

Term Test
MBBS Second Year 2016-17
(Physiology-Subjective)

20

INSTRUCTIONS
1-All subjective part is to be submitted within 130 minutes, no extra time will be given.
2-Neat handwriting, use of margins will increase the outlook /presentation of your paper.

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.
TOTAL MARKS = 45
TIME = 2 hours 10 min
DATED: 20-4-2017

- Q1. A) Define receptor. Give classification of receptors. (2.5)
B) Enumerate the properties of receptors; describe mechanism of adaptation & its importance. (2.5)
- Q2. A) Draw Dorsal column medial lemniscus system. (2)
B) Compare & contrast dorsal column medial system with that of anterolateral systems. (3)
- Q3. A) Draw & label the Dual pain pathway-give causes of visceral pain. (3)
B) Describe the mechanism of analgesia system in brain. (2)
- Q4. A) Draw Sensory Homunculus. (2)
B) Give features & functions of somatosensory area I. (3)
- Q5. A) Define GFR. Calculate the Net filtration pressure. (2)
B) List all the determinants of GFR & their impact on GFR. (3)
- Q6. A) Enumerate the buffer system of the body (2)
B) Discuss different mechanisms by which H⁺ ions are buffered in renal tubules of kidney. (3)
- Q7. A) Name hormones produced by different layers of adrenal cortex. (3)
B) A lady presents to the outdoor with complaints of unexplained obesity, severe muscular weakness and bruises on the body. On examination, she is found to have a moon face appearance, unequal fat distribution and stria. She is also found to be suffering from hyperglycemia.
i. Diagnose the disease. *Cushing syndrome.* (1)
ii. What is the underlying pathology? (1)
- Q8. A) Write down the steps for synthesis of Thyroid hormone. (2.5)
B) 35 years female patient came to doctor & told she is having feeling of Palpitation & nervousness heat intolerance and loosing weight inspite of having good appetite. Her eyes were protruded out, blood examination revealed autoimmune circulating antibodies
i) What is most probable diagnosis? *Graves, hyper thyroid.* (1)
ii) Give pathophysiology of disease? (1.5)
- Q9. A) Enumerate the functions of Testosterone before birth & after puberty. (2.5)
B) Give a brief account of ovarian cycle & LH surge. (2.5)

ZARA NAHEED MEDICAL COLLEGE LAHORE

Send -up Examination Part 2

MBBS 2015-16

(Physiology-Subjective)

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INSTRUCTIONS

- 1-All subjective part is to be submitted within 130 minutes, no extra time will be given.
- 2-Neat handwriting, use of margins will increase the outlook /presentation of your paper.

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

TOTAL MARKS = 50
TIME = 2 hours 10 min

DATED: 23-9-2016

K.S.

- Q1. A) Name dorsal column tracts, list the sensations carried by these. (2.5)
B) Draw dorsal column-medial lemniscal system pathway till the primary sensory cortex. (2.5)
- Q2. A) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. His face is mask like with no change of expression.
i. Give your diagnosis (0.5)
ii. Explain pathophysiology of disease (1)
iii. What other symptoms and signs the patient will show (0.5)
B) List the physiological divisions of cerebellum and their functions (2)
- Q3. A) Classify the sensory receptors (2)
B) Briefly mention the properties of receptors. (3)
- Q4. A) Write down the Functions of Hypothalamus. (2)
B) Define Speech. Give the important speech areas and mechanism of speech. (3)
- Q5. A) Define GFR. (1)
B) List the DETERMINANTS of GFR and outline their impact on GFR. (4)
- Q6. A) Define accommodation reflex .Give in detail the reactions for near response & it's nervous pathway. (3)
B) Give an account of functions of middle ear with special emphasis on impedance matching. (2)
- Q7. A) Explain the functions of insulin related to carbohydrate metabolism. (3)
B) A lady presents to the outdoor with complaints of unexplained obesity, severe muscular weakness and bruises on the body. On examination, she is found to have a moon face appearance, unequal fat distribution and stria. She is also found to be suffering from hyperglycemia.
i. Diagnose the disease. (1)
ii. What is the underlying pathology? (1)
- Q8. A) What are requirements for concentrated urine formation? (1.5)
B) Describe steps involved in Counter current multiplier mechanism. (3.5)
- Q9. A) Give the hypothalamic-pituitary-testicular axis in adult male stressing upon the hormones involved. (2)
B) Draw & label the phases of uterine cycle. (3)
- Q10. A) Discuss in detail the mechanism of heat loss when a person is exposed to hot environment. (2)
B) Discuss the role of hypothalamus in regulation of body temperature (3)

Department of Physiology

2nd YEAR MBBS 2011-16

SENT-UP EXAMINATION

BR

INSTRUCTIONS

All subjective part is to be submitted within 2 hours, 10 minutes, no extra time will be given. Neat handwriting, use of margins will increase the outlook / presentation of your paper

SUBJECTIVE PART (SEQs)

(100m)

TOTAL MARKS: 50

DATED: 05-07-13

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

- Q1. A) Define GFR. Enlist factors regulating GFR. (3)
 B) Explain micturition reflex briefly. (2)
- Q2. Give the mechanism of formation of concentrated urine with special emphasis on counter-current multiplier system. (5)
- Q3. A) List the events occurring in pH of renal phase. (3)
 B) Enumerate the functions of stomach. (2)
- Q4. A) Name dorsal column tracts & list the sensations carried by these. (3)
 B) Give properties of sensory receptors. (2)
- Q5. A) Draw & label the Dual pain pathway. (3)
 B) Give the causes of visceral pain & explain the mechanism of referred pain. (3)
- Q6. A) Give a brief account of origin, pathway & function of pyramidal tract. (3)
 B) A 60 year old patient was brought in emergency with complaint of progressive weakness & loss of voluntary control on right side of his body. He is a known hypertensive. On examination, he is unconscious and Babinski's sign was found to be positive on the right side. (3)
 i. What is the most probable diagnosis? (1)
 ii. What other features related to this disease is expected in this patient. (1)
- Q7. A) Enlist the functions of Basal Ganglia. (2)
 B) Explain the features of Parkinson's disease. (3)
- Q8. A) Name the Hormones of the ovary. (2)
 B) Draw & label phases of menstrual cycle. (3)
- Q9. A) What is limbic system? Give its parts. (2)
 B) List the functions of hypothalamus. (3)
- Q10. A) Draw the visual pathway till visual cortex. (3)
 B) Give visual disorders, from which the person will suffer, if there is lesion in right optic nerve, optic chiasma, right optic tract, right side optic radiations. (2)

