

26. (a) Write an essay about uterus.

Or

(b) Explain about the cranial nervous system.

27. (a) Describe about Thyroid glands.

Or

(b) With neat diagram explain about large intestine.

28. (a) Write notes on :

(i) Nephrons

(ii) Urine formation.

Or

(b) Explain about the lungs.

29. (a) What are the functions of Heart? Explain.

Or

(b) Write notes on :

(i) Sternoclavicular joint

(ii) Acromioclavicular joint.

30. (a) With neat diagram explain about femur and tibia.

Or

(b) Explain about the structure of a human cell.

Paper I — RADIOGRAPHIC ANATOMY AND
PHYSIOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

SECTION A — (20 × 1 = 20 marks)

Choose the correct answer :

1. The study of skeleton

(a) Osteology

(b) Myology

(c) Histology

(d) Otology.

2. The common name of patella is

(a) Hip bone

(b) Leg bone

(c) Knee cap

(d) Thigh bone.

3. Arthrology is the study of

(a) Tissues

(b) Joints

(c) Muscles

(d) Cells.

4. The pH of Gastric juice is about

(a) 0.9 to 1.5

(b) 6.35 to 6.85

(c) 0.09 to 0.15

(d) None.

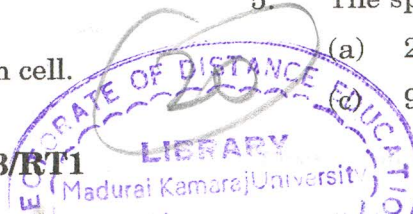
5. The specific gravity of CSF is

(a) 2.01

(b) 1.005

(c) 9.8

(d) 5.002.



PG D

Fill in the blanks :

6. The production of oestrogens is the function of the _____.
7. _____ is the essential formation of thyroid gland.
8. The renal artery supplies _____ to the kidneys.
9. The length of pharynx is _____.
10. The capillaries are called as _____.

Match the following :

- | | | |
|-----------------|-----|-------------------|
| 11. Flexion | (a) | Inorganic balance |
| 12. RBC | (b) | Mitochondria |
| 13. Manubrim | (c) | Diuresis |
| 14. ATP | (d) | Bending movement |
| 15. Vasopressin | (e) | Handle. |

Answer in a word/sentence :

16. What is residual volume?
17. State the processes of urine formation.
18. Which hormone stimulate the lactation?
19. State any two main functions of teeth.
20. What are the types of autonomic nervous system?

SECTION B — (5 × 6 = 30 marks)

21. (a) What are the types of muscle? Explain.

Or

- (b) State and explain about the functions of bones.

22. (a) What are the differences between male and female pelvis?

Or

- (b) Write short notes on blood clotting.

23. (a) What is meant by respiration? Explain about the artificial respiration.

Or

- (b) With neat diagram briefly explain about the structure of a kidney.

24. (a) Write short notes on mouth.

Or

- (b) Briefly explain about adrenal glands.

25. (a) What is reflex action? Explain.

Or

- (b) Write short notes on semen.

Paper II — BASIC OF RADIATION PHYSICS

Time : Three hours

Maximum : 100 marks

SECTION A — (20 × 1 = 20 marks)

Fill in the blanks :

1. The molecules within the object move _____ as the temperature increases.
2. Semiconductors' intrinsic electrical properties are modified by introducing impurities known as _____.
3. The rate of change of flux linkage will be _____ by increasing the total number of linkages N.
4. The _____ is the variation in the voltage across the X-ray tube expressed as a percentage of the maximum value.
5. For most diagnostic radiography, the _____ sensors are placed in front of the image receptor to measure the transmitted X-ray flux.

Choose the correct answer :

6. The amount of radiation produced increases as the square of the kilovoltage (u) intensity is proportional to _____.

- (a) k^2 (b) $\frac{k}{V_p^2}$
(c) (kV_p) (d) None of the above.

7. Half value layer is the thickness of absorbing material which will reduce the radiation to _____ of its original value.

- (a) equal to (b) one-half
(c) one-quarter (d) none of the above.

8. 1 Roentgen is equal to _____

- (a) 760 mm of Hg
(b) 2.58×10^{-4} c/kg of air
(c) 0.001293 of air
(d) 8.54×10^{-8} c/kg of air.

