

# Rajiv Gandhi University of Health Sciences, Karnataka

MBBS Phase – I Degree Examination - JUNE-2019

Time: Three Hours

Max. Marks: 100 Marks

## Anatomy – Paper I (RS2 & RS3)

Q.P. CODE: 1075

Your answers should be specific to the questions asked  
Draw neat, labeled diagrams wherever necessary

### LONG ESSAYS

2 x 10 = 20 Marks

- ✓1. Describe the boundaries and contents of posterior triangle of neck.
2. Describe Temporo Mandibular Joint under following headings:
  - a) Formation
  - b) Ligaments
  - c) Relations
  - d) Movements and muscles causing it
  - e) Applied Anatomy

### SHORT ESSAYS

10 x 5 = 50 Marks

3. Thenar space
4. Development of Tongue
5. Insula
6. Clavipectoral Fascia
7. Major and minor openings of Diaphragm
8. Microscopy of Hyaline Cartilage
9. Spermatogenesis
10. Inferior Horn of lateral Ventricle
11. Nuclei of Cerebellum
12. Lymphatic drainage of Mammary gland

### SHORT ANSWERS

10 x 3 = 30 Marks

- ✓13. Contents of Carpal Tunnel
- ✓14. Sesamoid Bones
- ✓15. Supra-Sternal space
16. Osteon
17. Derivatives of Second Branchial Arch
18. Sarcomere
19. Draw a neat labeled diagram of Microscopic structure of Thymus.
20. Pulmonary Ligament
21. Results of Fertilization
22. Styloid apparatus

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
First Phase MBBS Degree Examination – JUNE-2019

**Time: Three Hours**

**Max. Marks: 100 Marks**

**Anatomy – Paper II (RS2 & RS3)**

**Q.P. CODE: 1076**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary.

**LONG ESSAYS**

**2 x 10 = 20 Marks**

1. Describe the position, supports, blood supply and development of uterus.
2. Describe the hip joint under following heads: (1+2+3+4)  
a) Type b) Capsule and ligaments c) Relations and d) Movements and muscles acting.

**SHORT ESSAYS**

**10 x 5 = 50 Marks**

3. Microscopic anatomy of fundus of stomach
4. Interior of anal canal
5. Ligaments of liver
6. Superior mesenteric artery – origin and branches of distribution
7. Inguinal ligament
8. Development of pancreas
9. Gluteus maximus
10. Profunda femoris artery – origin, course and branches
11. Turner's syndrome
12. Second part of duodenum – relations and blood supply

**SHORT ANSWERS**

**10 x 3 = 30 Marks**

13. Saphenous nerve – origin, course and distribution
14. Cutaneous nerve supply of dorsum of foot
15. Saphenous opening
16. Leino renal ligament
17. Transverse colon
18. Positions of appendix
19. Microscopic structure of cortex of kidney
20. Differences between jejunum and ileum – gross and microscopic
21. Root of mesentery – attachments and contents
22. Sites of constrictions of ureter

# Rajiv Gandhi University of Health Sciences, Karnataka

MBBS Phase – I Degree Examination - JUNE-2019

Time: Three Hours

Max. Marks: 100 Marks

## Physiology – Paper I (RS2 & RS3)

Q.P. CODE: 1077

Your answers should be specific to the questions asked  
Draw neat, labeled diagrams wherever necessary

### LONG ESSAYS

2 x 10 = 20 Marks

1. Define Cardiac output. Describe the various factors regulating cardiac output.
2. Describe the role of counter current mechanism in kidney function.

### SHORT ESSAYS

10 x 5 = 50 Marks

3. Micturition reflex
4. Functions of plasma proteins
5. Surfactant
6. Movements of small ~~proteins~~ *intestine*
7. Regulation of GFR
8. Deglutition
9. Sodium – potassium pump
10. Juxta medullary nephron
11. Rh factor and its importance
12. Periodic breathing

### SHORT ANSWERS

10 x 3 = 30 Marks

13. Ventilation – perfusion ratio
14. Tubular maximum for Glucose (Tm G)
15. Anticoagulants
16. P-R interval
17. Functions of Gastrin
18. Heart sounds
19. Dietary fiber
20. Facilitated diffusion
21. Morphological classification of anemias
22. Gap junctions