AL NAHEED MEDICAL COLLEGE LAHORE

2ND YEAR MBBS 2013-14
(Physiology)

13172

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SEND-UP EXAMINATION

DATED: 08-08-14

INSTRUCTIONS

- 1-All subjective part is to be submitted within 2 hours 10 minutes, no extra time will be given.
- 2-Neat handwriting, use of margins will increase the outlook /presentation of your paper.

SUBJECTIVE PART (SEQs)

TOTAL MARKS: 50

TIME: 2 HOURS 10 MINUTES

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.
DRAW THE NECESSARY DIAGRAMS WHERE REQUIRED.

1. A) What is countercurrent multiplier system in kidney? Explain its mechanism and function in detail. (3.5)
B) Describe micturition reflex and its pathway. (1.5)
2. Define GFR. List the determinants of GFR and outline their mechanism of regulation of GFR. (1+2+2)
3. A) List all the ascending tracts. (1)
B) List the sensations carried by dorsal column medial lemniscus system. (1.5)
C) Draw a sensory homunculus and give its properties. (1.5)
4. A) Explain with the help of diagram the functional division of cerebellum and corresponding function of each part. (3)
B) A 55-year-old lady came in emergency with sudden onset of right-sided weakness of body & loss of voluntary movements. She is a known hypertensive. On examination, she is unconscious and Babinski's Sign was found to be positive on right side.
 - i. What is the most probable diagnosis? (1)
 - ii. What other features related to this disease do you expect in this patient? (1)
5. A) Define Speech. Give the important speech areas and mechanism of speech. (3)
B) List the functions of hypothalamus. (2)
6. A) Name the nervous plexus of GIT & their corresponding functions. (3)
B) Describe the sequence of events occurring in pharyngeal phase of swallowing reflex. *GIT* (2)
7. A) Give in a tabulated form, the effect of parasympathetic nerve stimulation in heart, GIT, pupil of eye and urinary bladder. *RIP Dic* (2)
B) Compare the dwarfism due to hypopituitarism with that due to cretinism. (3)
8. A) Give the hypothalamic-pituitary-testicular axis in adult male with emphasis on the hormones involved. (2)
B) List the hormones produced by placenta & outline the function of each hormone. (3)
9. A) Enumerate the hormones included in blood sugar level regulation. (2)
B) Discuss the role of insulin in carbohydrate and protein metabolisms. (3)
10. A) Define Accomodation reflex. Give in detail the reactions for near response. Draw the pathway for this reflex. (3)
B) Draw and label the auditory pathway till auditory cortex. (2)



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THE SUPERIOR COLLEGE, LAHORE

First Professional MBBS (Part-2) Annual Examination 2013

(PHYSIOLOGY)

SUBJECTIVE (SEGS)

Total Marks 45

Total Time 2 Hrs & 10 Mins

DATED: 26-08-2013

INSTRUCTIONS

1. The subjective part is to be submitted within 130 minutes, no extra time will be given.
 2. Neat handwriting, use of margins will increase the outlook / presentation of your paper.

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

1. Draw and label the structure of a nephron. Outline the functions of various parts of the renal tubule. (2, 3) 1, 1.
2. A) Enumerate the stages of swallowing and explain the pharyngeal stage of swallowing. (3) 2.
 B) Define Dysphagia. Enlist the causes. (2) 1.
3. A) Name & local colour in tracts & list the sensations carried by these. (2.5) 2.5
 B) Give properties of sensory receptors. (2.5) 2.
4. A) Enlist the functions of Basal Ganglia. (2) 1.
 B) Explain the features of Parkinson's disease. (3) 2.
5. A) Give the functional division of cerebellum. (2)
 B) A 55 year old lady came into outdoor with feeling of one sided weakness of body and history of frequent falls during walking. On examination she was walking on broad base and there was tendency to fall when she was asked to walk with closed eyes.
 A. Which part of central nervous system is diseased in this case? (1)
 B. Write all other disturbances which may be present in this patient. (2)
6. A) What is limbic system? Give its parts. 2 (2)
 B) List the functions of hypothalamus. 2 (2)
7. A) Enumerate the hormones involved in blood sugar level regulation. 2 (2)
 B) Discuss the role of insulin in carbohydrates and protein metabolisms. 1 (3)
8. A) Describe the mechanism of ovulation and role of hormones in an adult female. (3) 1
 B) Draw & mention briefly the phases of female ovarian cycle. (2) 1
9. A) Discuss briefly the accommodation reflex & its nervous pathway. (3) 1
 B) Briefly list & describe the error of refraction. (2) 1



PHYSIOLOGY

(SEO's)

9 *[Signature]*

Time Allowed 2 hours & 10 Minutes

Total Marks 45

Roll No. -----

Instructions

1. The SEO's part is to be submitted within 2 hours & 10 Minutes, Extra time will not be given.
2. Neat Hand Writing use of margin and marker for headlines will increase the presentation of your paper.
3. Do not write your name or disclose your identity in anyway.

