## **APRIL - 2001**

## [KD 704] Sub. Code : 4164

FIRST B.Pharmacy DEGREE EXAMINATION.

#### (Revised Regulations)

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

Time : Three hours	Maximum : 90 marks
Two and a half hours	Sec. A & Sec. B : 60 marks
for Sec. A & Sec. B.	Section C : 30 marks

Answer Sections A and B in the same Answer Book.

Answer Section C in the answer sheet provided.

SECTION A --  $(2 \times 15 = 30 \text{ marks})$ 

Answer any TWO questions.

 Describe the mechanism of respiration. Write notes on internal respiration. (10 + 5)

 Write elaborative notes on the Autonomic nervous system. (15)

 With the help of a neat diagram, describe the female reproductive system and menstrual cycle. (8 + 7)

 Draw and describe the structure of the thyroid gland and give its functions. (5 + 10) SECTION B --- (6 × 5 = 30 marks) Answer any SIX questions. All questions carry equal marks.

5. How are the blood groups classified?

Describe the composition and circulation of the cerebro spinal fluid.

Write notes on ECG.

Name the different types of salivary glands. Write down the composition and functions of saliva.

9. How is the blood pressure regulated?

10. Write notes on artificial respiration.

11. Describe the permanent method of family planning.

 $\mathbf{2}$ 

Draw and label the nephron.

[KD 704]

### **NOVEMBER - 2001**

[KE 704] Sub. Code : 4164

### FIRST B.Pharmacy DEGREE EXAMINATION.

### (Revised Regulations)

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

Time : Three hours	Maximum : 90 marks
Two and a half hours	Sec. A & Sec. B : 60 marks
for Sec. A and Sec. B	Section C : 30 marks

Answer Sections A and B in the same Answer Book.

Answer Section C in the Answer Sheet provided.

SECTION A —  $(2 \times 15 = 30 \text{ marks})$ 

Answer any TWO questions.

1. (a) Define blood coagulation. Write the steps involved in intrinsic and extrinsic pathway of blood coagulation. Name two anticoagulants of different mode of action. (1+4+3+2)

(b) Define Landsteiner's law. Tabulate agglutinogens and agglutinins of ABO and Rh system of blood groups. (2 + 3)

Describe the mechanism of urine formation.

(6 + 6 + 3)

### **NOVEMBER - 2001**

3. (a) Define reflex action. Draw a labelled diagram of a simple reflex arc. How are reflexes classified clinically? Give an example for each type.  $(1 + 2\frac{1}{2} + 5\frac{1}{2})$ 

(b) Mention four functions of hypothalamus and explain any one. (4 + 2)

4. (a) Describe briefly the anatomy of the heart and indicate the direction of circulation of blood through the heart. (4+2)

(b) Define cardiac cycle giving its normal duration. List the events of cardiac cycle and describe any one of them.  $(2 + 2\frac{1}{2} + 4\frac{1}{2})$ 

SECTION B --- (6 × 5 = 30 marks)

Answer any SIX questions.

All questions carry equal marks.

 Write a brief note on regulation of arterial blood pressure.
 (5)

6. List the anterior pituitary hormones and mention the actions of any one of them.  $(2\frac{1}{2} + 2\frac{1}{2})$ 

 Define health. Add a note on indicators of health. (1+4)

8. Classify the joints giving an example for each type.  $(1\frac{1}{2} + 1\frac{1}{2} + 2)$ 

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[KE 704]

9. Mention the different female contraceptive methods. Give the mode of action, merits and demerits of any one of them.  $(2\frac{1}{2} + 2\frac{1}{2})$ 

10. Describe briefly the mechanism of respiration. (5)

Give the structure and functions of the skin. (2 + 3)

Write a note refractive errors of the eye.

3

[KE 704]

### **MARCH - 2002**

[KG 704]

Sub. Code : 4164

#### FIRST B.Pharm. DEGREE EXAMINATION.

#### (Revised Regulations)

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

Time : Three hours	Maximum : 90 marks
Two and a half hours	Sec. A & Sec. B : 60 marks
for Sec. A & Sec. B	Section C : 30 marks

Answer Sections A and B in the same answer Book.

SECTION A -- (2 × 15 = 30 marks)

Answer any TWO questions.

