



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(MRIT)-2022/B.Sc.(MRIT)-2023

Course Name – Human Anatomy & Physiology Part II

Course Code - BMRITC201

(Semester II)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) which of the following structure are seen to enter into the hilum of kidney. select correct option
- | | |
|---------------|---------------------|
| a) ureter | b) renal vein |
| c) lymphatics | d) peri-nephric fat |
- (ii) Which type of epithelium lines the fallopian tubes? Identify correct option.
- | | |
|-----------------------------------|---|
| a) Simple squamous epithelium | b) Simple columnar epithelium |
| c) Stratified squamous epithelium | d) Pseudostratified columnar epithelium |
- (iii) state the location where spermatogenesis occurs.
- | | |
|------------------------|--------------------|
| a) seminiferous tubule | b) rete-testes |
| c) epi-didymis | d) vasa efferentia |
- (iv) During which phase of meiosis does the primary oocyte become arrested until puberty? state the correct option
- | | |
|---------------|--------------------|
| a) prophase 1 | b) meraphase 1 |
| c) prophase 2 | d) leptotene stage |
- (v) Tentorium cerebelli arises as fold from which layer of meninges. select correct option
- | | |
|---------------|--------------------|
| a) dura-mater | b) arachnoid mater |
| c) pia-mater | d) falx-cerebri |
- (vi) Identify the total no of segments found in the spinal cord.
- | | |
|-------|-------|
| a) 33 | b) 31 |
| c) 35 | d) 36 |
- (vii) Choose yellow color of urine is due to
- | | |
|--------------|---------|
| a) Urochrome | b) Urea |
|--------------|---------|

- c) Bilirubin
 (viii) Choose the Glomerular filtration rate would be increased by :
 a) constriction of the afferent arteriole
 c) compression of the renal capsule
 (ix) State the excretion of dilute urine requires
 a) relative permeability of the distal tubule to water
 c) impermeability of the collecting tubule to water
 (x) Choose the male reproductive hormone
 a) Estradiol
 c) Inhibin
 (xi) Choose from the following: Ciliary glands are modified
 a) sweat glands
 c) salivary glands
 (xii) _____ are one of the few types of neurons that can replace themselves in adult life.
 Choose from the following
 a) Cones
 c) Rods
 (xiii) tell layer of the uterine wall does the placenta attach to during pregnancy?
 a) Perimetrium
 c) Myometrium
 (xiv) During which phase of the menstrual cycle does the endometrium of the uterus thicken in preparation for potential implantation of a fertilized egg?
 a) Follicular phase
 c) Luteal phase
 (xv) Tell What is oogenesis?
 a) The process of egg release from the ovary
 c) The process of egg maturation within the ovary
- d) Uric acid
 b) a decrease in afferent arteriolar pressure
 d) a decrease in the concentration of plasma protein
 b) the presence of ADH
 d) None of these
 b) Testosterone
 d) None of the above
 b) sebaceous glands
 d) lacrimal glands
 b) Taste buds
 d) Olfactory receptors
 b) Endometrium
 d) Parametrium
 b) ovulatory phase
 d) Menstrual phase
 b) The process of egg fertilization by sperm
 d) The process of egg implantation into the uterus

Group-B

(Short Answer Type Questions)

3 x 5=15

Answer all questions

2. Discuss the normal constituents of urine (3)
3. Describe the location, parts, hormones released by the Pituitary gland (3)
4. Describe the steps of spermatogenesis along with proper diagram? (3)
5. Summarize the function of female sex hormone? (3)
6. Explain the Hormonal mechanism of action of hormone (3)

OR

Explain the function of male sex hormone in detail (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

Answer all questions

7. Explain the different stages of Menstrual cycle (5)
8. Describe the anatomy of the prostate gland (5)
9. Describe the placenta. Mention the name of the hormones and functions associated with them (5)
10. Explain these different types of muscle- cardiac, smooth and skeletal muscle (5)
11. Describe the uterine and ovarian changes in menstrual cycle (5)
12. Explain about the coverings of brain and spinal cord with proper diagram? describe the folds of dura mater with proper diagram (5)

OR

Explain the mechanism of nerve impulse conduction (5)
