[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.

2

(a) Gigantism (b) Jaundice. 13.

[KM 704]

# AUGUST - 2005

[KN 704]	Sub. Code : 4164	II.	Short Notes :	(8 × 5 = 40)	
FIRST B.Pharm. DEGREE EXAMINATION.		Answer any EIGHT questions.			
(Revised Regulations)		1.	1. Write the steps involved in the ovulation process.		
Paper IV — ANATOMY, PHY	SIOLOGY AND HEALTH	2.	2. Write the composition and functions of blood.		
EDUCATION		3.	3. Discuss the digestion and absorption of proteins.		
Time : Three hours Maximum : 90 marks		4.	Write the functions of the hypothalamus.		
Theory : Two hours and Theory : 70 marks		5.	Discuss the regulation of blood 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 :	$(2 \times 15 = 30)$	7. Discuss the anatomy of the lungs with a ne- labelled diagram.			
Answer any TW	O questions.	8.	Write the endocrine functions	s of the pancreas.	
1. Draw a neat labelled diagram of the internal structure of the heart. Discuss heart sounds in detail.		9.	Write the family planning me	ethods 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

### **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.

2

[KN 737]

[KO 704]	Sub. Code : 4164	п.	Short notes :		
			Answer any EIGHT questions :	$(8 \times 5 = 40)$	
FIRST B.Pharm. DEGREE EXAMINATION. (Revised Regulations)		<ol> <li>Enumerate the hormones secreted by pituitar gland and give the function of growth hormone.</li> </ol>			
Paper IV - ANATOMY, PHY	SIOLOGY AND HEALTH	2.	Write a note on prevention and s	pread of mataria.	
EDUCA		<ol><li>State the functions of the hypothalamus.</li></ol>			
Time : Three hours Maximum : 90 marks		4. Explain the formation, circulation and function			
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 I. Long Essay :		6. of o	Discuss intrauterine devices and ontraception.	l barrier methods	
		7.	Briefly explain the mechanism of	urine formation.	
Answer any TWO questi	ons: (2 × 15 = 30)	<ol> <li>Draw a neat diagram to explain struction of human eye.</li> </ol>			
1. Describe the stages of b	lood clotting and explain				
the various factors that pr clotting.		9.	How does digestion of protein occ	ur in the body?	
2. Define the term blood pressure. Discuss how blood pressure is regulated. (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]

[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			d in the sec	
FIRST B.Pharm. DEGREE EXAMINATION.		hormones. Describe the symptoms of hyposecretion of insulin.			
(Revised Regulations)		п.	Short notes :		$(6 \times 5 = 30)$
Paper IV — ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION		Answer any SIX questions. 1. Explain how carbon-di-oxide is transported from blood to lungs.			
Time : Three hours	Maximum : 90 marks	2.	Write notes on h	vpo and hyper ti	ovroidism.
Theory : Two hours and Theory : 70 marks forty minutes		<ol> <li>Draw and label the 'stomach'. Write down the functions of the stomach.</li> </ol>			
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 functions of blood?			
<ol> <li>(a) Explain the events that take place during blood coagulation.</li> </ol>		7.	How are carbohy	drates digested?	P
(b) Explain the origin and conduction of heart beat.		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 any SIX questions.			
FIRST B.Pharm. DEG	FIRST B.Pharm. DEGREE EXAMINATION. (Modified Regulations)		Physiology of mens	truation.	
(Modified I			2. Mechanism of vision and disorders of eye.		
Paper III — ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION		<ol><li>Draw a neat labelled diagram of Brain. Write the functions of cerebrum.</li></ol>			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 names and	its function	
Answer any T	WO questions.				
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

[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.

[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. DEGREE		EE EXAMINATION.	1.	What are the functions of Hy	pothalamus?	
	(Modified Reg	gulations)	2.	2. What are the functions of Testosteror		
Paper III — ANATOMY, PHYSIC		PHYSIOLOGY AND	3.	3. Explain how carbohydrates are dige		
	HEALTH EDU	HEALTH EDUCATION	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	puln 6.	ulmonary and systematic circulation. What is the basis of classification of blo		
	M.C.Q. : Twenty minutes	Essay (Write any TWO): $(2 \times 15 = 30)$		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	
:	1. Define Blood Pressure. Discuss various factors that regulate Blood Pressure.		8. are i	Give the classification of con ts functions?	nective tissue. What	
	2. Draw a neat sketch of a label the parts. Explain in a vision.		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	

.

2

[KR 737]

## February-2008

[KS 704]	<b>Sub. Code : 4164</b>		Enlist the hormones secreted by pancreas actions and regulation of secretion of Ins
FIRST B.Pharm. DEGREE EXAMINATION. (Revised Regulations)		4. I	Describe the different phases of menstr
		What are the harmonal changes during th stages of the cycle?	
Paper IV — ANATOMY, PHY EDUCA'		II. S	Short notes : (8
Q.P. Code : 564164			Answer any EIGHT questions
		(a	a) Explain about synovial joint with ex
Time : Three hours	Maximum : 90 marks	()	b) Artificial respiration
Theory : Two hours and	Theory : 70 marks	(0	c) Reflex action
forty minutes		((	d) Functions of the skin
M.C.Q. : Twenty minutes	M.C.Q. : 20 marks	(e sanitat	e) Basic principles of rural heation
I. Long Essay :	$(2 \times 15 = 30)$	(1	f) Exocrine functions of the pancreas
I. Long Dobay .	$(2 \times 10 - 00)$	(	g) Functions of cerebellum
Answer any TWO questions.		(l	h) Classify different types 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.

 $\mathbf{th}$ and

'Y F

Functions of platelet (i)

Functions of hypothalamus. (j)

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'.

# [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	Short notes : $(8 \times 5 = 4)$		
		Answer any EIGHT questions.		
1.	1. Briefly describe the physiology of hearing.			
2.	2. Explain 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	Describe the blood coagulation.		
7. Define reflex action. Draw and label the diagram of a reflex arc. $(1 + 4)$				
8.	Clas	Classify the joints with examples.		
9.	Eme	Emergency 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]