intercostal nerves (nn. intercostales)
cardiac plexus (plexus cardiacus)
pulmonary plexus (plexus pulmonalis)
gray rami communicantes (rami communicantes grisei)
coeliac plexus (plexus coeliacus)

65 The intercostal nerves (nn. intercostales) are in their anatomical nature:
anterior branches of the thoracic spinal nerves (nn. thoracici)
thoracic spinal nerves (nn. thoracici)
anterior branches of the sympathetic trunk (truncus sympathicus)
branches of the thoracic plexus
posterior branches of the thoracic spinal nerves (nn. thoracici)

66 The anterior branches of the thoracic spinal nerves (nn. thoracici) are composed of:
postganglionic sympathetic fibers
sensory fibers
somatic motor fibers
preganglionic parasympathetic fibers
preganglionic sympathetic fibers

67 The intercostal nerves (nn. intercostales) innervate:

skin of the anterolateral thoracic wall
autochthonous muscles of thorax (mm. thoracis proprii)
skin and muscles of almost totality of the anterolateral abdominal wall
thoracic and abdominal organs
spinal meninges (meninges spinales)

68 Commonly the posterior branches of the spinal nerves (nn. spinales) include:
sensory fibers
somatic motor fibers
postganglionic sympathetic fibers
postganglionic parasympathetic fibers
preganglionic sympathetic fibers

69 The posterior branches of the spinal nerves:
commonly are mixed in their fiber composition
innervate skin of back
innervate autochthonous muscles of back (mm. dorsi proprii)
innervate all muscles of back (mm. dorsi)
are specific in their fiber composition at the levels of C1, C2

70 Brachial plexus (plexus brachialis) like other somatic plexuses is formed via anastomoses of:
anterior branches of certain spinal nerves (nn. spinales)
certain spinal nerves (nn. spinales)
branches of the sympathetic trunk
posterior branches of certain spinal nerves (nn. spinales)
anterior roots (radices ant.) of certain spinal nerves (nn. spinales)

71 Brachial plexus (plexus brachialis):
is formed by anterior branches of spinal nerves C4, C5-C8, Th1
is formed by anterior roots of spinal nerves C4, C5-C8, Th1
is partly contained in the interscalenic space (spatium interscalenum)
is embryonically associated with the upper limb development
gives rise to the short and long branches

72 Brachial plexus (plexus brachialis) presents:
supraclavicular part (pars supraclavicularis)
infraclavicular part (pars infraclavicularis)
three trunks (truncus) in its supraclavicular part (pars supraclavicularis)
three cords [fasciculi] (fasciculi) in its infraclavicular part (pars infraclavicularis)

three branches issuing from the cords [fasciculi] (fasciculi)

73 The medial cord (fasciculus medialis) of the brachial plexus gives rise to:
ulnar nerve (n. ulnaris)
medial cutaneous nerve of arm (n. cutaneus brachii medialis)
radial nerve (n. radialis)
medial cutaneous nerve of forearm (n. cutaneus antebrachii medialis)
musculocutaneous nerve (n. musculocutaneus)

74 Branches of the supraclavicular part of the brachial plexus (plexus brachialis) are among others:
long thoracic nerve (n. thoracicus longus)
thoracodorsal nerve (n. thoracodorsalis)
suprascapular nerve (n. suprascapularis)
intercostal nerve (n. intercostalis)
supraclavicular nerve (n. supraclavicularis)

75 The axillary nerve (n. axillaris):
is a branch of the posterior cord (fasciculus post.) of brachial plexus
passes in the quadrilateral foramen (foramen quadrilaterum)
innervates mainly the deltoid (m. deltoideus)
innervates mainly the latissimus dorsi (m. latissimus dorsi)
gives rise to the lateral cutaneous nerve of forearm (n. cutaneus antebrachii lateralis)

76 The long thoracic nerve (n. thoracicus longus):
is a branch of the supraclavicular part of the brachial plexus (plexus brachialis)
descends lying on the serratus anterior (m. serratus anterior)
innervates the serratus anterior (m. serratus anterior)
innervates the latissimus dorsi (m. latissimus dorsi)
innervates the intercostal muscles (mm. intercostales)

77 The musculocutaneous nerve (n. musculocutaneus):
is a branch of the lateral cord (fasciculus lat.) of brachial plexus
pierces coracobrachialis (m. coracobrachialis)
innervates the anterior muscle group of the arm
is continuous with the lateral cutaneous nerve of forearm (n. cutaneus antebrachii lateralis)
innervates mainly the deltoid (m. deltoideus)

78 The musculocutaneous nerve (n. musculocutaneus) innervates:
coracobrachialis (m. coracobrachialis)

biceps brachii (m. biceps brachii)
brachialis (m. brachialis)
triceps brachii (m. triceps brachii)
pronator teres (m. pronator teres)

