

KATHMANDU UNIVERSITY
End Semester Examination [C]
January, 2018

Marks Scored:

Level : B.Pharm.
Year : II

Course : PHAR 212
Semester: II

Exam. Roll No.:

Time: 30 mins.

F.M. : 20

Registration No.:

Date : JAN 14 2018

SECTION "A"

[20 Q.×1=20 marks]

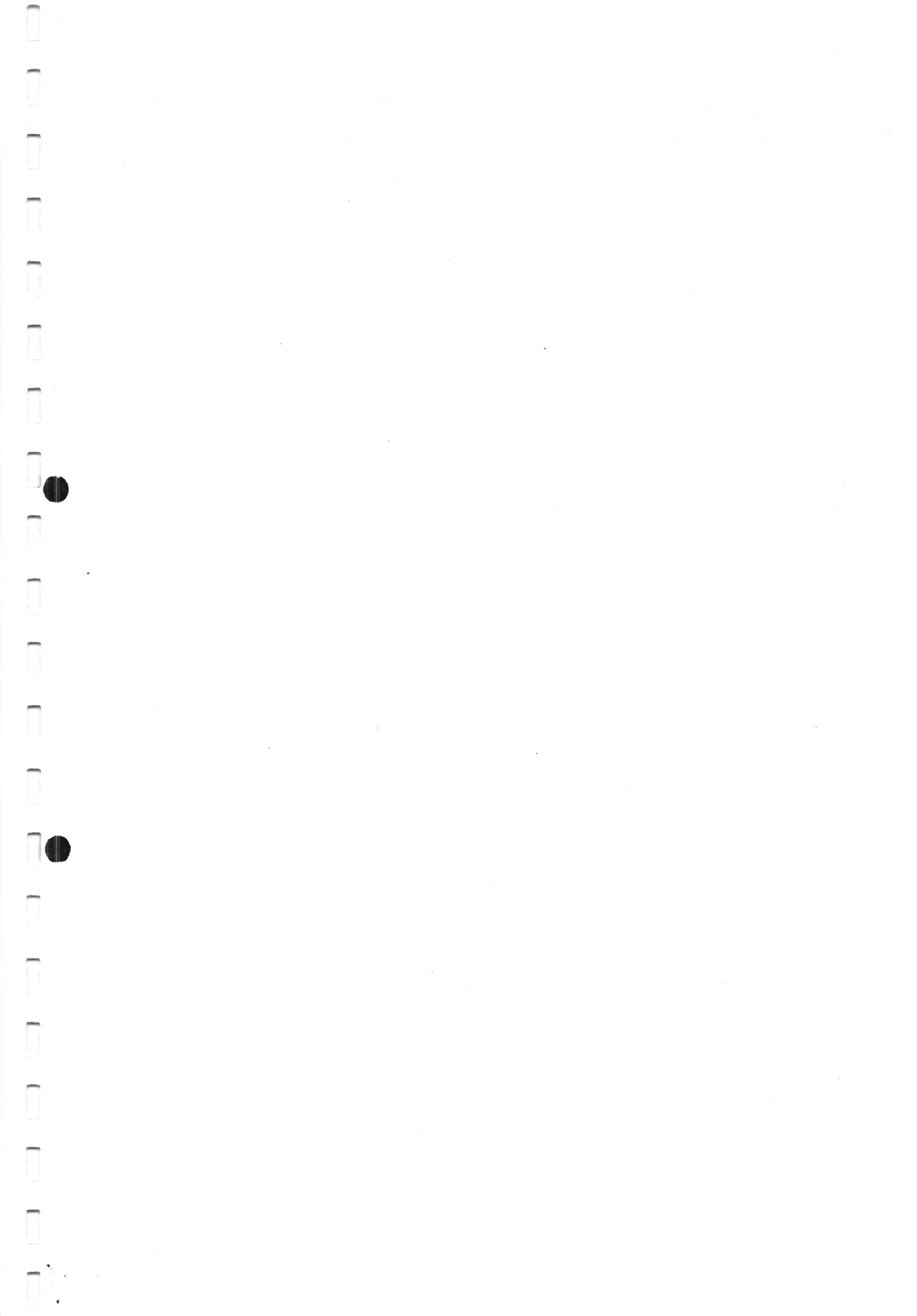
Tick [√] the correct answer.

1. The white rami communicant contains which kind of fibers
[a] Pre ganglionic parasympathetic
[b] Post ganglionic parasympathetic
[c] Pre ganglionic sympathetic
[d] Post ganglionic sympathetic
2. Which of the following organ detects the motion of the body of a person performing ballet spin?
[a] Utricle [b] Sacculle
[c] Semicircular canal [d] Organ corti
3. Injury in optic tract leads to
[a] Heteronymous hemianopia
[b] Homonymous hemianopia
[c] Homonymous hemianopia with macular sparing
[d] None of above
4. Angular gyrus is responsible for
[a] Naming objects [b] Interpreting music
[c] Process visual language [d] Process somatosensory
5. Continuous writhing movement in parkinsonism is called
[a] Akinesia [b] Athetosis [c] Chorea [d] Ballism
6. Plasma level of free T3 is
[a] 0.3 ng/dl [b] 2 ng/dl [c] 0.1 µg/dl [d] 8 µg/dl
7. It is the hormone that is stored extracellularly
[a] Thyroxin [b] Cortisol
[c] Calcitriol [d] Aldosterone
8. Broadmann's area number 22 is the area for
[a] Somatic sensation [b] Naming object
[c] Language and comprehension [d] Face recognition

