Practice Questions – Autonomic, Endocrine, and Reproductive Systems

Note: choices may be used more than once or not at all.

1-5. Matching

A)	Sympathetic	ganglionic/postganglionic neurons in adrenal medulla	1) __A__
B)	Parasympathetic	preganglionic cell bodies mainly in thoracic cord	2) __A__
C)	None of the above	preganglionic cell bodies mainly in brain stem	3) __B__
		preganglionic axons in vagus nerve	4) __B__
		preganglionic axons in white rami	5) __A__

6-10. Matching

A)	Norepinephrine	released by sympathetic pre-ganglionic neurons	6) __B__
B)	Acetylcholine	released by sympathetic post-ganglionic neurons	7) __A__
C)	A and B	released by parasympathetic pre-ganglionic neurons	8) __B__
D)	None of the above	released by parasympathetic post-ganglionic neurons	9) __B__
		released by adrenal ganglionic neurons (chromaffin cells)	10) __A__

11-15. Matching

A)	Celiac and mesenteric ganglia	controls pupils of eyes	11) __B__
B)	Chain ganglia	control heart and lungs	12) __B__
		control abdominal organs	13) __A__
		control blood vessels in GI tract	14) __A__
		control blood vessels in skeletal muscle	15) __B__

16-20. Matching

A)	Somatic nervous system	utilizes 1 motor neuron	16) __A__
B)	Autonomic nervous system	utilizes 2 motor neurons	17) __B__
		mainly controls smooth muscle	18) __B__
		mainly controls skeletal muscle	19) __A__
		controls visceral organs and vessels	20) __B__

21-25. Matching

A)	Celiac and mesenteric ganglia	found in target organs	21) __C__
B)	Sympathetic chain ganglia	found adjacent to the aorta	22) __A__
C)	Intramural ganglia	also known as chain ganglia	23) __B__
D)	Adrenal medulla	most peripheral sympathetic ganglion	24) __D__
		found mainly in <u>para</u>sympathetic nervous system	25) __C__

26-30. Matching

A)	Parat*hyroid* hormone	produced by pancreatic Beta cells	26) __E__
B)	Epinephrine	produced by pancreatic Alpha cells	27) __D__
C)	Calcitonin	produced by parathyroid chief cells	28) __A__
D)	Glucagon	produced by adrenal chromaffin cells	29) __B__
E)	Insulin	produced by thyroid interfollicular ("C") cells	30) __C__

31-35. Matching

A) Produced by thyroid interfollicular ('C')cells
B) Produced by thyroid follicular cells
C) Produced by the pancreatic islets

insulin	31) __C__
glucagon	32) __C__
calcitonin	33) __A__
thyroxin	34) __B__
triiodothyronin	35) __B__

36-40. Matching

A) Testosterone	produced by adrenal zona reticularis	36) __A__
B) Epinephrine	produced by adrenal chromaffin cells	37) __B__
C) Aldosterone	produced by adrenal zona fascicularis	38) __D__
D) Cortisol	produced by adrenal zona glomerulosa	39) __C__
E) Renin	produced by juxtaglomerular apparatus	40) __E__

41-45. Matching

A) Adrenal medulla	releases thyroid stimulating hormone into blood	41) __B__
B) Anterior pituitary	releases acetylcholine into blood	42) __D__
C) Posterior pituitary	releases epinephrine into blood	43) __A__
D) None of the above	releases ACTH into blood	44) __B__
	releases TSH into blood	45) __B__

46-50. Matching

A) Posterior pituitary	produces luteinizing Hormone	46) __B__
B) Anterior pituitary	*secretes* Vasopressin	47) __A__
C) None of the above	*secretes* oxytocin	48) __A__
	produces thyroxin	49) __C__
	produces ACTH	50) __B__

51-55. Matching

A) Posterior pituitary	contains blood capillaries	51) __B__
B) Median eminence	contains glandular epithelial cells	52) __C__
C) Anterior pituitary	often referred to together as the pituitary gland	53) __E__
D) All of the above	composed of axons from hypothalamic neurons	54) __A__
E) A and C	site of secretion of hypothalamic regulatory hormones	55) __B__

56-60. Matching

A) Adrenocorticotropic Hormone	stimulates milk production	56) __D__
B) Thyroid stimulating Hormone	stimulates *thyroxin* secretion	57) __B__
C) Follicle stimulating Hormone	stimulates cellular metabolism	58) __B__
D) Prolactin	stimulates estrogen production	59) __C__
	stimulates cortisol secretion from the adrenal cortex	60) __A__

61-65. Matching

A) Follicle stimulating hormone	stimulates ovulation	61) __B__
B) Luteinizing hormone	stimulates follicle development	62) __A__
	stimulates *production of* androgen binding protein	63) __A__
	stimulates production of testosterone	64) __B__
	stimulates production of progesterone	65) __B__

66-70. Matching

A)	Mitosis (duplication)	primary spermatocytes → secondary spermatocytes	66) __B__
B)	Meiosis I (halving)	spermatogonia → primary spermatocytes	67) __A__
C)	Meiosis II (duplication of halves)	secondary spermatocytes → spermatids	68) __C__
D)	None of the above	sertoli cells → interstitial cells	69) __D__
		spermatids → *spermatozoa*	70) __D__

71-75. Matching

A)	Epididymis	site for storage of sperm near the ejaculatory duct	71) __E__
B)	Prostate gland	site for maturation of sperm near the testis	72) __A__
C)	Seminal vesicle	produces a lubricating fluid	73) __D__
D)	Bulbourethral gland	produces prostatic fluid	74) __B__
E)	Ampulla of vas deferens	produces seminal fluid	75) __C__

76-80. Place the following in the order that sperm pass.

A)	Seminiferous tubules	first	76) __A__
B)	Rete testes	second	77) __B__
C)	Epididymis	third	78) __C__
D)	Vas deferens	fourth	79) __D__
E)	Ejaculatory duct	fifth	80) __E__

81-85. Matching

A)	Ampulla of uterine tube	site for production of follicles	81) __C__
B)	Endometrium	site for production of secondary oocyte	82) __C__
C)	Ovary	preferred site for implantation of embryo	83) __B__
D)	None of the above	common site for penetration of oocyte by sperm	84) __A__
		the functional zone *of* ___ sloughs off during the menstrual cycle	85) __B__

86-90. Place the following in the order that the oocyte / egg passes.

A)	Fimbrae	first	86) __B__
B)	Mature follicle	second	87) __A__
C)	Body of uterus	third	88) __E__
D)	Isthmus of uterine tube	fourth	89) __D__
E)	Ampulla of Fallopian tube	fifth	90) __C__

91-95. Matching

A)	Regrowth of endometrium	requires estrogen	91) __A__
B)	Stabilization of endometrium	starts after ovulation	92) __B__
C)	Menses	requires progesterone	93) __B__
		occurs in absence of ovarian steroids	94) __C__
		associated with inhibition of endometrial growth	95) __B__