79 The anterior muscle group of the arm is innervated by:
musculocutaneous nerve (n. musculocutaneus)
median nerve (n. medianus)
ulnar nerve (n. ulnaris)
axillary nerve (n. axillaris)
radial nerve (n. radialis)

80 The posterior muscle group of the arm is innervated by:
radial nerve (n. radialis)
median nerve (n. medianus)
ulnar nerve (n. ulnaris)
axillary nerve (n. axillaris)
musculocutaneous nerve (n. musculocutaneus)

81 The skin of the posterior surface of the arm is innervated by:
radial nerve (n. radialis)
median nerve (n. medianus)
ulnar nerve (n. ulnaris)
axillary nerve (n. axillaris)
musculocutaneous nerve (n. musculocutaneus)

82 The ulnar nerve (n. ulnaris):
is a branch of the medial cord (fasciculus med.) of brachial plexus
pierces the medial intermuscular septum of arm (septum intermusculare med.)
passes behind the medial epicondyle of humerus (epicondylus medialis humeri)
passes later between the muscles of the posterior muscle group of forearm
innervates all of the muscles of hand

83 The ulnar nerve (n. ulnaris):
in the forearm is located in the ulnar groove (sulcus ulnaris)
penetrates into hand through the ulnar canal (canalis carpi ulnaris)
gives rise to common palmar digital nerves (nn. digitales palmares communes)
provides totally the cutaneous innervation of the 1,5 fingers
provides totally the cutaneous innervation of the 3,5 fingers

84 The ulnar nerve (n. ulnaris) innervates:
flexor digitorum profundus (m. flexor digitorum profundus)
dorsal and palmar interossei of hand (mm. interossei dorsales, palmares)
all of the hypothenarian muscles (hypothenar)
all of the thenarian muscles (thenar)
flexor digitorum superficialis (m. flexor digitorum superficialis)

85 The ulnar nerve (n. ulnaris) innervates:
flexor carpi ulnaris (m. flexor carpi ulnaris)
medial part of flexor digitorum profundus (m. flexor digitorum profundus)
adductor pollicis (m. adductor pollicis)
skin of the hand (manus)
flexor pollicis longus (m. flexor pollicis longus)

86 The radial nerve (n. radialis):
is a continuation of the posterior cord (fasciculus post.) of brachial plexus
passes in the arm through the humeromuscular canal (canalis humeromuscularis)
is the main nerve for innervation of all of the upper limb extensors (mm. extensorum membri sup.)
terminates giving rise to two terminal branches
penetrates in the hand through the carpal tunnel (canalis carpalis)

87 The radial nerve (n. radialis) innervates the skin of:
posterior surface of arm
posterior surface of forearm
dorsum of hand
part of dorsum hand and of 2,5 fingers
lateral surface of forearm

88 The radial nerve (n. radialis) innervates:
extensor pollicis longus (m. extensor pollicis longus)
extensor digitorum (m. extensor digitorum)
extensor digiti minimi (m. extensor digiti minimi)
supinator (m. supinator)
pronator quadratus (m. pronator quadratus)

89 The median nerve (n. medianus):
is formed by the roots issuing from the medial and lateral cords (fasciculus med., lat.) of brachial plexus
is a continuation of the posterior cord (fasciculus post.) of brachial plexus

accompanies in the arm the brachial artery (a. brachialis)
passes in the carpal tunnel (canalis carpalis)
is the main nerve for innervation of all of the upper limb flexors (mm. flexorum membri sup.)

90 The median nerve (n.medianus) innervates:
anterior muscle group of arm
anterior muscle group of forearm excepting 1,5 of them
muscles of hypothenar
muscles of thenar excepting one of them
interossei of hand (mm. interossei)

91 The median nerve (n.medianus) innervates:
flexor digitorum superficialis (m. flexor digitorum superficialis)
flexor digitorum profundus (m. flexor digitorum profundus)
pronator quadratus (m. pronator quadratus)
biceps brachii (m. biceps brachii)
supinator (m. supinator)

92 The lumbricales of hand (mm. lumbricales manus) are innervated by:
median nerve (n. medianus)
ulnar nerve (n. ulnaris)
axillary nerve (n. axillaris)
radial nerve (n. radialis)
musculocutaneous nerve (n. musculocutaneus)

93 The skin of the hand (manus) innervates by:
median nerve (n.medianus)
ulnar nerve (n.ulnaris)
radial nerve (n. radialis)
axillary nerve (n. axillaris)
musculocutaneous nerve (n. musculocutaneus)

94 The dorsal and palmar interossei of hand (mm. interossei dorsales et palmares manus) are innervated by:
ulnar nerve (n. ulnaris)
median nerve (n. medianus)
axillary nerve (n. axillaris)
radial nerve (n. radialis)
musculocutaneous nerve (n. musculocutaneus)

