

FEBRUARY - 2005

[KM 704]

Sub. Code : 4164

SECTION B — (8 × 5 = 40 marks)

FIRST B.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

**Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION**

Time : Three hours

Maximum : 90 marks

**Sec. A & B : Two hours and
forty minutes**

Sec. A & B : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

Essay Questions :

1. Write a detailed note on structure and functions of cerebellum. (5 + 10)
2. With the help of a diagram, explain the structure and functions of nephron. Add a note on functions of kidney as a whole. (10 + 5)
3. Explain the physiological role of insulin. (15)

Answer any EIGHT questions.

All questions carry equal marks.

Short notes :

4. Write the steps involved in synthesis of thyroxine.
5. Write a note on coagulation of blood.
6. Explain various methods of family planning in short.
7. Write in short about functions of medulla oblongata.
8. Write a note on exocrine functions of pancreas.
9. Explain properties of cardiac muscle.
10. Write a note on external respiration.
11. Describe functions of plasma proteins.
12. Explain the role of lungs in maintaining acid-base balance.
13. (a) Gigantism (b) Jaundice.

AUGUST - 2005

[KN 704]

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II. Short Notes :

(8 × 5 = 40)

FIRST B.Pharm. DEGREE EXAMINATION.

Answer any EIGHT questions.

(Revised Regulations)

**Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION**

Time : Three hours

Maximum : 90 marks

**Theory : Two hours and
forty minutes**

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay :

(2 × 15 = 30)

Answer any TWO questions.

- 1. Draw a neat labelled diagram of the internal structure of the heart. Discuss heart sounds in detail.**
- 2. Write the composition of urine. Discuss urine formation in detail.**
- 3. Discuss the physiology of respiration in detail.**

- 1. Write the steps involved in the ovulation process.**
- 2. Write the composition and functions of blood.**
- 3. Discuss the digestion and absorption of proteins.**
- 4. Write the functions of the hypothalamus.**
- 5. Discuss the regulation of blood pressure.**
- 6. Write the non hearing functions of the ear.**
- 7. Discuss the anatomy of the lungs with a neat labelled diagram.**
- 8. Write the endocrine functions of the pancreas.**
- 9. Write the family planning methods in detail.**
- 10. Write a note on balanced diet.**

[KN 737]

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FIRST B.Pharm. DEGREE EXAMINATION.

(Modified Regulations)

**Paper III — ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION**

Time : Three hours

Maximum : 90 marks

**Theory : Two hours and
forty minutes**

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay :

(2 × 15 = 30)

Answer any TWO questions.

1. Explain in detail, the events that take place during 'Cardiac cycle'.
2. Write down the functions of adrenal gland, adding a note on hypo and hyper secretion of each hormone.
3. With the help of a neat, labelled figure, explain a 'Nephron'.

II. Short notes :

(8 × 5 = 40)

Answer any EIGHT questions

1. Discuss the mechanism of blood clotting.
2. With a neat diagram, explain ECG recording.

3. Discuss the functions of WBCs.

4. Discuss the process of digestion in the stomach.

5. Draw a neat labelled diagram of the ear. What is the non-hearing function of the ear?

6. Write a note on transport of Carbon-dioxide in the blood.

7. Classify joints with examples.

8. Discuss the functions of medulla oblongata.

9. Discuss the functions of testosterone.

10. Mention the hormones of anterior lobe of pituitary and mention their functions.

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[KO 737]

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FIRST B.Pharm. DEGREE EXAMINATION.

(Modified Regulations)

Paper III — ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay : (2 × 15 = 30)

Answer any TWO questions.

1. Define Blood Pressure. Discuss various factors that regulate Blood Pressure.
2. Describe the anatomy of the Thyroid gland. Write down its functions and explain what happens when there is hypo and hyper secretion.
3. Describe the mechanism of coagulation of blood. How do extrinsic and intrinsic pathways differ? What are the factors involved?

II. Short notes : (8 × 5 = 40)

Answer any EIGHT questions.