ATTEMPT ALL QUESTIONS: ALL QUESTIONS CARRY EQUAL MARKS

- ✓ 1. A) Enumerate the basal ganglia. Name their important circuits. List their functions. (3)
 B) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. (0.5)
 - i. Give your diagnosis. (1)
 - ii. Explain pathophysiology of disease. (0.5)
 - iii. How you will treat such patient? (2.5)
- ✓ 2. A) Name dorsal column tracts & list the sensations carried by these. (2)
 B) Draw a nervous pathway from a peripheral receptor in Dorsal column medial lemniscus system till somatosensory cortex. (2.5)
- ✓ 3. A) What is limbic system? List its parts. (2)
 B) List the functions of hypothalamus with corresponding area or nuclei. (3)
- ✓ 4. A) Explain the structure of muscle spindle with diagram with special emphasis on its innervations. (4)
 Give its important functions. (4)
 B) Draw a stretch reflex.
- ✓ 5. A) Give the mechanism of formation of concentrated urine with special emphasis on counter-current multiplier system. (3)
 B) Give a summary of function of kidney. (2)
- ✓ 6. A) Enumerate the stages of swallowing and explain the pharyngeal stage of swallowing. (3)
 B) Define Dysphagia. Enlist the causes. (2)
- ✓ 7. A) Describe briefly the phases of female ovarian cycle. (2)
 B) Discuss functions of placenta with special emphasis on respiratory & endocrine functions. (3)
8. A) A 44-year-old woman, known diabetic presented with backache & a six month history of swellings on bony areas of the body, tightening of rings, more recent headache & decreased vision. She complains of pain in joints. (1)
 - i. Give the diagnosis. (2)
 - ii. Impact of the responsible hormone on the metabolisms of carbohydrates & proteins. (2)
 B) Compare the dwarfism due to hypopituitarism with that due to cretinism. (2)
9. A) Define accommodation reflex. Give in detail the reactions for near response. Also describe the retinotectal pathway for accommodation reflex (3)
 b) Draw olfactory pathway? (2).

THE SUPERIOR COLLEGE, LAHORE

1st PROFESSIONAL MBBS Part II

ANNUAL EXAMINATION 2016

Physiology

(SEQs)

10

Roll No. 60

Time Allowed: 2 hours and 10 minutes

Total Marks: 45

Instructions

1. The SEQs part is to be submitted within 2 hours and 10 minutes, extra time will not be given.
2. Neat hand writing, use of margin and marker for headlines will increase the presentation of your paper.
3. Do not write your name or disclose your identity in anyway.

- Q.1- a) Describe pain suppression (analgesia) system in brain & spinal cord. (2)
b) Name types of intracranial headache. → meningitis headache (1.5)
c) Give causes of migraine headache. → migraine headache (1.5)
CSF ↑ hyper tension
- Q.2- a) Define synapse and give physiological types of synapse. (1+1)
b) Enumerate the properties of synaptic transmission. (3)
- Q.3- a) Write down the steps for the synthesis of Thyroid hormone. (2)
b) A patient came to doctor and told that from the last few days he is feeling nervousness and his sleep is reduced. He has palpitation, and intolerance to heat, has sweating on hands and inspite of fact that his appetite is increased, his body weight is reducing. On examination there was protrusion of eyeball, heart rate was increased and B.P. was raised (Hypertension). In your opinion
i) What is most probable diagnosis of this condition? (1.5)
ii) What is pathophysiology of this disease? (1.5)
Thyroid's disease
- Q.4- a) Enlist the components of Limbic system. (2.5)
b) Write down the functions of Hypothalamus. (2.5)
- Q.5- a) Draw and explain "Micturition Reflex". (3.5)
b) Describe the atonic bladder. (1.5)
- Q.6- a) Give the functions of Human Chorionic gonadotropin hormone. (2.5)
b) Isano, a 28 years old, came to gynae outdoor, she told that she was married "3" years back but still had no child. She told that she had normal menstrual cycle of 28 days. On urine examination one week before menstruation = No Pregnenediol level in the blood. Body temperature chart was maintained, it showed that = No rise in body temperature during menstrual cycle.
In your opinion what is the most probable cause of infertility in this female? (1)
What is the pathophysiology of this cause? (1)
What are other causes of infertility? (0.5)
- Q.7- a) What changes occur in the eye, when focused on near object? (1.5)
b) Explain the nervous mechanism involved. (3.5)
- Q.8- a) Write down the functional division of cerebellum. (2)
b) Give the mechanism of signal Turn ON/ Turn OFF with special emphasis on the role of Purkinji cells. (3)
- Q.9- a) Give detailed account of site of secretion, mechanism of action and metabolic functions of cortisol. (3.5)
b) Give pathophysiology and symptoms/ signs of Cushing's Syndrome. (1.5)

2ND YEAR MBBS 2014-15
(Physiology)

GRAND TEST 2015

DATED: 23-07-15

INSTRUCTIONS

- 1-All subjective part is to be submitted within 2 hours 10 minutes, no extra time will be given.
- 2-Neat handwriting, use of margins will increase the outlook /presentation of your paper.

SUBJECTIVE PART (SEQs)

TOTAL MARKS: 50

TIME: 2 HOURS 10 MINUTES

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.
DRAW THE NECESSARY DIAGRAMS WHERE REQUIRED.