 Describe the structure of a nephron. Add a note on the mechanism of urine formation. (5 + 10)

2. With the help of a labelled diagram describe menstrual cycle. (15)

3. Define blood coagulation. Give normal clotting time. Represent schematically the intrinsic and extrinsic mechanisms of blood coagulation. Name two clotting disorders and cause for each. (1 + 1 + 10 + 3)

4. Explain briefly the normal and chemical regulation of respiration. (7+8) SECTION B —  $(6 \times 5 = 30 \text{ marks})$ Answer any SIX questions.

Each carry equal marks.

 Draw and label a myelinated neuron. Add a note on saltatory conduction. (3 + 2)

6. Define arterial blood pressure. Give normal values. Explain briefly the role of baro receptors immediately after blood loss. (1 + 1 + 3)

 Enumerate the functions of saliva. Explain any one. (3 + 2)

 Name the primary tissues. Give the salient features of any one of them. (2 + 3)

 Add a note on the basic principles of rural health and sanitation. (5)

10. Give the contents and functions of middle ear. (2+3)

 Name the hormones of adrenal gland. Explain briefly any two actions of any one of them. (3 + 2)

 Define reflex action. Draw and label the diagram of a reflex arc. (1+4)

2 [KG 704]

# SEPTEMBER - 2002 [KH 704] Sub. Code : 4164

FIRST B.Pharmacy DEGREE EXAMINATION.

### (Revised Regulations)

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

Time : Three hours	Maximum : 90 marks
Two and a half hours	Sec. A & Sec. B : 60 marks
for Sec. A and Sec. B	Section C : 30 marks

Answer Sections A and B in the same Answer Book.

Answer Section C in the Answer Sheet provided.

SECTION A --- (2 × 15 = 30 marks)

Answer any TWO questions.

1. (a) Give the normal concentration of different plasma proteins. Enumerate their functions and explain any one of them. (3 + 4 + 3)

(b) Write a note on the functions of platelets. (5)

 (a) Draw a labelled diagram to show the histology of the thyroid gland. Write the steps involved in synthesis of thyroxine. (3 + 4)

(b) Briefly describe the changes taking place in the ovaries, during a 28 day menstrual cycle. (8)

### **SEPTEMBER - 2002**

 (a) What is the normal heart rate? Write a note on reflex control of heart rate. (1+7)

(b) List the factors influencing venous return to the heart. Explain how venous return controls cardiac output. (4 + 3)

 (a) Describe the functions and control of salivary glands. (4 + 4)

(b) Write a short note on protein and fat digestion in the gut. (4 + 3)

SECTION B —  $(6 \times 5 = 30 \text{ marks})$ 

Answer any SIX questions.

All questions carry equal marks.

 Name the posterior pituitary hormones. Describe the actions of any one of them. (1+4)

 Write a note on balanced diet. Define the following terms : (3 + 2)

(a) Scurvy

(b) Kwashiorkor's syndrome.

Briefly describe the physiology of hearing. (5)

 Name the functions of the testes. Explain any one of them. (2 + 3)

2 [KH 704]

Write a note on prevention of contagious disease.
 (5)

 Define Micturition. Explain the mechanism of micturition. (1+4)

Write briefly on functions of (a) Cerebellum
 (b) Medulla oblongata. (3 + 2)

Define or explain the following terms: (5)

3

(a) Hypoxia

(b) Myxoedema

(c) Gigantism

(d) Jaundice

(e) Anaemia.

[KH 704]