9. Deficiency of 17- α hydroxylase leads to excessive production of
 [a] Aldosterone [b] 11- deoxycortisol
 [c] Cortisol [d] Testosterone
10. Ventral corticospinal tract mostly innervate to
 [a] Cranial muscles [b] Distal muscles
 [c] Proximal muscles [d] Visceral muscle
11. Active form of vitamin D is formed in the kidneys by the action of
 [a] Sunlight [b] 24 hydroxylase
 [c] 25 hydroxylase [d] 1 α hydroxylase
12. Eccrine type of sweat gland is present in this part of the body
 [a] Areola [b] Axilla [c] Palm [d] Nipple
13. Renal clearance of a substance is defined as:
 [a] Weight of plasma completely cleared of a substance by the kidneys
 [b] Weight of plasma completely cleared of a substance by the kidneys per unit time
 [c] Volume of plasma completely cleared of a substance by the kidneys
 [d] Volume of plasma completely cleared of a substance by the kidneys per unit time
14. Hyperosmolarity of the renal medullary interstitium is created by:
 [a] Proximal tubule [b] Distal tubule
 [c] Collecting ducts [d] Limbs of loop of Henle
15. Which of the following represents the correct order of branching of the renal artery after entering the kidney?
 [a] Renal artery \rightarrow Interlobular arteries \rightarrow Arcuate arteries \rightarrow Interlobar arteries \rightarrow Afferent arterioles
 [b] Renal artery \rightarrow Interlobar arteries \rightarrow Interlobular arteries \rightarrow Arcuate arteries \rightarrow Afferent arterioles
 [c] Renal artery \rightarrow Interlobar arteries \rightarrow Arcuate arteries \rightarrow Interlobular arteries \rightarrow Afferent arterioles
 [d] Renal artery \rightarrow Arcuate arteries \rightarrow Afferent arterioles \rightarrow Interlobar arteries \rightarrow Interlobular arteries
16. Which of the following statements is true?
 [a] Lower the alveolar ventilation \rightarrow Higher the PCO₂
 [b] Increased H⁺ concentration inhibits respiration
 [c] As the pH decreases \rightarrow Alveolar ventilateion rate decreases
 [d] Concentration of phosphate buffer in extracellular fluid is higher than in the intracellular fluid
17. Which of the following conditions is associated with an increase in extracellular potassium ion concentration?
 [a] Diabetes Mellitus [b] Aldosterone Excess
 [c] Alkalosis [d] Beta adrenergic stimulation

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18. Which of the following factors is not associated with increase in calcium excretion?
[a] Decrease in Parathyroid hormone level [b] Increase in Extracellular fluid
[c] Increase in plasma phosphate level [d] Increase in blood pressure
19. Which of the following is not true about the monthly endometrial cycle?
[a] Proliferation of uterine endometrium occurs
[b] Desquamation of the endometrium occurs
[c] Reepitheliazation of endometrium occurs within 20 days of menstruation
[d] Corpus luteum secretes large quantity of progesterone and estrogen
20. Which of the following methods is not meant for female sterilization?
[a] Laparotomy [b] Vasectomy
[c] Minilaparatomy [d] Laparoscopy



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F.M. : 55

SECTION "B"
[5 Q.×3=15 marks]

Explain with graphs and figures where ever required

Answer any *FIVE* questions.

1. How does the body maintain temperature during cold climate?
2. Explain the rate of growth of individual tissues of the body. What is catchup growth.
3. Write about any three pathologies related to adrenal glands.
4. What is carpo-pedal spasm?
5. Draw a well labeled diagram and briefly describe the various parts of kidney.
6. How does the kidneys autoregulate renal blood flow and GFR?
7. What are the various events that occur following fertilization of the ovum till it gets implanted in the uterus?

SECTION "C"
[5 Q.×5=25 marks]

Answer any *FIVE* questions.

8. Elaborate the functions of basal ganglia.
9. Elaborate different tracts and pathways for motor system.
10. How does the light falling to the retina is converted to action potential? State young helmholtz theory.
11. Explain the mechanism of release of insulin in response to glucose. Explain rapid actions of insulin.
12. Highlight upon the "feedback control of hydrogen ion concentration" by the respiratory system. Describe how the ammonia buffer system and phosphate buffer system help in generation of bicarbonate ions. [2+3]
13. Explain clearly how the following factors stimulate potassium secretion by principal cells. [2+2+1]
 - a. Increased extracellular fluid potassium concentration
 - b. Increased aldosterone
 - c. Increased tubular flow rate
14. Describe in detail the various phases of ovarian cycle with a well labeled diagram

SECTION "D"
[2 Q.×7.5=15 marks]

Answer any *TWO* questions.

15. What are the different types of memory Name different types of brain waves with their frequencies? Elaborate sleep. [3+1.5+3]
16. Write a detailed note on "Acute and Chronic Renal Failure"
17. A. Give an account on gustatory pathway.(4)
B. Write a short note on the various hormones used for diagnosis of pregnancy (3.5)

