

Printed Pages : 3



EBM-503

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 101507

Roll No.

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B. Tech.

(SEM. V) (ODD SEM.) THEORY
EXAMINATION, 2014-15
TISSUE ENGINEERING

Time : 2 Hours]

[Total Marks : 50

Note : Attempt **all** questions**1** Answer any **two** parts: **7×2=14**

- (a) With the help of neat diagrams explain the structure and functions of human cell.
- (b) Explain with the help of suitable diagrams, generation of action potential in a cell.
- (c) Explain the different types of human tissues and give their functions.

2 Answer any **four** parts: **3×4=12**

- (a) Discuss cardiovascular system and its functioning.
- (b) Explain the different sense organs.
- (c) Discuss the functioning of endocrine system.
- (d) Explain the different types of human muscles with examples.
- (e) What is CNS? Explain its functioning in humans.
- (f) Explain the human respiratory system.

3 Answer any **two** parts : **6×2=12**

- (a) Explain generation of cardiac cycle. What are the different heart valves? Give their functioning. Discuss systemic and pulmonary circulation.
- (b) Discuss the exchange in gases in the alveoli. What is artificial respiration? Explain how is spirometer is employed to test the human respiratory system.
- (c) Discuss the various organs of human alimentary system. How does digestive system functions? Explain

4 Answer any **two** parts :

6×2=12

- (a) Explain the composition of blood. Give the functions of different blood cells. How is blood cell counting done?
 - (b) With help of neat diagrams explain the human excretory system. What is Nephron? Discuss its structure and functioning in formation of urine.
 - (c) Explain the human nervous system and its functions. What is Reflex action and reflex arc? Explain the functioning of sympathetic nervous system.
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