[KI 704] Sub. Code : 4164 SECTION B —  $(6 \times 5 = 30 \text{ marks})$ Answer any SIX questions. FIRST B Pharm. DEGREE EXAMINATION. (Revised Regulations) 5. Write a note on family planning in females. Paper IV - ANATOMY, PHYSIOLOGY AND HEALTH 6. Classify white blood cells. Mention the functions of EDUCATION WBC. Name four conditions for increase in WBC count. Time : Three hours Maximum : 90 marks  $(1\frac{1}{6}+1\frac{1}{6}+2)$ Two and a half hours Sec. A & Sec. B : 60 marks for Sec. A and Sec. B Section C: 30 marks 7. Draw and label the diagram of Neuro Muscular Junction (NMJ). Mention the steps of Neuro muscular Half an hour for Section C transmission  $(2\frac{1}{2}+2\frac{1}{2})$ Answer Sections A and B in the SAME Answer Sheet. Answer Section C in the Answer Sheet provided. 8. Define and classify hypoxia giving an example for SECTION A  $-(2 \times 15 = 30 \text{ marks})$ each. (1+4)Answer any TWO questions. 9. Define deglutition. Mention the stages. Add a note Draw a diagram to show the connection between 1 on the first stage of deglutition.  $(1+1\frac{1}{2}+2\frac{1}{2})$ hypothalamus and pituitary. Name the hormones of hypothalamus and pituitary. Describe briefly the Describe briefly the mechanism of micturition. (5) 10. actions of any one hormone of anterior pituitary. (3 + 6 + 6)11. Give the composition and functions cerebrospinal fluid. Draw a neat labelled diagram of eye. Add a note 2. on refractory errors of the eye, (7 + 8)Mention the functions of skin. Explain any one of 12. Draw a diagram to show the parts of respiratory 3. them. (3+2)tract. Add a note on mechanisms of breathing. (7 + 8)Define arterial blood pressure giving normal 4 values. Write a note on the regulation of arterial blood

(3 + 12)

pressure.

[KI 704] 2

(5)

of

(5)

## **OCTOBER - 2003**

[KJ 704] Sub. Code : 4164 FIRST B.Pharm. DEGREE EXAMINATION. (Revised Regulations) Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION Time : Three hours Maximum : 90 marks Two hours and forty minutes Sec. A & Sec. B : 70 marks for Sec. A and Sec. B Twenty minutes for Sec. C Section C : 20 marks Answer Sections A and B in the SAME Answer Sheet. Answer Section C in the Answer Sheet provided. SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. Discuss the anatomy of female reproductive system and Ovarian cycle.

 Give an account of transport of O<sub>2</sub> and CO<sub>2</sub> in the blood. Add a note on chemical control of respiration.

Explain the outflow and functions of divisions of autonomic nervous system. SECTION B — (8 × 5 = 40 marks) Answer any EIGHT questions.

Describe various regulation of blood pressure.

Discuss the heart sound and its importance.

Describe the digestion in small intestine.

7. What is reflex action? Write its mechanism.

Discuss the insulin chemistry and function.

Describe different contraceptive methods used in females.

 Explain the auditory and non-auditory functions of ear.

 Discuss the importance of blood group determination.

Give the composition and functions of cerebro spinal fluid.

13. Write a note on prevention of contagious diseases.

2 [KJ 704]

[KK 704]	Sub. Code : 4164	
FIRST B.Pharm. DEGRE	E EXAMINATION.	
(Revised Regu	lations)	4
Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION		5
Time : Three hours	Maximum : 90 marks	6
Sec. A & B : Two hours and forty minutes	Sec. A & B : 70 marks	a 7
MCQ : Twenty minutes	MCQ : 20 marks	'
Answer Sections A and B in th	e SAME Answer Book.	8
SECTION A — $(2 \times 1)$	5 = 30  marks)	9
Answer any TWO	questions.	1
		: *

1. Describe structure and functions of respiratory organs.

2. Describe various parts of alimentary canal and explain their role in digestion of food.

3. Describe anatomy and physiological functions of thyroid gland. Explain the consequences of hypothyroidism and hyperthyroidism.

SECTION B —  $(8 \times 5 = 40 \text{ marks})$ Answer any EIGHT questions.

4. Describe blood coagulation process.

5. Explain functions of cerebellum.

6. Enumerate hormones of anterior pituitary gland and write their functions.

- 7. Explain in brief structure and functions of skin.
- 8. Write functions of plasma proteins.
- 9. Comment upon water borne diseases.
- 10. Explain in short functions of kidney.
- 11. Write a note on blood groups.
- 12. Write a note on family planning in females.

13. Give composition and functions of cerebrospinal fluid.



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[KK 704]

# [KK 704]

## Sub. Code : 4164

## FIRST B.Pharmacy DEGREE EXAMINATION.

(Revised Regulations)

Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

- Time : Three hours Maximum : 90 marks
- Sec. A & B : Two hours and Sec. A & B : 70 marks forty minutes

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

Answer Sections A and B in the SAME Answer Book.