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marks*

U-G P-R

- 1. A) What is countercurrent multiplier system in kidney? Explain its mechanism and function in detail. (3.5)
- 1. B) Describe micturition reflex and its pathway. (1.5)
- 2. Define GFR. List the ^{rel}determinants of GFR and outline their mechanism of regulation of GFR. (1+2+2)
- 3. A) List all the ascending tracts. (3) *(Spinal cord) → SP → R → L → SP → R → L*
- 3. B) List the sensations carried by dorsal column medial lemniscus system. *→ SP → R → L → SP → R → L* (1.5)
- 3. C) Draw a sensory homunculus and give its properties. *→ SP → R → L → SP → R → L* (1.5)
- 4. A) Explain with the help of diagram the functional division of cerebellum and corresponding function of each part. (3)
- 4. B) A 55-year-old lady came in emergency with sudden onset of right-sided weakness of body & loss of voluntary movements. She is a known hypertensive. On examination, she is unconscious and Babinski's Sign was found to be positive on right side. *He Mark Hemiplegia*
- 4. i. What is the most probable diagnosis? (1)
- 4. ii. What other features related to this disease do you expect in this patient? (1)
- 5. A) Define Speech, Give the important speech areas and mechanism of speech. (3)
- 5. B) List the functions of hypothalamus. (2)
- 6. A) Name the nervous plexus of GIT & their corresponding functions. (3)
- 6. B) Describe the sequence of events occurring in pharyngeal phase of swallowing reflex. (2)
- 7. A) Give in a tabulated form, the effect of parasympathetic nerve stimulation in heart, GIT, pupil of eye and urinary bladder. (2)
- 7. B) Compare the dwarfism due to hypopituitarism with that due to cretinism. (3)
- 8. A) Give the hypothalamic-pituitary-testicular axis in adult male with emphasis on the hormones involved. (2)
- 8. B) List the hormones produced by placenta & outline the function of each hormone. (3)
- 9. A) Enumerate the hormones included in blood sugar level regulation. *Insulin, glucagon, cortisol* (2)
- 9. B) Discuss the role of insulin in carbohydrate and protein metabolisms. (3)
- 10. A) Define Accomodation reflex. Give in detail the reactions for near response. Draw the pathway for this reflex. (3)
- 10. B) Draw and label the auditory pathway till auditory cortex. *cyfo* (2)

UMNL → Babinski sign + present, superficial abdominal reflex absent, Cremasteric reflex absent, 1/2 SS of line, excited, indistinctly moving

NAHEED MEDICAL COLLEGE LAHORE

2ND YEAR MBBS 2013-14
(Physiology)

SEND-UP EXAMINATION

DATED: 08-08-14

INSTRUCTIONS

- 1-All subjective part is to be submitted within 2 hours 10 minutes, no extra time will be given.
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SUBJECTIVE PART (SEQs)

TOTAL MARKS: 50

TIME: 2 HOURS 10 MINUTES

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

DRAW THE NECESSARY DIAGRAMS WHERE REQUIRED.

1. A) What is countercurrent multiplier system in kidney? Explain its mechanism and function in detail. (3.5)
B) Describe micturition reflex and its pathway. (1.5)
2. Define GFR. List the determinants of GFR and outline their mechanism of regulation of GFR. (1+2+2)
3. A) List all the ascending tracts. (1)
B) List the sensations carried by dorsal column medial lemniscus system. (1.5)
C) Draw a sensory homunculus and give its properties. (1.5)
4. A) Explain with the help of diagram the functional division of cerebellum and corresponding function of each part. (3)
B) A 55-year-old lady came in emergency with sudden onset of right-sided weakness of body & loss of voluntary movements. She is a known hypertensive. On examination, she is unconscious and Babinski's Sign was found to be positive on right side.
 - i. What is the most probable diagnosis? (1)
 - ii. What other features related to this disease do you expect in this patient? (1)
5. A) Define Speech. Give the important speech areas and mechanism of speech. (3)
B) List the functions of hypothalamus. (2)
6. A) Name the nervous plexus of GIT & their corresponding functions. (3)
B) Describe the sequence of events occurring in pharyngeal phase of swallowing reflex. (2)
7. A) Give in a tabulated form, the effect of parasympathetic nerve stimulation in heart, GIT, pupil of eye and urinary bladder. (2)
B) Compare the dwarfism due to hypopituitarism with that due to cretinism. (3)
8. A) Give the hypothalamic-pituitary-testicular axis in adult male with emphasis on the hormones involved. (2)
B) List the hormones produced by placenta & outline the function of each hormone. (3)
9. A) Enumerate the hormones included in blood sugar level regulation. (2)
B) Discuss the role of insulin in carbohydrate and protein metabolisms. (3)
10. A) Define Accomodation reflex. Give in detail the reactions for near response. Draw the pathway for this reflex. (3)
B) Draw and label the auditory pathway till auditory cortex. (2)

Department of Physiology

2nd YEAR MBBS 2011-16

SENT-UP EXAMINATION

- Increase
- 1- Glomerular pressure
- 2- Blood pressure
- 3- Increase renal blood flow
- 4- Efferent arteriole constriction

INSTRUCTIONS

- 1- All subjective part is to be submitted within 2 hours 10 minutes, no extra time will be given.
- 2- Neat handwriting, use of margins will increase the outlook / presentation of your paper.

SUBJECTIVE PART (SEQs)

- Decrease
- 2- Increase osmotic pressure
- DATED: 05-07-13
- 2- Afferent arteriole constriction
- 2- Bowman's capsule pressure (3)

TOTAL MARKS: 50

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

- Q1. A) Define GFR. Enlist factors regulating GFR. (2)
- B) Explain micturition reflex briefly. *ATP* (2)
- Q2. Give the mechanism of formation of concentrated urine with special emphasis on counter-current multiplier system. (5)
- Q3. A) List the events occurring in pharyngeal phase. (3)
- B) Enumerate the functions of stomach. (2)
- Q4. A) Name dorsal column tracts & list the sensations carried by these. (2)
- B) Give properties of sensory receptors. (3)
- Q5. A) Draw & label the Dual pain pathway. (2)
- B) Give the causes of visceral pain & explain the mechanism of referred pain. (3)
- Q6. A) Give a brief account of origin, pathway & function of pyramidal tract. (3)
- B) A 60 year old patient was brought in emergency with complaint of progressive weakness & loss of voluntary control on right side of his body. He is a known hypertensive. On examination, he is unconscious and Babinski's sign was found to be positive on the right side. (1)
- i. What is the most probable diagnosis? *→ Hemiplegia* (1)
- ii. What other features related to this disease is expected in this patient. (1)
- Q7. A) Enlist the functions of Basal Ganglia. *Muscular movement control, Voluntary movement regulate, initiate movement* (2)
- B) Explain the features of Parkinson's disease. *learning of motor skills* (3)
- Q8. A) Name the Hormones of the ovary. *→ Estrogen, Progesterone* (2)
- B) Draw & label phases of menstrual cycle. *→ h* (3)
- Q9. A) What is limbic system? Give its parts. (2)
- B) List the functions of hypothalamus. (3)
- Q10. A) Draw the visual pathway till visual cortex. (3)
- B) Give visual disorders, from which the person will suffer, if there is lesion in right optic nerve, optic chiasma, right optic tract, right sided optic radiations. (2)