1. Discuss the basis of blood grouping.
2. What are the functions of kidney?
3. Discuss the exocrine function of pancreas.
4. Explain the different family planning methods.
5. What is reflex arc? Explain its working.
6. Explain the mechanics of respiration.
7. What is pulmonary circulation? What is its function?
8. Describe the process of 'Spermatogenesis'.
9. Describe the functions of the hormones secreted by 'Neurohypophysis'.
10. What are the functions of 'Cerebellum'?

AUGUST - 2006

[KP 737]

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(Modified Regulations)

**Paper III — ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION**

Time : Three hours

Maximum : 90 marks

**Theory : Two hours and
forty minutes**

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer any TWO questions.

- I. Long Essay :** (2 × 20 = 40)
- 1. Write notes on :** (10 + 10 = 20)
- (a) Compositions and functions of Blood
- (b) Cardiac cycle.
- 2. Explain in detail about mechanism of Respiration.
Add a note on lung volumes.**
- 3. Discuss in detail about physiology of urine
formation. Add a note on micturition.**
- 4. List the Endocrine glands with its hormones.
Write in detail about hormones of Anterior pituitary.**

II. Short notes :

(6 × 5 = 30)

Answer any SIX questions.

- 1. Physiology of menstruation.**
- 2. Mechanism of vision and disorders of eye.**
- 3. Draw a neat labelled diagram of Brain. Write the
functions of cerebrum.**
- 4. Write briefly about Emergency treatment of
poisoning.**
- 5. Discuss the process of digestion in the small
intestine.**
- 6. Cranial nerves and its function.**
- 7. Spermatogenesis.**
- 8. Synovial joint and its disorder.**

FEBRUARY - 2007

[KQ 737]

Sub. Code : 4228

FIRST B.Pharm. DEGREE EXAMINATION.

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Paper III – ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION

Time : Three hours Maximum : 90 marks

Theory : Two hours and Theory : 70 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer any TWO questions.

I. Long Essay (Write any TWO): (2 × 20 = 40)

1. With a neat schematic representation, write the physiology of urine formation. Add a note on micturition.

2. Describe the anatomy of Thyroid Gland. Write down its functions and explain what happens when there is Hypo and Hyper Secretion?

3. Classify joints with example. Discuss briefly about synovial joint.

4. Discuss the mechanism involved in vision. Add a note on disorders of eye.

II. Short notes (write any SIX question) (6 × 5 = 30)

1. Electrophysiology of muscle.

2. Blood grouping and its significance.

3. Digestion and absorption in small Intestine.

4. Spermatogenesis.

5. AIDS.

6. Emergency treatment of shock.

7. Describe the ovarian cycle.

8. Describe the internal anatomy of heart.

August-2007

[KR 737]

Sub. Code : 4228

(For candidates admitted from 2004-05 onwards)

FIRST B.Pharm. DEGREE EXAMINATION.

(Modified Regulations)

Paper III — ANATOMY, PHYSIOLOGY AND
HEALTH EDUCATION

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay (Write any TWO) : (2 × 15 = 30)

1. Define Blood Pressure. Discuss various factors that regulate Blood Pressure.
2. Draw a neat sketch of cross section of Eye and label the parts. Explain in detail the physiology of vision.
3. Describe the composition of pancreatic juice and digestive function of each component. How is pancreatic juice secretion regulated?

II. Short notes :

(8 × 5 = 40)

Answer any EIGHT questions.

1. What are the functions of Hypothalamus?
2. What are the functions of Testosterone?
3. Explain how carbohydrates are digested.
4. Describe the structure and functions of 'larynx'.
5. Write down the differences between the pulmonary and systematic circulation.
6. What is the basis of classification of blood groups? What do you about 'incompatibility' of blood groups?
7. Write the characteristic features of a sinovial joint.
8. Give the classification of connective tissue. What are its functions?
9. Explain the juxta-glomerular apparatus and its function?
10. List out the differences between the sympathetic and parasympathetic nerves.

February-2008

[KS 704]

Sub. Code : 4164

FIRST B.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION

Q.P. Code : 564164

Time : Three hours Maximum : 90 marks

Theory : Two hours and Theory : 70 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

I. Long Essay : (2 × 15 = 30)

Answer any TWO questions.

1. Define cardiac cycle. Describe the various events of cardiac cycle with pressure and volume changes.

2. What are the different stages of urine formation? Explain the role of glomerulus of nephron in the formation of urine.