95 The branches of the lumbar spinal nerves (nervi lumbales):
anterior (ramus ventralis)
posterior (ramus dorsalis)
meningeal (ramus meningeus)
cutaneous
muscular (ramus muscularis)

96 The anterior branches of the lumbar spinal nerves form:
sacral plexus (plexus sacralis)
lumbar plexus (plexus lumbalis)
hypogastric plexus (plexus hypogastricus)
intercostal nerves (nn. intercostales)
celiac plexus (plexus coeliacus)

97 The composition of the anterior branches of the lumbar spinal nerves includes:
postganglionic sympathetic fibers
sensitive fibers
motor fibers
preganglionic parasympathetic fibers
preganglionic sympathetic fibers

98 Lumbar plexus (plexus lumbalis):
innervates greater psoas muscle (m. psoas major)
is formed by the anterior branches (rami ventrales) of the spinal nerves L1-L4
innervates the teres major muscle (m. teres major)
is formed by the posterior branches (rami dorsales) of the spinal nerves L1-L4
does not have muscle branches

99 The composition of the posterior branches of the lumbar spinal nerves includes:
postganglionic sympathetic fibers
sensitive fibers
motor fibers
preganglionic sympathetic fibers
preganglionic parasympathetic fibers

100 The posterior branches (rami dorsales) of the lumbar spinal nerves (nervi lumbales) innervate:
rotatores muscles (m. rotatores)
longissimus muscle (m. longissimus)
semispinalis muscle (m. semispinalis)

latissimus dorsi (m. latissimus dorsi)
trapezius muscle (m. trapezius)

101 Branches of the sacral spinal nerves:
anterior (rami ventrales)
posterior (rami dorsales)
meningeal (ramus meningeus)
cutaneous
muscular (ramus muscularis)

102 The posterior branches of the sacral spinal nerves innervate:
skin of the sacrum and coccyx
skin of the gluteal region
multifidus muscle (mm. multifidi)
capsule of the sacroiliac joint (art. coxae)
abdominal muscles

103 Lumbar plexus (plexus lumbalis):
innervates the psoas minor (m. psoas minor)
innervates psoas major muscle (m. psoas major)
is formed by the anterior branches (rami ventrales) of the spinal nerves L1-L4
is formed by anterior branches (rami ventrales) of the spinal nerve Th12
is formed by the posterior branches (rami dorsales) of the spinal nerves L1-L4

104 Branches of the lumbar plexus (plexus lumbalis) are:
obturator nerve (n. obturatorius)
lateral femoral cutaneous nerve (n. cutaneus femoris lateralis)
iliohypogastric nerve (n. iliohypogastricus)
intercostal nerve (n. intercostalis)
subcostal nerve (n. subcostalis)

105 Branches of the lumbar plexus (plexus lumbalis) are:
lateral femoral cutaneous nerve (n. cutaneus femoris lateralis)
femoral nerve (n. femoralis)
obturator nerve (n. obturatorius)
iliohypogastric nerve (n. iliohypogastricus)
posterior femoral cutaneous nerve (n. cutaneus femoris posterior)

106 Branches of the lumbar plexus (plexus lumbalis) are:

obturator nerve (n. obturatorius)
ilioinguinal nerve (n. ilioinguinalis)
lateral femoral cutaneous nerve (n. cutaneus femoris lateralis)
genitofemoral nerve (n. genitofemoralis)
posterior femoral cutaneous nerve (n. cutaneus femoris posterior)

107 The obturator nerve (n. obturatorius) passes:
along the medial border of the psoas major muscle (m. psoas major)
along the lateral border of the psoas major muscle (m. psoas major)
through the obturator canal (canalis obturatorius)
on the anterior surface of psoas major muscle (m. psoas major)
through the adductor canal (canalis adductorius)

108 Medial muscles of the thigh are innervated by:
superficial peroneal nerve (n. peroneus superficialis)
obturator nerve (n. obturatorius)
deep peroneal nerve (n. peroneus profundus)
inferior gluteal nerve (n. gluteus inferior)
common peroneal nerve (n. peroneus communis)

109 Anterior muscles of the thigh are innervated by:
femoral nerve (n. femoralis)
sciatic nerve (n. ischiadicus)
tibial nerve (n. tibialis)
obturator nerve (n. obturatorius)
common peroneal nerve (n. peroneus communis)

110 Posterior muscles of the thigh are innervated by:
sciatic nerve (n. ischiadicus)
tibial nerve (n. tibialis)
deep peroneal nerve (n. peroneus profundus)
obturator nerve (n. obturatorius)
femoral nerve (n. femoralis)