THE SUPERIOR COLLEGE, LAHORE

1ST PROFESSIONAL MBBS (PART - II)

ANNUAL EXAMINATION 2014

PHYSIOLOGY

(SEQ's)

13102

Time Allowed: 2 hours & 10 Minutes

Total Marks: 45

Roll No. -----

Instructions

- The SEQ's part is to be submitted within 2 hours & 10 Minutes, Extra time will not be given.
- Neat Hand Writing use of margin and marker for headlines will increase the presentation of your paper.
- Do not write your name or disclose your identity in anyway.

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS

- (A) Enumerate the basal ganglia. Name their important circuits. List their functions.** (3)

B) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. (0.5)

 - Give your diagnosis. *→ Parkinson's disease* (1)
 - Explain pathophysiology of disease. (0.5)
 - How you will treat such patient? (2.5)
- A) Name dorsal column tracts & list the sensations carried by these.**

B) Draw a nervous pathway from a peripheral receptor in Dorsal column medial lemniscus system till somatosensory cortex. (2.5)
- A) What is limbic system? List its parts.** (2)

B) List the functions of hypothalamus with corresponding area or nucleic. (3)
- A) Explain the structure of muscle spindle with diagram with special emphasis on its innervations. Give its important functions.** (4)

B) Draw a stretch reflex. (1)
- A) Give the mechanism of formation of concentrated urine with special emphasis on counter-current multiplier system.** (3)

B) Give a summary of function of kidney. (2)
- A) Enumerate the stages of swallowing and explain the pharyngeal stage of swallowing.** (3)

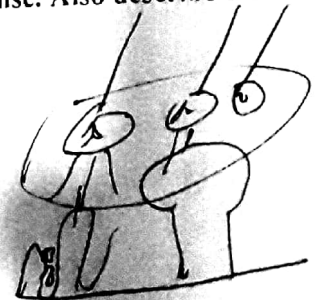
B) Define Dysphagia. Enlist the causes. (2)
- A) Describe briefly the phases of female ovarian cycle.** (2)

B) Discuss functions of placenta with special emphasis on respiratory & endocrine functions. (3)
- A) A 44-year-old woman, known diabetic presented with backache & a six month history of swellings on bony areas of the body, tightening of rings, more recent headache & decreased vision. She complains of pain in joints.**

 - Give the diagnosis. *Acromegaly* (1)
 - Impact of the responsible hormone on the metabolisms of carbohydrates & proteins. (2)

B) Compare the dwarfism due to hypopituitarism with that due to cretinism. (2)
- A) Define accommodation reflex. Give in detail the reactions for near response. Also describe the nervous pathway for accommodation reflex?**

(B) Draw olfactory pathway?



RA NAHEED MEDICAL COLLEGE LAHORE

2ND YEAR MBBS 2014-15
(Physiology)

SEND-UP EXAMINATION

DATED: 13-08-15

INSTRUCTIONS

- 1-All subjective part is to be submitted within 2 hours 10 minutes, no extra time will be given.
- 2-Neat handwriting. Use of margins will increase the outlook /presentation of your paper.

SUBJECTIVE PART (SEQs)

TOTAL MARKS: 50

TIME: 2 HOURS 10 MINUTES

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

DRAW THE NECESSARY DIAGRAMS WHERE REQUIRED.

- Q1. A) What is countercurrent multiplier system, discuss its function in detail. 2 (3)
B) Describe micturition reflex and its pathway. 1 (2)
- Q2. A) Name the nervous plexuses of GIT and their corresponding functions. 2 (3)
B) Explain defecation reflex with the help of a diagram. 1 (2)
- Q3. A) Mention briefly the pathophysiology and important features of Graves' disease. 2 (3)
B) Compare the dwarfism due to hypopituitarism with that due to cretinism. 1 (2)
- Q4. A) Discuss functions of placenta with special emphasis on respiratory & endocrine functions. 2 (3)
B) Draw & label the phases of menstrual cycle. 1 (2)
- Q5. A) Define accommodation reflex. Give in detail the reactions for near response & its nervous pathway. 1 (2.5)
B) Give an account of functions of middle ear with special emphasis on impedance matching. 1 (2.5)
- Q6. A) Define Speech. Give the important speech areas and mechanism of speech. 2 (3)
B) Discuss the disorders of speech with examples. 1 (2)
- Q7. A) Name dorsal column tracts & list the sensations carried by these. 1 (2.5)
B) Mention briefly the properties of sensory receptors. 1 (2.5)
- Q8. A) Compare the features of upper motor neuron and lower motor neuron lesions. 2 (3)
B) Draw a stretch reflex. 1 (2)
- Q9. A) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. His face is mask like with no change of expression. (0.5)
i. Give your diagnosis → parkinsonism (1)
ii. Explain pathophysiology of disease (0.5)
iii. How you will treat such patient (3) 31
B) List the physiological divisions of cerebellum and their functions 2 (2)
- Q10. A) Draw & label the Dual pain pathway. 2 (3)
B) Give the causes of visceral pain & explain the mechanism of referred pain 2

Zohaib

Grand Test
MBBS Second Year 2015-16
(Physiology-Subjective)

29 ✓

INSTRUCTIONS
1-All subjective part is to be submitted within 130 minutes, no extra time will be given.
2-Neat handwriting, use of margins will increase the outlook /presentation of your paper.

