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DATE: 10-04-2018 ( 9am)

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**B.Sc., ZOOLOGY – IV SEMESTER**

**SEMESTER EXAMINATION: APRIL 2018**

ZO 415: Human Anatomy and Physiology

(For supplementary candidates)

Do not write the register number on the question paper

Please attach the question paper along with the answer script.

Time: 1.5 hours Max Marks: 35

This question paper has 2 printed pages and 3 parts

Note: Answer all Part A questions together

Draw neat labeled diagrams wherever necessary

**PART A**

**Answer the following: 1 X 5 = 5**

1. Choose the correct answer for the following table
2. Parathyroid hormone 1. Testosterone
3. Calcitonin 2. Gluconeogenesis
4. Zona reticularis 3. Bone mineralization
5. Glucagon 4. Raises Blood Calcium level
6. A3, C1, D4, B2 b. A2, B1, C4, D2
7. A4, B3, C1, D2 d. A3, B1, C4, D2
8. Kyphosis is a condition due to
9. Hypersecretion of GH in children
10. Hyposecretion of GH in Adults
11. Hypersecretion of GH in Adults
12. Hyposecretion of GH in Children
13. Fluid present in the ventricles of the CNS is secreted by
14. Astrocytes b. Neuroglial cells c. Oligodendrocytes d. Ependymal cells
15. \_\_\_\_\_\_ion should be present in synapse for the efficient transmission of impulses
16. Mg2+ b. Na+ c. K+ d. Ca2+
17. Fovea centralis on the retina of eye has predominantly,
18. Rods b. Cones c. Both a&b absent d. both a&b present

**PART B**

**Answer any FOUR of the following: 5 X 4 =20**

1. Give reasons for the following on the basis of evolutionary significance
2. Rhinocoel of Bird and reptile
3. Sinus venosus of Pisces and amphibian
4. Explain the chemical theory of synaptic transmission of an impulse.
5. In an emergency situation, you either fight or fly from the situation. Explain the hormonal regulation and physiological changes that influences your body.
6. Identify the disorder and deficiency on the basis of the following symptoms in each,
7. Expression of secondary male sexual characters in a female
8. A mentally retarded child with a disproportionate body.
9. Locking of Jaws and Laryngeal spasms.
10. Polyuria up to 5 litres/day.
11. Enlargement of nasal cartilage and chin bone.
12. Describe the structure of middle ear. Add a note on the significance of Eustachian tube.
13. List any five properties of conduction of nerve impulses.

**PART C**

**Answer any ONE of the following: 10 X 1 = 10**

1. Describe the structure of a human eye with a suitable diagram.
2. With suitable illustrations, explain the structure of a spinal cord and a add note on reflex arc with an example.