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Register Number:

DATE: 11-04-2017

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

**B. Sc., ZOOLOGY- IV SEMESTER**

**SEMESTER EXAMINATION: APRIL 2017**

**ZO 415 - Human Anatomy and Physiology**

**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**

1. **Answer the following: 1 x 5= 5**
2. Pituitary dwarfism differs from cretinism in
3. Disproportionate body c. Mental retardation
4. Hormonal deficiency d. Short stature
5. Match the following:

|  |  |  |  |
| --- | --- | --- | --- |
| P | Exophthalmos | 1 | Hyperaldosteronism |
| Q | Tetany | 2 | Hypothyroidism |
| R | Addisons | 3 | Hyperthyroidism |
| S | Cretinism | 4 | Hyperparathyroidism |

1. P-2, Q-1, R-4, S-3 b. P-4, Q-1, R-2, S-3
2. P-3, Q-4, R-1, S-2 d. P-4, Q-3, R-1, S-2
3. The two lower lobes of corpora quadrigemina are concerned with
4. Visual reflex c. Auditory reflex
5. Both a and b d. None of the above
6. Select the correct answer:
7. Cuddle hormone = Oxytocin **/** Prolactin
8. Tasteless overflow= Diabetes mellitus/ Diabetes insipidus
9. Broca’s area is concerned with
10. Speech b. Color vision c. Dance d. Smell

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**PART B**

 **II. Answer *any* FOUR of the following. 5×4=20**

1. Explain the role of pancreatic hormones in maintaining blood glucose homeostasis.

1. Mention any one function of
2. Blood-Brain barrier b. CSF c. Pia mater d. Ach e. Foramen of Monroe
3. Give a comparative account of hearts in shark and bird with neat diagrams
4. a. List three hormones of anterior hypophysis and mention a function (3)
5. Why catecholamines are called emergency hormones? (1)
6. Vasopressin is a neurohormone. Comment. (1)
7. Trace the evolution of pro and mesonephros in vertebrates.
8. a. Draw and label a multipolar neuron (2)
9. Depict a reflex arc (3)

**PART C**

**III. Answer any ONE of the following. 10×2=20**

1. a. Explain the origin and conduction of nerve impulse along axon. (6)
2. Draw the median section of human brain and label (4)
3. a. Explain the role of human ear in hearing with suitable diagram (7.5)
4. Depict the Hypothalamo-hypophyseal-adrenal axis and mention a function of each of

the hormones produced (2.5)

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