111 Sacral plexus (plexus sacralis):
is located on the anterior surface of the piriform muscle (m. piriformis)
is formed by the anterior branches (rami ventrales) of spinal nerves L4-L5
is formed by the anterior branches (rami ventrales) of spinal nerves S1-S4
does not have muscular branches

is formed by the anterior branches (rami ventrales) of spinal nerves S4-S5

112 The branches of the sacral plexus (plexus sacralis) are:
pudendal nerve (n. pudendus)
superior gluteal nerve (n. gluteus superior)
inferior gluteal nerve (n. gluteus inferior)
genitofemoral nerve (n. ilioinguinalis)
obturator nerve (n. obturatorius)

113 The branches of the sacral plexus (plexus sacralis) are:
sciatic nerve (n. ischiadicus)
posterior cutaneous nerve of thigh (n. cutaneus femoris posterior)
obturator nerve (n. obturatorius)
pudendal nerve (n. pudendus)
genitofemoral nerve (n. ilioinguinalis)

114 Following nerves pass through foramen infrapiriformis:
pudendal nerve (n. pudendus)
ischiadic nerve (n. ischiadicus)
inferior gluteal nerve (n. gluteus inferior)
obturator nerve (n. obturatorius)
superior gluteal nerve (n. gluteus superior)

115 The skin of the thigh is innervated by:
posterior femoral cutaneous nerve (n. cutaneus femoris posterior)
genitofemoral nerve (n. ilioinguinalis)
lateral femoral cutaneous nerve (n. cutaneus femoris lateralis)
iliohypogastric nerve (n. iliohypogastricus)
saphenous nerve (n. saphenus)

116 Sural nerve (n. suralis):
is formed by the branches of tibial (n. tibialis) and the common peroneal nerve (n. peroneus communis)
innervates the anterior group of leg muscles
passes in the adductor canal (canalis adductorius)
innervates the gastrocnemius muscle (m. gastrocnemius)
innervates the lateral group of leg muscles

117 The superficial peroneal nerve (n. peroneus superficialis) innervates:
peroneus longus muscle (m. peroneus longus)

peroneus brevis msucle (m. peroneus brevis)
anterior tibial muscle (m. tibialis anterior)
posterior tibial muscle (m. tibialis posterior)
popliteal muscle (m. popliteus)

118 The deep peroneal nerve (n. peroneus profundus) innervates:
anterior muscle group of the leg
posterior muscle group of the leg
lateral muscle group of the leg
anterior muscle group of the thigh
medial muscle group of the thigh

119 The lateral group of leg muscle is innervated by:
superficial peroneal nerve (n. peroneus superficialis)
sciatic nerve (n. ischiadicus)
tibial nerve (n. tibialis)
common peroneal nerve (n. peroneus communis)
deep peroneal nerve (n. peroneus profundus)

120 The anterior muscle group of the leg is innervated by:
deep peroneal nerve (n. peroneus profundus)
sciatic nerve (n. ischiadicus)
tibial nerve (n. tibialis)
superficial peroneal nerve (n. peroneus superficialis)
common peroneal nerve (n. peroneus communis)

121 The deep peroneal nerve (n. peroneus profundus) innervates:
extensor digitorum longus (m. extensor digitorum longus)
extensor digitorum brevis (m. extensor digitorum brevis)
talocrural joint (art. talocruralis)
anterior tibial muscle (m. tibialis anterior)
triceps surae muscle (m. triceps surae)

122 The tibial nerve (n. tibialis) innervates:
triceps surae muscle (m. triceps surae)
plantaris muscle (m. plantaris)
popliteal muscle (m. popliteus)
knee joint (art. genus)
anterior tibial muscle (m. tibialis anterior)

123 The tibial nerve (n. tibialis) innervates:
posterior tibial muscle (m. tibialis posterior)
flexor hallucis longus muscle (m. flexor hallucis longus)
anterior tibial muscle (m. tibialis anterior)
peroneus longus muscle (m. peroneus longus)
peroneus brevis muscle (m. peroneus brevis)

124 The posterior muscle group of the leg is innervated by:
tibial nerve (n. tibialis)
sciatic nerve (n. ischiadicus)
superficial peroneal nerve (n. peroneus superficialis)
common peroneal nerve (n. peroneus communis)
deep peroneal nerve (n. peroneus profundus)

125 The medial plantar nerve (n. plantaris medialis) innervates:
flexor hallucis brevis muscle (m. flexor hallucis brevis)
abductor hallucis muscle (m. abductor hallucis)
flexor digitorum brevis muscle (m. flexor digitorum brevis)
flexor digitorum longus muscle (m. flexor hallucis longus)
quadratus plantae muscle (m. quadratus plantae)

126 The skin of the anterior surface of the thigh is innervated by:
lateral femoral cutaneous nerve (n. cutaneus femoris lateralis)
genitofemoral nerve (n. genitofemoralis)
femoral nerve (n. femoralis)
iliohypogastric nerve (n. iliohypogastricus)
ilioinguinal nerve (n. ilioinguinalis)