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
**First Phase MBBS Degree Examination – JUNE-2019**

**Time: Three Hours**

**Max. Marks: 100 Marks**

**Physiology-paper II (RS2 & RS3)**

**QP Code: 1078**

Your answers should be specific to the questions asked  
Draw neat labeled diagrams wherever necessary

**LONG ESSAYS**

**2 x 10 = 20 Marks**

1. Draw a neat labeled diagram of 'slow pain' pathway from right lower limb. Explain 'descending analgesia system'
2. Describe the physiological actions & regulation of secretion of cortisol.

**SHORT ESSAYS**

**10 x 5 = 50 Marks**

3. Give the principal connections & functions of Basal Ganglia.
4. Explain the role of 'cochlea' in 'pitch discrimination'.
5. List the features of 'Brown Sequard syndrome'
6. Give the source, target organs and actions of 'calcitonin'
7. Draw the pathway for 'direct light reflex'
8. List the functions of thalamus.
9. Enumerate the hormones of posterior pituitary and explain the actions of ANY one
10. With examples explain 'positive feedback' control of hormones.
11. Neural pathway & the physiological role of taste sensation.
12. Explain the mechanism of neuromuscular transmission. Add a note on neuromuscular blockers.

**SHORT ANSWERS**

**10 x 3 = 30 Marks**

13. Mention the part of retina with highest visual acuity and give reasons for the same.
14. Indicators of ovulation
15. List the functions of placenta.
16. Impedance matching by the middle ear.
17. Prolactin
18. Superfemale
19. Physiological mechanisms of heat gain
20. Explain the physiological basis of any ONE test to investigate the cause of infertility in a female
21. Rigor mortis
22. Oligodendrocytes

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
**MBBS Phase – I Degree Examination - JULY-2019**

**Time: Three Hours**

**Max. Marks: 50 Marks**

**Biochemistry – Paper I (RS2 & RS3)**

**Q.P. CODE: 1079**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

**(Note: Both QP Codes 1079 and 1080 are to be, answered within total duration of three hours)**  
**(Use separate Answer books for QP Code 1079 & 1080)**

**LONG ESSAYS**

**1 x 10 = 10 Marks**

1. Describe the Metabolism of phenylalanine and tyrosine and inborn errors associated with it.

**SHORT ESSAYS**

**5 x 5 = 25 Marks**

2. Describe the steps of beta oxidation of fatty acids from palmitic acid to acetyl CoA.
3. Classify carbohydrates with two examples for each class and subclass.
4. Draw a labeled structure of cell with two organelles. Describe the functions of four organelles.
5. Fatty liver
6. Temperature and pH as factors affecting velocity of enzyme catalysed reactions, with examples

**SHORT ANSWERS**

**5 x 3 = 15 Marks**

7. Fasting and glucose tolerance test criteria for diagnosis of ~~diabetes~~ diabetes mellitus
8. Specialized products formed from glycine
9. Anapleurotic reactions of citric acid cycle for three intermediates
10. Site specific inhibitors of electron transport chain with one example for each site
11. Phase two reactions of detoxification

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**Rajiv Gandhi University of Health Sciences, Karnataka**  
**MBBS Phase – I Degree Examination - JULY-2019**

**Time: Three Hours**

**Max. Marks: 50 Marks**

**Biochemistry – Paper II (RS2 & RS3)**

**Q.P. CODE: 1080**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1079 and 1080 are to be, answered within total duration of three hours)  
(Use separate Answer books for QP Code 1079 & 1080)

**LONG ESSAYS**

**1 x 10 = 10 Marks**

1. Write in detail the process of translation in Eukaryotes. Add a note on post translational modifications and its inhibitors.

**SHORT ESSAYS**

**5 x 5 = 25 Marks**

2. Coenzymes of Cobalamin and its functions
3. Polymerase chain reaction
4. BMR
5. Porphyrias
6. Metabolic acidosis

**SHORT ANSWERS**

**5 x 3 = 15 Marks**

7. Different types of RNA with their function
8. Scurvy
9. Reference values
10. Oncogenes
11. Gout.

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