Answer M.C.Q. in the Answer Sheet provided.

### SECTION A

Answer any TWO questions :  $(2 \times 15 = 30)$ 

1. Describe the factors responsible for maintenance of normal blood pressure. Write a note on hypertension. (7+8)

2. Explain the structure and functions of cerebrum. (7+8)

3. Explain the terms digestion and metabolism. Write a note on digestion and metabolism of carbohydrates. (5+10)

4. Describe the anatomical structure and physiological functions of anterior and posterior lobes of pituitary body. (10 + 5)

### SECTION B

Answer any EIGHT questions :  $(8 \times 5 = 40)$ All questions carry equal marks.

5. Give classification of joints with examples. (2+3)

6. Write a note on principles of rural health and sanitation. (2+3)

7. In brief, explain the functions of spinal cord.

8. Explain the functions of gastric and intestinal glands. (3+2)

9. Write a note on cardiac cycle.

10. Describe in short the process of micturition.

11. Dwell upon the functions of lymph nodes.

12. Explain the role of kidneys in maintaining acid base balance.

13. Write a note on coagulation of blood.

14. Explain various methods of family planning in short.

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[KK 704]

## **FEBRUARY - 2005**

[KM 704] Sub. Code: 4164 Answer any EIGHT questions. FIRST B.Pharm. DEGREE EXAMINATION. (Revised Regulations) Short notes : Paper IV - ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION 4. Time : Three hours Maximum: 90 marks 5. Sec. A & B : 70 marks Sec. A & B : Two hours and 6. forty minutes short. M.C.Q. : 20 marks M.C.Q. : Twenty minutes 7. SECTION A —  $(2 \times 15 = 30 \text{ marks})$ oblongata. Answer any TWO questions. 8. **Essay Questions :** 9. Write a detailed note on structure and functions of 1. 10. (5 + 10)cerebellum.

With the help of a diagram, explain the structure 2. and functions of nephron. Add a note on functions of (10 + 5)kidney as a whole.

Explain the physiological role of insulin. (15)3.

SECTION B —  $(8 \times 5 = 40 \text{ marks})$ 

All questions carry equal marks.

Write the steps involved in synthesis of thyroxine.

Write a note on coagulation of blood.

Explain various methods of family planning in

Write in short about functions of medulla

Write a note on exocrine functions of pancreas.

Explain properties of cardiac muscle.

Write a note on external respiration.

Describe functions of plasma proteins. 11.

Explain the role of lungs in maintaining acid-base 12. balance.

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(a) Gigantism (b) Jaundice. 13.

[KM 704]

# AUGUST - 2005

[KN 704]	Sub. Code : 4164	II.	Short Notes :	(8 × 5 = 40)	
FIRST B.Pharm. DEGR	EE EXAMINATION.	Answer any EIGHT questions.			
(Revised Reg	gulations)	1.	1. Write the steps involved in the ovulation process.		
Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH		2.	2. Write the composition and functions of blood.		
EDUCA	FION	3.	Discuss the digestion and abs	sorption of proteins.	
Time : Three hours	Maximum : 90 marks	4.	Write the functions of the hy	pothalamus.	
Theory : Two hours and	Theory: 70 marks	5.	Discuss the regulation of bloc	od pressure.	
forty minutes		6.	Write the non hearing function	ons of the ear.	
M.C.Q. : Twenty minutes	M.C.Q. : 20 marks	7.			
I. Long Essay :	$(2 \times 15 = 30)$	0.000	Discuss the anatomy of the lled diagram.	e lungs with a neat	
Answer any TW	O questions.	8.	Write the endocrine functions	s of the pancreas.	
1. Draw a neat labelled	J	9.	Write the family planning me	ethods in detail.	
structure of the heart. Discuss	diagram of the internal s heart sounds in detail.	10.	Write a note on balanced diet		
2. Write the composition	of urine. Discuss urine				
formation in detail.					

3. Discuss the physiology of respiration in detail.

[KN 704]

2. A

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## **AUGUST - 2005**

[KN 737] Sub. Code : 4228

FIRST B.Pharm. DEGREE EXAMINATION.