3. Enlist the hormones secreted by pancreas. Explain the functions and regulation of secretion of Insulin.

4. Describe the different phases of menstrual cycle. What are the hormonal changes during the different stages of the cycle?

II. Short notes : (8 × 5 = 40)

Answer any EIGHT questions

(a) Explain about synovial joint with examples.

(b) Artificial respiration

(c) Reflex action

(d) Functions of the skin

(e) Basic principles of rural health and sanitation

(f) Exocrine functions of the pancreas

(g) Functions of cerebellum

(h) Classify different types of anemia

(i) Functions of platelet

(j) Functions of hypothalamus.

August 2008

[KT 704]

Sub. Code : 4164

FIRST B.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

Paper IV — ANATOMY, PHYSIOLOGY AND
HEALTH EDUCATION

Q.P. Code : 564164

Time : Three hours

Maximum : 90 marks

I. Long Essay : (2 × 20 = 40)

Answer any TWO questions.

1. Draw a labelled diagram of a nephron and describe the mechanism of urine formation. Add a note on Medullary Nephrons. (4 + 12 + 4)

2. Describe the anatomy and histology of thyroid gland, and describe the physiology of the hormones secreted by the gland. Add a note on cretinism. (4 + 14 + 2)

3. Enumerate the phases of menstrual cycle. Describe the changes in each phase and give the hormonal basis for each phase. (2 + 18)

August 2008

II. Short Notes : (8 × 5 = 40)

Answer any EIGHT questions.

1. Describe the conducting system of the heart.
 2. Name the plasma proteins and describe their function.
 3. Baroreceptors and its function.
 4. Hering-Breuer Reflex.
 5. Juxta-glomerular Apparatus.
 6. Heart sounds.
 7. Composition and functions of Gastric juice.
 8. Synovial joint.
 9. Fat soluble vitamins and their importance in the diet.
 10. Draw and label a cross section of Eye. Add a note on the functions of Rods and cones.
3. Name the lobes of cerebrum and its function.
 4. Bohr effect and the factors responsible for it.
 5. Functions of skin.
 6. Name the posterior pituitary hormones and write the functions of any one.
 7. What is the cause for Diabetes Mellitus and Diabetes Insipidus?
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III. Short Answer : (5 × 2 = 10)

Answer any FIVE questions.

1. Types of Leucocytes and their functions.
2. What are Anticoagulants? Give examples.

August 2008

[KT 737]

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Paper III — ANATOMY, PHYSIOLOGY AND HEALTH
EDUCATION

Q.P. Code : 564228

Time : Three hours

Maximum : 90 marks

I. Long Essay : (2 × 20 = 40)

Answer any TWO questions.

1. (a) Draw a neat diagram of cross section of Eye and label the parts. Explain in detail the physiology of vision. (10 + 5)

(b) Functions of Skin. (5)

2. (a) Physiology of urine formation. (10)

(b) Define Blood Pressure. Write about various factors that regulate Blood Pressure. (10)

August 2008

3. (a) Composition and function of Blood. (10)
(b) Spermatogenesis. (10)

II. Short notes : (8 × 5 = 40)

Answer any EIGHT questions.

1. Briefly describe the physiology of hearing.
2. Explain Mechanism of Respiration.
3. What is Succus Entericus? Write its function. (2 + 3)
4. Write the endocrine function of Pancreas.
5. Mention the different female contraceptive method. Give the mode of action, Merits and Demerits of any one of them. (2½ + 2½)
6. Describe the blood coagulation.
7. Define reflex action. Draw and label the diagram of a reflex arc. (1 + 4)
8. Classify the joints with examples.
9. Emergency treatment of shock.
10. Note on Erythro poiesis.

III. Short Answers : (5 × 2 = 10)

Answer any FIVE questions.

1. Explain the following :
 - (a) Oliguria
 - (b) Anuria.
2. Define Vital Capacity.
3. Write the Glucocorticoides secreted from Adrenal cortex.
4. Write about Bones and sutures present in skull.
5. Note on Organ's of Corts.
6. Write the parts of conductive system of heart
7. Write the types of valves in the heart. Where it is present.