

S3B10

BM

N19-01163

TED (15) – 3241

Reg. No. 18240415

(REVISION – 2015)

Signature

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2019

**BASIC MEDICAL SCIENCE**

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. Define Anatomy.
2. Define cardiac output.
3. State the term "Residual volume".
4. State the function of "cone cells".
5. Recognize the function of mitochondria.

(5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Draw and label human cell.
2. Draw the ECG waveform and explain the each event.
3. Sketch and label parts of neuron.
4. Describe the functions of kidney.
5. Explain any three lung volume and capacity.
6. Describe the Equilibrium balance of ear.
7. Describe the process of digestion.

(5×6 = 30)

[78]

[P.T.O.]

tinna  
eardrums/ eardrums.

Don't  
sclera  
cornea  
retina.

yellow spot  
blind spot

## PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

## UNIT — I

- III (a) Explain different types of epithelial tissue. 8  
 (b) Write a short note on taste sensors. 7

OR

- IV (a) Discuss about different types of ECG electrodes. 8  
 (b) Explain the transmission of impulse through nerve fibers. 7

## UNIT — II

- V (a) Explain the structure of heart. 10  
 (b) Explain about electromyography. 5

OR

- VI (a) Draw and explain human brain. 9  
 (b) Differentiate the function of sympathetic and parasympathetic nervous system. 6

## UNIT — III

- VII (a) Draw and explain respiratory system. 8  
 (b) Explain the mechanism of ventilation. 7

OR

- VIII (a) Draw the structure and function of nephron. 10  
 (b) Explain haemodialysis. 5

## UNIT — IV

- IX (a) Draw and label the parts of eye. 8  
 (b) Discuss about visual process in detail. 7

OR

- X (a) Draw and label the human digestive system. 8  
 (b) Discuss the process of hearing. 7