(Modified Regulations)

### 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 minutesM.C.Q.: 20 marksI.Long Essay : $(2 \times 15 = 30)$ 

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 :  $(8 \times 5 = 40)$ 

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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[KN 737]

## FEBRUARY - 2006

[KO 704]	Sub. Code : 4164	п.	Short notes :		
			Answer any EIGHT questions :	$(8 \times 5 = 40)$	
FIRST B.Pharm. DEGR		<ol> <li>Enumerate the hormones secreted by pituitary gland and give the function of growth hormone.</li> <li>Write a note on prevention and spread of malaria.</li> <li>State the functions of the hypothalamus.</li> </ol>			
(Revised Reg	rulations)				
Paper IV - ANATOMY, PHY	SIOLOGY AND HEALTH				
EDUCA					
Time : Three hours	Maximum : 90 marks	4.	Explain the formation, circulation	n and function of	
Theory : Two hours and	Theory: 70 marks	CSI	? (Cerebrospinal fluid)		
forty minutes		5.	Write a note on spermatogenesis.		
M.C.Q. : Twenty minutes	M.C.Q. : 20 marks	6. of o	Discuss intrauterine devices and ontraception.	l barrier methods	
I. Long Essay :		7.	Briefly explain the mechanism of	urine formation.	
Answer any TWO questions : $(2 \times 15 = 30)$		8. Draw a neat diagram to explain struction of			
1. Describe the stages of b	lood clotting and explain	human eye.			
the various factors that promote and inhibit blood clotting. (10+5)		9.	How does digestion of protein occ	ur in the body?	
2. Define the term blood pre pressure is regulated.	essure. Discuss how blood (2 + 13)	10.	Discuss a balanced diet.		
3. Discuss pulmonary ventile and internal respiration. W	rite a note on artificial				
respiration.	(12 + 3)		2	[KO 704]	

[KO 704]

## **FEBRUARY - 2006**

[KO 737]

Sub. Code: 4228

### 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 :	$(2 \times 15 = 30)$		

Answer any TWO questions.

1. Define Blood Pressure. Discuss various factors that regulate Blood Pressure.

 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'.

2

10. What are the functions of 'Cerebellum'?

[KO 737]

[KP 704]	Sub. Code : 4164			retion of these	
FIRST B.Pharm. DEGE	EE EXAMINATION.		ulin.	ne symptonia o	approvention of
(Revised Re	gulations)	п.	Short notes :		$(6 \times 5 = 30)$
Paper IV — ANATOMY, PHY EDUCA		1. bla		any SIX questio	transported from
Time : Three hours	Maximum : 90 marks	2.	Write notes on h	vpo and hyper ti	ovroidism.
Theory : Two hours and forty minutes	Theory : 70 marks	3.		the 'stomach'.	Write down the
M.C.Q. : Twenty minutes	M.C.Q. : 20 marks	4.	Describe the pul	monary circulati	on.
I. Long Essay :	$(2 \times 20 = 40)$	5.	How is the blood	pressure regula	ted?
Answer any TW	O questions.	6.	What are the fur	actions of blood?	
<ol> <li>(a) Explain the even blood coagulation.</li> </ol>	ts that take place during	7.	How are carbohy	drates digested?	P
(b) Explain the origin beat.	and conduction of heart	8. 'stru	Describe 'reflex etch reflex'.	action' citing t	he example of a
<ol><li>With the help of a no 'nephron'. Explain how urine</li></ol>	eat diagram, describe the is formed.		-		
<ol><li>Describe the origin an nerves.</li></ol>	d functions of autonomic			2	[KP 704]

