

Question Paper

Malcup

Exam Date & Time: 10-Jun-2019 (09:30 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester II - End Semester Examination
June 2019
PHA-BP201T: Human Anatomy and Physiology-II (Theory)
Date : 10 / 06 /2019
Human Anatomy and Physiology-II [PHA-BP201T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

1) Perception of pain sensation in limbs will be transmitted

(1)

from peripheral nervous system to central nervous system via spinal cord

from spinal cord to peripheral nervous system via central nervous system

from peripheral nervous system to spinal cord via central nervous system

from spinal cord to central nervous system via peripheral nervous system

2) Subdural space is between

(1)

Dura mater and vertebral canal

Dura mater and arachnoid mater

Arachnoid mater and pia mater

Pia mater and dura mater

3) Lateral geniculate nucleus is associated with

(1)

Vision

Hearing

Olfaction

Gustation

4) Channel above the cochlear duct

(1)

Scala vestibuli

Scala tympani

Helicotrema

Scala media

5) Myxedema is caused by the deficiency of a hormone secreted by

(1)

Parathyroid

Hypothalamus

- 6) Thyroid
Pineal body
The posterior pituitary: (1)
- produces oxytocin
stores oxytocin
secretes trophic hormones
secretes neurohormone
- 7) The class of adrenal hormone that regulates electrolyte homeostasis is (1)
- Glucocorticoids
Mineralocorticoids
Androgens
Catecholamines
- 8) A person urinates and consumes fluids very often, however his glucose level is normal. This condition (1)
may be the result of
- A reduction in insulin secretion from pancreas
A reduction in vasopressin secretion from posterior pituitary
A fall in glucose concentration in urine
An increase in secretion of glycogen.
- 9) Which of the following mechanisms **DO NOT** control glomerular filtration rate (1)
- Renal autoregulation
Hormonal regulation
Neural regulation
Chemical regulation of ions
- 10) Name the hormone secreted by the kidney (1)
- Erythropoietin
Aldosterone
Angiotensin converting hormone
Insulin
- 11) The process of emptying the bladder is called (1)
- Mydriasis
Miosis
Menstrual cycle
Micturition
- 12) Urinary bladder consists of (1)
- Columnar epithelial cells

Cuboidal epithelial cells

Pseudo ciliated epithelial cells

Transitional epithelial cells

Increase in levels of _____ gas stimulate respiration

(1)

Oxygen

Carbon dioxide

Nitrogen

Carbon monoxide

14)

After a deep inspiration the volume of air present in the lungs will be equal to

(1)

Vital Capacity

Forced Inspiratory volume

Total Lung capacity

Inspiratory reserve capacity

15)

Conchae are present in the

(1)

Cardiac notch

Nasal cavity

Voice box

Diaphragm

16)

Lecithin is a substance present in

(1)

Oropharynx

Bronchial tubes

Alveoli

Proximal convoluted tubule.

17)

Corpus luteum is formed from the remnants of

(1)

Red blood cells

White blood cells

Placental cells

Graafian follicles

18)

Fertilization of ovum with the sperm will take place at

(1)

Oviduct

Urethra

Uterus

Vagina

19)

The "seat of intelligence" is

(1)

Cerebellum

Cerebrum

Medulla oblongata

Diencephalon

- 20) Which part of the brain may get affected during a fatal blow at the back of the head? (1)

Cerebrum

Cerebellum

Medulla oblongata

Hypothalamus

II Long Answers

Answer all the questions.

- 1) Describe the actions of sympathetic and parasympathetic system (10)
- 2) Explain the synthesis, storage and release of thyroid hormones. Summarize the different cells and the functions of hormones secreted by anterior pituitary gland (10)
[6 +4]

III Short Answers

Answer all the questions.

- 1) Ms. Arathi was suffering from running nose, cold and sore throat that is affecting her ability to sing and talk. What are the structures involved and how are they affected? (5)
- 2) Explain the signal transmission at a chemical synapse (5)
- 3) Describe the functions of brain stem (5)
- 4) Describe the histology of nervous tissue (5)
- 5) Draw a neat labelled diagram of kidney and explain its functions. (5)
- 6) Miss. Evelyn is looking forward to her mountaineering adventure in Himalayan range scheduled on 10th June 2019 . Her regular menstrual cycle begins during 7 to 10th of every month due to which she would be failing to participate in the expedition. In order to avoid the occurrence of menstruation during this period, what can she do to either advance or postpone her cycle. Give the underlying physiological principles. (5)
- 7) With a neat, labelled diagram, explain the different lung volumes and capacities (5)

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