

Telangana Public Service Commission

Physiology

1. Define homeostasis.
2. Explain in brief characteristic features of negative and feedback mechanisms. Give appropriate examples.
3. Add a note on Feed Forward Control system.
4. Illustrate with the help of diagram /flow chart the formation of temporary and permanent haemostatic plugs.
5. Components and physiological importance of Fibrinolytic system.
6. Pathophysiology of disseminated intravascular coagulation.
7. Enumerate various components of Cytoskeleton.
8. Explain in brief the structure and function of each.
9. List the major molecular motors and their functions.
10. Role of folic acid in erythropoiesis.
11. Features and laboratory investigations of folic acid deficiency anemia.
12. Steps involved in production of hyperosmotic renal medullary interstitium.
13. Role of vasa-recta in excreting concentrated urine.
14. Free-water clearance.
15. Define Glomerular Filtration Rate (GFR).
16. Determinants of GFR.
17. Autoregulation of GFR and renal blood flow.
18. Measurement of GFR
19. What is Mononuclear Phagocytic System?
20. What are its components, their location and functions in human body?
21. Define ageing
22. Theories of ageing
23. Anti-ageing therapies
24. Sampling techniques in medical research
25. ANOVA
26. What are the factors affecting metabolic rate?
27. Obesity