# AUGUST - 2006

[KP 737]	Sub. Code : 4228	п.	Short notes :	(6 × 5 = 3	0)
			Answer an	y SIX questions.	
FIRST B.Pharm. DEG	REE EXAMINATION.	1.	Physiology of mens	truation.	
(Modified I	legulations)	2.	Mechanism of visio	n and disorders of eye.	
<ul> <li>Press and the state state of the state state state of the state state state.</li> </ul>	IYSIOLOGY AND HEALTH ATION	3. fune	Draw a neat labell ctions of cerebrum.	ed diagram of Brain. Write th	ae
Time : Three hours	Maximum : 90 marks	4. pois	Write briefly abo oning.	out Emergency treatment	of
Theory : Two hours and forty minutes	Theory : 70 marks	5.		ess of digestion in the sma	all
M.C.Q. : Twenty minutes	M.C.Q. : 20 marks	6.	Cranial nerves and	its function	
Answer any T	WO questions.			na mineron.	
I. Long Essay :	$(2 \times 20 = 40)$	7.	Spermatogenesis.		
1. Write notes on :	(10 + 10 = 20)	8.	Synovial joint and i	ts disorder.	
(a) Compositions an	d functions of Blood				
(b) Cardiac cycle.					
2. Explain in detail abou Add a note on lung volumes.	t mechanism of Respiration.				
3. Discuss in detail a formation. Add a note on mi	bout physiology of urine cturition.				
4. List the Endogrine Write in detail about hormo	glands with its hormones. nes of Anterior pituitary.			2 <b>[KP 737</b>	n

## FEBRUARY - 2007

[KQ 704]

Sub. Code: 4164

### FIRST B.Pharm. DEGREE EXAMINATION.

### (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 :	$(2 \times 20 = 40)$		

Answer any TWO questions.

1. Write briefly on internal respiration and external respiration. Discuss on the various mechanisms involved in the regulation of respiration.

What distinguishes a bone from a cartilage? With the help of neat labelled diagrams describe the types of joints in our body.

3. What is meant by blood clotting? How does it differ from agglutination? Write the mechanism of clotting.

 Discuss on the structure of gastro-intestinal wall. Add a note on the phases of gastro-intestinal control. Name the enzymes involved in the process of digestion of food. II. Short notes on :  $(6 \times 5 = 30)$ 

### Answer any SIX questions.

- 1. Cerebellum.
- 2. Ear.
- 3. Oogenesis and spermatogenesis.
- 4. Thyroid gland.
- 5. Termination methods in contraception.
- 6. Control and prevention of communicable diseases.
- 7. Comment on balanced diet.
- 8. Comment on HIV infection.

2

## FEBRUARY - 2007

[KQ 737]

Sub. Code : 4228

## FIRST B.Pharm. DEGREE EXAMINATION. (Modified Regulations)

#### 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)

 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 happen when there is Hypo and Hyper Secretion?

Classify joints with example. Discuss briefly about synovial joint.

 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.

2

[KQ 737]

		Aug	gust-2007		
	[KR 737]	Sub. Code : 4228	II.	Short notes :	$(8\times 5=40)$
	(For candidates admitted	from 2004-05 onwards)		Answer any EIGHT q	uestions.
	FIRST B.Pharm. DEGR	EE EXAMINATION.	1.	What are the functions of Hy	pothalamus?
	(Modified Reg	gulations)	2.	What are the functions of Te	stosterone?
Paper III — ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION		3.	Explain how carbohydrates a	re digested.	
		JCATION	4.	Describe the structure and fu	inctions of 'larynx'.
	Time : Three hours	Maximum : 90 marks	5.	Write down the differe	nces between the
	Theory : Two hours and forty minutes	Theory : 70 marks	pulr 6.	nonary and systematic circulat	
M.C.Q.	M.C.Q. : Twenty minutes	M.C.Q. : 20 marks		What is the basis of classifica at do you about 'incompatibility	<b>.</b>
	<ol> <li>Long Essay (Write any T</li> <li>Define Blood Pressure</li> </ol>		7. joint	Write the characteristic fea	atures of a sinovial
:	<ol> <li>Define Blood Pressure. Discuss various factors that regulate Blood Pressure.</li> <li>Draw a neat sketch of cross section of Eye and label the parts. Explain in detail the physiology of vision.</li> </ol>		8. are i	Give the classification of con ts functions?	nective tissue. What
			9. funct	Explain the juxta-glomerula	r apparatus and its
	3. Describe the composition digestive function of each comp juice secretion regulated?	of pancreatic juice and onent. How is pancreatic		List out the differences betw parasympathetic nerves.	een the sympathetic

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2

[KR 737]

