

Q.P.Code:1379

REG. NO:.....

**FIRST YEAR M.SC. PHYSIOLOGY DEGREE EXAMINATION
(FOUNDATION COURSE)**

MODEL QUESTION PAPER

Time: 3 hrs

Max. Marks:- 70

PAPER I- ANATOMY

- *Answer all the questions*
- *Draw diagrams wherever necessary.*

Essay:

(2x10=20)

1. Enumerate the parts of brain. Discuss in detail the gyri and sulci and functional areas of superolateral surface of cerebral hemisphere.
2. Write in detail about the external and internal features of the kidney. Add a note on its development.

Short Notes:

(6x5=30)

3. Right atrium
4. Stomach
5. Bronchopulmonary segments.
6. Supports of uterus and its applied aspects
7. Trachea
8. Placenta

Answer Briefly:

(10X2=20)

9. Cornea
10. Lumbar puncture
11. Sternum
12. Down's syndrome
13. Arch of aorta
14. Waldeyer's lymphatic ring
15. Pleura
16. Microscopic anatomy of pituitary gland
17. Fibrous joints
18. cardiac muscle

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(FOUNDATION COURSE)**

MODEL QUESTION PAPER

Time: 3 hrs

Max. Marks:- 70

PAPER II - BIOCHEMISTRY

- *Answer all the questions*
- *Draw diagrams wherever necessary.*

Essay:

(2x10=20)

1. Name the factors affecting the enzyme activity. Describe any two of them. What is K_m ? What are its significances. (1+6+1+2=10marks)
2. Describe the metabolism of phenylalanine and Tyrosine. What are the inborn errors associated with their metabolism. (6+4 = 10 marks)

Short Notes:

(6x5=30)

3. Secondary and tertiary structure of proteins.
4. Significances of HMP shunt pathway.
5. Fatty acid synthase complex.
6. Haem degradation.
7. Anaplerotic reactions in TCA cycle
8. Biological functions of folic acid

Answer Briefly:

(10X2=20)

9. Differences between RNA and DNA
10. Define urea clearance
11. Beer-Lambert law
12. Restriction endonucleases
13. Name the plasma buffers
14. Sources and requirement of iron
15. Carbon sources of purine ring
16. Physiological uncouplers
17. Functions of Very Low Density Lipoprotein
18. Chemistry of Benedict's test

Q.P.Code:3379

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MODEL QUESTION PAPER

Time: 3 hrs

Max. Marks:- 70

PAPER III - PHYSIOLOGY

- *Answer all the questions*
- *Draw diagrams wherever necessary.*

Essay:

(2x10=20)

1. Describe hoe oxygen is transported in the blood from lungs to tissue, with the help of an oxygen haemoglobin dissociation curve (ODC). Explain the factors which shift the ODC to the right. (5+2+3=10 marks)
2. Define stroke volume and cardiac output giving the normal values. Discuss how stroke volume is regulated. (4+6 = 10 marks)

Short Notes:

(6x5=30)

3. Water reabsorption in the renal tubules
4. Regulation of aldosterone secretion
5. Changes taking place in the uterine endometrium during different phases of the menstrual cycle.
6. Composition and functions of pancreatic juice
7. Intrinsic mechanism of blood coagulation & name two anticoagulants used in the laboratories.

Answer Briefly:

(5X4=20)

8. Function of Cerebellum
9. Refractive errors of the eye and their correction
10. Acromegaly
11. Excitation contraction coupling
12. Reflex action