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

TOTAL MARKS = 45
TIME = 2 hours 10 min

DATED: 25-8-2016

- Q1. A) Name dorsal column tracts, list the sensations carried by these. (2.5)
B) Draw dorsal column-mediallemniscal system pathway till the primary sensory cortex. (2.5)
- Q2. A) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. His face is mask like with no change of expression.
i. Give your diagnosis (0.5)
ii. Explain pathophysiology of disease (1)
iii. What other symptoms and signs the patient will show (0.5)
B) List the physiological divisions of cerebellum and their functions 164F (3)
- Q3. A) Draw & label the Dual pain pathway. (2)
B) Give the causes of visceral pain & explain the mechanism of referred pain (3)
- Q4. A) Define Speech. Give the important speech areas and mechanism of speech. (3)
B) Discuss the disorders of speech with examples. (2)
- Q5. A) Define GFR. (1)
B) List the DETERMINANTS of GFR and outline their impact on GFR. (4)
- Q6. A) Define accommodation reflex. Give in detail the reactions for near response & its nervous pathway. (2.5)
B) Give an account of functions of middle ear with special emphasis on impedance matching. (2.5)
- Q7. A) Give chemical classification of hormones. (3)
B) A lady presents to the outdoor with complaints of unexplained obesity, severe muscular weakness and bruises on the body. On examination, she is found to have a moon face appearance, unequal fat distribution and stria. She is also found to be suffering from hyperglycemia.
i. Diagnose the disease. *Cushing Syndrome* (1)
ii. What is the underlying pathology? (1)
- Q8. A) Discuss the role of Hypothalamus in regulating body temperature. 199F (2.5)
B) What is mechanism of sweating and the impact of acclimatization on it? 197 + 198F (1.5)
C) Discuss the effect of clothing on conductive heat loss. (1)
- Q9. A) Enumerate the functions of TESTOSTERONE. (3)
B) Give a brief account of SPERMATOGENESIS 257F (2)

2ND YEAR MBBS 2013-14
(Physiology)

50
2

GRAND TEST

DATED: 16-06-14

INSTRUCTIONS

- 1-All subjective part is to be submitted within 2 HOURS, no extra time will be given
- 2-Neat handwriting, use of margins will increase the outlook /presentation of your paper

SUBJECTIVE PART (SEQs)

TOTAL MARKS: 45

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

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- Q: A) What is countercurrent exchanger, give its function. (2)
- ✓ B) Describe miscturation reflex and its pathway. (3)
- A) Name the nervous plexuses of GIT and their corresponding functions. (3)
- ✓ B) Explain defecation reflex with the help of a diagram. (2)
- A) A 44-year-old woman, known diabetic presented with backache & a six month history of swellings on bony areas of the body, tightening of rings, more recent headache & decreased vision. She complains of pain in joints. *Acromegaly* (1)
- i. Give the diagnosis. (2)
- ii. Impact of the responsible hormone on the metabolism of carbohydrates & proteins. (2)
- Q: B) Compare the dwarfism due to hypopituitarism with that due to cretinism. (2)
- S: A) Give the hypothalamic-pituitary-testicular axis in adult male stressing upon the hormones involved. (3)
- B) Draw & label the phases of menstrual cycle. (3)
- A) Draw the visual pathway till visual cortex. ✓ (2)
- B) Give visual disorders, from which the person will suffer, if there is lesion in right optic nerve, optic chiasma, right optic tract, right sided optic radiations. ✗ (3)
- A) Define Speech. Give the important speech areas and mechanism of speech. (2)
- ✓ B) Discuss the disorders of speech with examples. (3)
- I A) Name the tracts and corresponding sensations carried by Antrolateral system. (2)
- B) Define synapse. Give its types. Give properties of synapse. (3)
- A) Compare the features of upper motor neuron and lower motor neuron lesions. (2)
- B) Draw a stretch reflex.
- A) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. *Parkinson disease* (0.5)
- i. Give your diagnosis (1)
- ii. Explain pathophysiology of disease (0.5)
- iii. How you will treat such patient *L-Dopa* (3)
- B) List the features of cerebellum disease.

Zohair

P-8

INSTRUCTIONS

- 1-All subjective part is to be submitted within 120 minutes, no extra time will be given.
2-Neat handwriting, use of margins will increase the outlook /presentation of your paper

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

TOTAL MARKS = 50

DATED: 23-9-2016

TIME = 2 hours 10 min

- Q1. A) Name dorsal column tracts, list the sensations carried by these. (2.5)
B) Draw dorsal column-medial lemniscal system pathway till the primary sensory cortex. (2.5)
- Q2. A) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. His face is mask like with no change of expression.
i. Give your diagnosis (0.5)
ii. Explain pathophysiology of disease (0.5)
iii. What other symptoms and signs the patient will show (0.5)
B) List the physiological divisions of cerebellum and their functions (2)
- Q3. A) Classify the sensory receptors (2)
B) Briefly mention the properties of receptors. (3)
- Q4. A) Write down the Functions of Hypothalamus. (2)
B) Define Speech. Give the important speech areas and mechanism of speech. (3)
- Q5. A) Define GFR. (1)
B) List the DETERMINANTS of GFR and outline their impact on GFR. (4)
- Q6. A) Define accommodation reflex. Give in detail the reactions for near response & its nervous pathway. (3)
B) Give an account of functions of middle ear with special emphasis on impedance matching. (2)
- Q7. A) Explain the functions of insulin related to carbohydrate metabolism. (3)
B) A lady presents to the outdoor with complaints of unexplained obesity, severe muscular weakness and bruises on the body. On examination, she is found to have a moon face appearance, unequal fat distribution and stria. She is also found to be suffering from hyperglycemia.
i. Diagnose the disease. (1)
ii. What is the underlying pathology? (1)
- Q8. A) What are requirements for concentrated urine formation? (1)
B) Describe steps involved in Counter current multiplier mechanism. (3)
- Q9. A) Give the hypothalamic-pituitary-testicular axis in adult male stressing upon the hormones involved. (1)
B) Draw & label the phases of uterine cycle. (3)
- Q10. A) Discuss in detail the mechanism of heat loss when a person is exposed to hot environment. (3)
B) Discuss the role of hypothalamus in regulation of body temperature (2)

Department of Physiology

2nd YEAR MBBS 2011-16

SENT-UP EXAMINATION

INSTRUCTIONS

- 1- All subjective part is to be submitted within 2 hours 10 minutes, no extra time will be given
- 2- Neat handwriting, use of margins will increase the outlook/presentation of your paper.