## February-2008

[KS 704]	<b>Sub. Code : 4164</b>	3. Enlist the hormones secret the functions and regulation of		
FIRST B.Pharm. DEGR	EE EXAMINATION.	4. Describe the different phases of me		
(Revised Regulations)		What are the harmonal changes during the stages of the cycle?		
Paper IV — ANATOMY, PHY EDUCA'		II. Short notes :	(8 >	
Q.P. Code : 564164		Answer any EIGH	T questions	
		(a) Explain about synov	ial joint with exa	
Time : Three hours	Maximum : 90 marks	(b) Artificial respiration	L	
Theory : Two hours and	Theory : 70 marks	(c) Reflex action		
forty minutes		(d) Functions of the skin	1	
M.C.Q. : Twenty minutes	M.C.Q. : 20 marks	(e) Basic principles sanitation	of rural healt	
I. Long Essay :	$(2 \times 15 = 30)$	(f) Exocrine functions o	f the pancreas	
I. LVIIG LODAY .	$(2 \times 10 - 00)$	$(2 \times 15 = 50)$ (g) Functions of cerebellum		
Answer any TW	O questions.	(h) Classify different type	es of anemia	

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

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

Explain lin.

al cycle. different

 $\times 5 = 40$ )

mples.

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'Y F

Functions of platelet (i)

Functions of hypothalamus. (j)

2

II.

1.

2.

3.

4.

## [KS 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

Q.P. Code : 564228

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):  $(2 \times 15 = 30)$ 

1. Describe the various stages of 'Erythropoiesis' and what are the factors essential for that? Add a note on Erythroblastosis foetalis.

2. Draw a labelled diagram of Respiratory organs and explain the mechanism of respiration.

3. Describe the outflow and functions of Autonomic Nervous System with special reference to its sympathetic division.

	Short notes :	$(8 \times 5 = 40)$
-	Answer any EIGHT questions.	
	Cranial Nerves and their functions	
	Synovial joint and its disorder	
	Emergency treatment of poisoning	
	Balanced diet	· · ·

5. Explain the Auditory and Non-Auditory functions of ear

6. Draw and label the microscopic structure of thyroid gland

7. Cardiac cycle

8. Contraceptive methods in females

9. B.C.G. vaccine

10. Write the functions of skin and explain briefly 'Sun Stroke'.

2

## [KT 704]

I.

### 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

Long Essay :  $(2 \times 20 = 40)$ 

#### 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)

II. Short Notes :  $(8 \times 5 = 40)$ 

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.

III. Short Answer :  $(5 \times 2 = 10)$ 

Answer any FIVE questions.

2

**[KT 704]** 

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

- 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?

- 3

[KT 704]

## [KT 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

Q.P. Code : 564228

Time : Three hours Maximum : 90 marks

I. Long Essay :  $(2 \times 20 = 40)$ 

#### 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)

3.	(a)	Composition and function of Blood.	(10)	
	(b)	Spermatogenesis.	(10)	
II.	Sho	rt notes : (8	× 5 = 40)	
		Answer any EIGHT questions.		
1.	Brie	fly describe the physiology of hearing	•	
2.	Exp	lain Mechanism of Respiration.		
3.	Wha	it is Succus Entericus? Write its funct	ion. (2 + 3)	
4.	Writ	e 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. $(2\frac{1}{2} + 2\frac{1}{2})$				
6.	Desc	ribe the blood coagulation.		
7. of a	Defi a reflex	ne reflex action. Draw and label the arc.	diagram (1 + 4)	
8.	Clas	sify the joints with examples.		
9.	Eme	rgency treatment of shock.	•	

10. Note on Erythro poiesis.

2

[KT 737]

 $(5 \times 2 = 10)$ Short Answers : III.

### Answer any FIVE questions.

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

Write the types of valves in the heart. Where it is 7. present.

[KT 737]

[KU 704]

Sub. Code: 4164

# FIRST B.PHARM. DEGREE EXAMINATION (ReRevised Regulations) Candidates Admitted upto 2003-04 Paper IV – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

