

9) The kidneys are:

- A) Help regulate blood volume,
- B) Help control blood pressure.
- C) Help control pH.
- D) All of the above are correct.

10) Which of the following is the proper sequence of structures in the nephron?

- A) Glomerulus, proximal convoluted tubule, distal convoluted tubule, nephron loop.
- B) Glomerulus, nephron loop, proximal convoluted tubule, distal convoluted tubule.
- C) Glomerulus, proximal convoluted tubule, nephron loop, distal convoluted tubule.
- D) Proximal convoluted tubule, glomerulus, nephron loop, distal convoluted tubule.

11) Fibrous connective tissue that surrounds each kidney is the:

- A) Cortex.
- B) Medulla.
- C) Renal capsule.
- D) Renal pyramids

12) Anterior pituitary also called as

- A) Adenohypophysis
- B) Neurohypophysis
- C) Pars intermedia
- D) Hypothalamus'

13) Prolactin hormone synthesized by----

- A) Lactotrophs
- B) Corticotrophs
- C) Gonadotrophs
- D) None of the above

14) The hypothalamus regulates _____

- A) Heart rate
- B) Body temperature
- C) Glandular secretions
- D) All of the above

15) The _____ produces the hormone *melatonin*

- A) Pituitary gland
- B) Pineal gland
- C) Thyroid gland
- D) Pancreatic gland

16) The corpus luteum secretes a hormone

- A) Luteinizing hormone.
- B) Estrogen and Progesterone.
- C) Oxytocin.
- D) Follicle-stimulating hormone.

17) Which of the following is the correct sequence for the development and regression of an ovarian follicle?

- A) The primordial follicle, mature vesicular ovarian follicle, corpus albicans, and corpus luteum
- B) The primordial follicle, mature vesicular ovarian follicle, corpus luteum, and corpus albicans
- C) The primordial follicle, corpus luteum, corpus albicans, and mature vesicular ovarian follicle
- D) The primordial follicle, corpus luteum, mature vesicular ovarian follicle, and corpus albicans

18) All of the following are regions of the uterus except

- A) The cervix.
- B) The body.
- C) The ampulla.
- D) The uterine cavity.

19) Pulmonary ventilation is

- A) Tidal volume + Respiratory rate
- B) Tidal volume + Vital capacity
- C) Tidal volume + Residual volume
- D) Tidal volume + Inspiratory reserve volume

20) Which of the following does NOT happen during inspiration?

- A) The ribs move upward.
- B) The diaphragm lifts up.
- C) The antero-posterior dimensions of the chest are increased.
- D) The transverse dimensions of the thorax are increased.

Q. No. 2 Long Answer questions (Any Two) (10X02=20) (20 M)

I. Explain in detail physiology of urine formation.

II. Draw neat and well labeled diagram of T.S. Spinal cord and explain physiology of Spinal cord

Describe biosynthesis, storage & Transport of Thyroid Hormones

Q. No. 3 Short Answer Question (Any Seven) (7X5=35) (35 M)

- i) Explain the physiological role of hormones of anterior pituitary gland.
- ii) Discuss Physiology of Menstrual Cycle.
- iii) Write note on Renin Angiotensin Aldosterone system.
- iv) Explain structure and function Cerebellum.
- v) Explain structure and functions of Kidney.
- vi) Write a note on Spermatogenesis.
- vii) Explain Mechanism of Pulmonary ventilation.
- viii) Illustrate the structure and function of the pancreas.
- ix) Define Tidal Volume, Vital Capacity, BMR, Diabetes mellitus, Meningitis.

A

*** End ***