SUBJECTIVE PART (SEQs)

TOTAL MARKS: 50

DATED: 05-07-13

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

- Q1. A) Define GFR. Enlist factors regulating GFR. (3)
B) Explain micturition reflex briefly. (2)
- Q2. Give the mechanism of formation of concentrated urine with special emphasis on counter-current multiplier system. (5)
- Q3. A) List the events occurring in ptyal meal phase. (3)
B) Enumerate the functions of stomach. (2)
- Q4. A) Name dorsal column tracts & list the sensations carried by these. (3)
B) Give properties of sensory receptors. (2)
- Q5. A) Draw & label the Dual pain pathway. (3)
B) Give the causes of visceral pain & explain the mechanism of referred pain. (3)
- Q6. A) Give a brief account of origin, pathway & function of pyramidal tract. (3)
B) A 60 year old patient was brought in emergency with complaint of progressive weakness & loss of voluntary control on right side of his body. He is a known hypertensive. On examination, he is unconscious and Babinski's sign was found to be positive on the right side. (3)
i. What is the most probable diagnosis? (1)
ii. What other features related to this disease is expected in this patient. (1)
- Q7. A) Enlist the functions of Basal Ganglia. (4)
B) Explain the features of Parkinson's disease. (2)
- Q8. A) Name the Hormones of the ovary. (4)
B) Draw & label phases of menstrual cycle. (2)
- Q9. A) What is limbic system? Give its parts. (1)
B) List the functions of hypothalamus. (3)
- Q10. A) Draw the visual pathway till visual cortex. (3)
B) Give visual disorders, from which the person will suffer, if there is lesion in right optic nerve, optic chiasma, right optic tract, right side of optic radiations. (2)

SEND-UP EXAMINATION

DATED: 08-08-14

INSTRUCTIONS

- 1-All subjective part is to be submitted within 2 hours 10 minutes, no extra time will be given.
2-Neat handwriting, use of margins will increase the outlook /presentation of your paper.

SUBJECTIVE PART (SEQs)

TOTAL MARKS: 50

TIME: 2 HOURS 10 MINUTES

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.
DRAW THE NECESSARY DIAGRAMS WHERE REQUIRED.

1. A) What is countercurrent multiplier system in kidney? Explain its mechanism and function in detail. (3)
B) Describe micturition reflex and its pathway. (1)
2. Define GFR. List the determinants of GFR and outline their mechanism of regulation of GFR. (1+2)
3. A) List all the ascending tracts. (1)
B) List the sensations carried by dorsal column medial lemniscus system. (1)
C) Draw a sensory homunculus and give its properties. (1)
4. A) Explain with the help of diagram the functional division of cerebellum and corresponding function of each part. (1)
B) A 55-year-old lady came in emergency with sudden onset of right-sided weakness of body & loss of voluntary movements. She is a known hypertensive. On examination, she is unconscious and Babinski's sign was found to be positive on right side.
 - i. What is the most probable diagnosis?
 - ii. What other features related to this disease do you expect in this patient?
5. A) Define Speech. Give the important speech areas and mechanism of speech.
B) List the functions of hypothalamus.
6. A) Name the nervous plexus of GIT & their corresponding functions.
B) Describe the sequence of events occurring in pharyngeal phase of swallowing reflex.) GIT
7. A) Give in a tabulated form, the effect of parasympathetic nerve stimulation in heart, GIT, pupil of eye and urinary bladder. RP etc
B) Compare the dwarfism due to hypopituitarism with that due to cretinism.
8. A) Give the hypothalamic-pituitary-testicular axis in adult male with emphasis on the hormones involved.
B) List the hormones produced by placenta & outline the function of each hormone.
9. A) Enumerate the hormones included in blood sugar level regulation.
B) Discuss the role of insulin in carbohydrate and protein metabolisms.
10. A) Define Accommodation reflex. Give in detail the reactions for near response. Draw the pathway for this reflex.
B) Draw and label the auditory pathway till auditory cortex.



THE SUPERIOR COLLEGE, LAHORE

First Professional MBBS (Part-2) Annual Examination 2013

(PHYSIOLOGY)

SUBJECTIVE (SEGS)

Total Marks 45

DATED: 26-08-2013

Total Time 2 Hrs & 10 Mins

INSTRUCTIONS

1- All subjective part is to be submitted within 130 minutes, no extra time will be given.
 2- Neat handwriting, use of margins will increase the outlook / presentation of your paper.

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS.

1. Draw and label the structure of a nephron. Outline the functions of various parts of the renal tubule. (2, 3) 1
2. A) Enumerate the stages of swallowing and explain the pharyngeal stage of swallowing. (3) 2
 B) Define Dysphagia. Enlist the causes. (2) 1
3. A) Name 4 renal colic tracts & list the sensations carried by these. (2.5) 2
 B) Give properties of sensory receptors. (2.5) 2
4. A) Enlist the functions of Basal Ganglia. (2) 1
 B) Explain the features of Parkinson's disease. (3) 2
5. A) Give the functional division of cerebellum. (2) 1
 B) A 55 year old lady came into outdoor with feeling of one sided weakness of body and history of frequent falls during walking. On examination she was walking on broad base and there was tendency to fell when she was asked to walk with closed eyes. (1) 1
 A. Which part of central nervous system is diseased in this case? (2) 1
 B. Write all other disturbances which may be present in this patient. (2) 1
6. A) What is Hirshman system? Give its parts. (2) 1
 B) List the functions of hypothalamus. (2) 1
7. A) Enumerate the hormones involved in blood sugar level regulation. (2) 1
 B) Discuss the role of insulin in carbohydrates and protein metabolisms. (3) 1
8. A) Describe the mechanism of ovulation and role of hormones in an adult female. (3) 1
 B) Draw & mention briefly the phases of female ovarian cycle. (2) 1
9. A) Discuss briefly the accommodation reflex & its nervous pathway. (3) 1
 B) Briefly list & describe the error of refraction. (2) 1