## Q.P. Code : 564164

## Time : Three hours Maximum : 90 marks $(2 \ge 20) = 40$ I. Essay Questions : **Answer any TWO questions** 1. a) Discuss the anatomy of respiratory organs with proper diagram. (10) **b**) Discuss in detail about the mechanism of respiration. (10) 2. a) Write in detail anatomy of pituitary gland and describe its function. (10)**b**) Discuss in detail about various stages of menstural cycle. What are hormones influencing mensturation. (7+3)3. a) Draw a neat diagram of eye. Discuss the physiology of vision. **b**) Add a detail note on various refractory errors and its corrections. **II.** Write Short Notes : Answer any EIGHT questions $(8 \times 5 = 40)$ 1. Aneamia. 2. Cerebro spinal fluid and its function. 3. Parasympathetic innovation and its function. 4. Cell Mediated Immunity. 5. Scapula. 6. Neuro Muscular junction. 7. Mechanism of urine formation. 8. Family planning methods. 9. Malarial infection and its prevention. 10. Balanced diet. **III. Short Answers:** Answer any FIVE questions $(5 \ge 2 = 10)$ 1. Hematopoisis. 2. Active transport.

- 3. Enterocytes.
- 4. Synapse.
- 4. Synapse. 5. Glomerular Filterati
- 5. Glomerular Filteration Rate (GAR).
- 6. Vital Capacity.
- 7. Circumduction.

## FIRST B.PHARM. DEGREE EXAMINATION (ReRevised Regulations) Candidates Admitted upto 2003-04 Paper IV – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION *Q.P. Code : 564164*

## **Time : Three hours**

# Maximum : 90 marks

**I.** Essay Questions : Answer any TWO questions  $(2 \times 20 = 40)$ 

- 1. a) With a neat diagram explain the structure of Heart.
  - **b**) Explain the conduction system of Heart.
- 2. a) Describe the location and anatomical features of the stomach.
  - **b**) Discuss the various phases that regulate gastric secretion.
- 3. Describe the anatomy and histology of adrenal gland and describe the physiology of hormones secreted by adrenal gland. Add a note on aldosteronism.

# II. Write Short Notes : Answer any EIGHT questions

 $(8 \times 5 = 40)$ 

- 1. Write the mechanism of blood coagulation.
- 2. Draw and lable the parts of nephron.
- 3. Discuss the functions of skin.
- 4. Write notes on spermantogenesis.
- 5. Write the mode of transmission and prevention of worm infestation.
- 6. Write notes on autonomic nervous system.
- 7. Define and classify bones with example.
- 8. Write briefly on the mechanism of respiration.
- 9. Define the term family planning. Discuss the various temporary methods of family planning.
- 10. Write the composition and functions of blood.

# **III. Short Answers:** Answer any FIVE questions $(5 \times 2 = 10)$

- 1. Define vital capacity.
- 2. Write the functions of pancrease.
- 3. List the bones of skull.
- 4. Name the fat soluble vitamins and write their functions.
- 5. Define the term, blood pressure and hypertension.
- 6. List the hormones of pituitary gland.
- 7. Write the functions of Hypothalamus.

## FIRST B.PHARM. DEGREE EXAMINATION (ReRevised Regulations) Candidates Admitted upto 2003-04 Paper IV – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION Q.P. Code : 564164

## Time : Three hours

## Maximum : 90 marks

I. Essay Questions : A	nswer any TWO questions	$(2 \times 20 = 40)$
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- 1. Write the composition and functions of blood. Discuss the mechanism of blood coagulation. Write notes on anaemia.
- 2. Draw and lable the parts of respiratory system. Discuss the mechanism of respiration.
- 3. Discuss the principle anatomical structures of the eye with a neat diagram. Write the physiology of vision.

# **II.** Write Short Notes : Answer any EIGHT questions $(8 \times 5 = 40)$

- 1. Write briefly on (IUCD) Intra Uterine Contraceptive Devices.
- 2. Define and classify joints. Add a note on ball and socket joint.
- 3. Write notes on heart sounds.
- 4. Discuss the anatomy and physiological functions of liver.
- 5. Define and outline the event of menstruation.
- 6. List the functions of cerebrospinal fluid.
- 7. Describe the physiology of hearing.
- 8. Write notes on Villi.
- 9. Discuss the regulation of thyroid hormone secretion.
- 10. Describe the mechanism of micturtition.

## **III. Short Answers:** Answer any FIVE questions $(5 \times 2 = 10)$

- 1. Write the functions of saliva.
- 2. Define cardiac output.
- 3. Write the preventive measures of tuberculosis.
- 4. Define diabetes mellitus.
- 5. Write the functions of bones.
- 6. What are plasma proteins? Give example.
- 7. Write the use of spironeter.