THE SUPERIOR COLLEGE, LAHORE

1ST PROFESSIONAL MBBS (PART - II)

ANNUAL EXAMINATION 2014

PHYSIOLOGY

(SEQ's)

Time Allowed: 2 hours & 10 Minutes

Total Marks: 45

Roll No. -----

Instructions

1. The SEQ's part is to be submitted within 2 hours & 10 Minutes, Extra time will not be given.
2. Neat Hand Writing use of margin and marker for headlines will increase the presentation of your paper.
3. Do not write your name or disclose your identity in anyway.

ATTEMPT ALL QUESTIONS; ALL QUESTIONS CARRY EQUAL MARKS

- ✓ 1. A) Enumerate the basal ganglia. Name their important circuits. List their functions. (3)
B) A 50-year-old patient came to an outdoor of a hospital with a complaint of involuntary movements of hands at rest & feeling of stiffness in legs. He also feels difficulty in starting a movement. (0.5)
 - i. Give your diagnosis. (1)
 - ii. Explain pathophysiology of disease. (0.5)
 - iii. How you will treat such patient? (2.5)
- ✓ 2. A) Name dorsal column tracts & list the sensations carried by these. (2.5)
B) Draw a nervous pathway from a peripheral receptor in Dorsal column medial lemniscus system till somatosensory cortex. (2.5)
- ✓ 3. A) What is limbic system? List its parts. (2)
B) List the functions of hypothalamus with corresponding area or nuclei. (3)
- ✓ 4. A) Explain the structure of muscle spindle with diagram with special emphasis on its innervations. (4)
Give its important functions. (1)
B) Draw a stretch reflex.
- ✓ 5. A) Give the mechanism of formation of concentrated urine with special emphasis on counter-current multiplier system. (3)
B) Give a summary of function of kidney. (2)
- ✓ 6. A) Enumerate the stages of swallowing and explain the pharyngeal stage of swallowing. (3)
B) Define Dysphagia. Enlist the causes. (2)
- ✓ 7. A) Describe briefly the phases of female ovarian cycle. (2)
B) Discuss functions of placenta with special emphasis on respiratory & endocrine functions. (3)
8. A) A 44-year-old woman, known diabetic presented with backache & a six month history of swellings on bony areas of the body, tightening of rings, more recent headache & decreased vision. She complains of pain in joints. (1)
 - i. Give the diagnosis. (1)
 - ii. Impact of the responsible hormone on the metabolisms of carbohydrates & proteins. (2)
B) Compare the dwarfism due to hypopituitarism with that due to cretinism. (2)
9. A) Define accommodation reflex. Give in detail the reactions for near response. Also describe the nervous pathway for accommodation reflex (3)
b) Draw olfactory pathway? (2).

Physiology

(SEQs)

Time Allowed: 2 hours and 10 minutes

Total Marks: 45

Instructions

1. The SEQs part is to be submitted within 2 hours and 10 minutes, extra time will not be given.
2. Neat hand writing, use of margin and marker for headlines will increase the presentation of your paper.
3. Do not write your name or disclose your identity in anyway.

- Q.1- a) Describe pain suppression (analgesia) system in brain & spinal cord. (2)
b) Name types of intracranial headache. \rightarrow meningitis headache (1.5)
c) Give causes of migraine headache. \rightarrow migraine headache (1.5)
Cerebral hyperextension
- Q.2- a) Define synapse and give physiological types of synapse. (1+1)
b) Enumerate the properties of synaptic transmission. (3)
- Q.3- a) Write down the steps for the synthesis of Thyroid hormone. (2)
b) A patient came to doctor and told that from the last few days he is feeling nervousness and his sleep is reduced. He has palpitation, and intolerance to heat, has sweating on hands and inspite of fact that his appetite is increased, his body weight is reducing. On examination there was protrusion of eyeball, heart rate was increased and B.P. was raised (Hypertension). In your opinion
i) What is most probable diagnosis of this condition? \rightarrow Thyroid disease (1.5)
ii) What is pathophysiology of this disease? (1.5)
- Q.4- a) List the components of Limbic system. (2.5)
b) Write down the functions of Hypothalamus. (2.5)
- Q.5- a) Draw and explain "Micturition Reflex". (3.5)
b) Describe the atonic bladder. (1.5)
- Q.6- a) Give the functions of Human Chorionic gonadotropin hormone. (2.5)
b) Bano, a 28 years old, came to gynae outdoor, she told that she was married "3" years back but still had no child. She told that she had normal menstrual cycle of 28 days. On urine examination one week before menstruation = No Pregnanediol level in the blood. Body temperature chart was maintained, it showed that = No rise in body temperature during menstrual cycle.
In your opinion what is the most probable cause of infertility in this female? (1)
What is the pathophysiology of this cause? (1)
What are other causes of infertility? (0.5)
- Q.7- a) What changes occur in the eye, when focused on near object? (1.5)
b) Explain the nervous mechanism involved. (3.5)
- Q.8- a) Write down the functional division of cerebellum. (2)
b) Give the mechanism of signal Turn ON/ Turn OFF with special emphasis on the role of Parokinji cells. (3)
- Q.9- a) Give detailed account of site of secretion, mechanism of action and metabolic functions of cortisol. (3.5)
b) Give pathophysiology and symptoms/ signs of Cushing's Syndrome. (1.5)