

Physiology including Biochemistry Question bank

(New pattern)

Q.1. Write appropriate answers (any ten out of fifteen)

10X2= 20

(Blood, CVS, Respiratory, Excretory System, Special Senses , Body temp, Skin, Physics.)

BLOOD:-

1. Write function of monocytes
2. Write two functions of blood.
3. Define erythropoiesis
4. What is haemolysis
5. What is ABO SYSTEM?
6. Define Anemia
7. What is Hemolytic anemia?
8. What is phagocytosis?
9. Give two functions of platelets?
10. Give full form for E.S.R.?
11. What is first reaction in blood clotting?

C.V.S.

12. Name coverings of heart
13. What is S.A. NODE?
14. What is A.V. NODE?
15. Define cardiac cycle
16. Nature of I st heart sound
17. What is cardiac murmur?
18. Define cardiac out put
19. What is E.C.G.?
20. What is significance of P.R. INTERVAL?
21. What is heart rate?

Respiratory

22. What is function of nasal cavity?
- 23 Two character tics of trachea
24. Give two functions of lungs
25. What is surfactant?
26. What is anatomical dead space?
27. What is alveolar capacity?
28. Diffusion
29. Bucket handle movement
30. What is cyanosis?
31. Define respirations

Excretory

- 32. Write two functions of kidney
- 33. What is Henley's loop?
- 34. Why glucose is called threshold substances
- 35. Micturition's
- 36. What is G.F.R.?
- 37. What is Erythropoietin?
- 38. What is rennin angiotensin?
- 39. Hydronephrosis
- 40. Normal capacity of urinary bladder
- 41. What is dehydration?

Special Senses

- 42. Name the visual cells of retina
- 43. Name the chambers of eye- ball
- 44. Define myopia
- 45. What are accommodations?
- 46. What is dark adaptation?

Body temp & Regulations

- 47. What is normal body temp write in Farhenite
- 48. What is B.M.R.?
- 49. Define hypothermia

Skin

50. Name the layers of skin

51. Two function of skin

Bio-Physics

52. What is Active-transport?

53. Define osmosis

54. What is chemo taxis

Q.2. System (write short answer) any four out of six

4X5=20

(Blood, cardio, Vascular, system, R.E. System, Lymph, Spleen.)

BLOOD

1. Name the plasma proteins write their important functions
2. Name the functions of blood
3. What is polycythemia, Explain various types
4. What are abnormal hemoglobin's write any two
5. What are immunoglobulin's write their functions
6. Write phagocytic phenomenon with figure
7. Give composition, formation and functions of lymph,
8. What is co-agulations write importance of co-agulations
9. Immune Response
10. Importance of blood transfusion

C.V.S.

11. Properties of cardiac muscles
12. Electrical stimulations of heart
13. Factors affecting cardiac out put
14. Coronary circulations
15. Pulmonary circulations
16. What is heart sound write their peculiarity
17. What is heart block
18. Write importance of radial pulse
19. Explain normal E.C.G.

20. What is blood – pressure how it is regulate.

21. Define radial pulse & give its types

22. Explain P.R. interval with diagram

R.E. SYSTEM

23. Write an account on phygo cytosis

24. Give the classification of R.E.S.

LYMPH

25. What is lymphatic glands write constituent of lymph

26. Formation, composition and function of lymph

***SPLEEN**

27. Describe the structure and function of spleen

28. Role of spleen in destruction of R.B.C.

29. Function of W.B.C.

30. Formation of Haemoglobin

Q.3. Write short answer (any four out of six) 4X5=20

System:- (Excretory system, Special Senses, Respiratory System, Skin)

EXCRETORY SYSTEM

1. Formation of urine
2. Write function of Bowman's capsules
3. Write normal composition of urine
4. Factors maintaining renal circulations
5. Describe micturition reflex write physiological importance's
6. What is renal test's how it is performed

SPECIAL SENSES

7. Draw a neat label diagram of eye-ball and write two functions of layers of eye-ball
8. Structure and function of retina
9. Write brief note on visual cycle
10. What is myopia how it is corrected
11. What is astigmatism
12. Write a short note on visual accommodations
13. Colour vision.

RESPIRATORY SYSTEM

14. Name the muscles involved in the respiration write their action during respirations
15. What is artificial respirations
16. Write pulmonary volumes & capacities
17. Gaseous exchange at alveolar level
18. Nervous control of respirations
19. What is apnoea how it is corrected.

Q.4. Long answer question (any two out of four) 2X10=20

System:- (Blood, C.V.S., Respiratory System, Body Temp & Regulation)

BLOOD

- 1.What are different types of anaemia give examples
- 2.Name the clotting factors write mechanism of coagulation
- 3.Give an account of blood group
- 4.Define erythropoietin describe the different stages and its regulation
- 5.Describe fate of R.B.c.

C.V.S.

- 6.What is heart sound ? Describe their character, mechanism and formation
- 7.What is cardiac cycle? Describe the various phases of cardiac cycle
- 8.What is an E.C.G.? Describe the significance of each wave in normal E.C.G.
- 9.Describe cardiac out-put in detail and factors affecting of it
- 10.Define blood pressure, and explain different physiological factors affecting it
- 11.Describe in detail the properties of cardiac muscles

RESPIRATORY SYSTEM

- 12.Describe different types of hypoxia
- 13.Describe transport of oxygen
- 14.Describe chloride shift
- 15.Describe breuer reffex
- 16.Transport of CO_2

BODY TEMP & REGULATION

- 17.Describe the mechanism of body temp in human being
18. Describe the mechanism of heat gain and heat loss

19. Define pyrexia and write in brief about hypothermia

Q.5.,6,&7 Long answer question 1X20=20

System: (Blood , C.V.S., Respiratory and body temperature)

Blood

1)Describe coagulation along with following head

a)factors

b)intrinsic mechanism

c)extrinsic mechanism

d)factor accelerating and inhibiting

2)write down in detail the blood group under following head

a)ABO system

b)Rh blood group

c)Rh negative mother

d) hazards of mismatched blood transfusion

3)describe erythropoiesis under following head

a)erythropoiesis in intra uterine life

b)stages of erythropoiesis

c)factors essentials for erythropoiesis

d)megaloblastic anaemia

4. State detail of leucopoiesis on following head

a) Intra uterine life

b) Stages of development

c) Factor affecting

d) Applied physiology

RESPIRATORY

1) Describe lung volume and capacity under following head.

- a) Tidal Volume & Residual Volume
- b) Inspiratory Reserve Volume & Expiratory Reserve Volume
- c) Lung Capacity
- d) Diagrammatic representation of Lung Volume & Capacity

2) Describe Respiration under following head.

- a) Definition of respiration
- b) Type of respiration
- c) Parts come under respiration
- d) Mechanism of respiration

3, describe transport of O₂ & CO₂ under following head

- a) Transport of oxygen
- b) At Alveoli level
- c) Transport of carbondioxide
- d) Explain chloride shift

C.V.S.

1. Describe the five junction tissue of heart under following head

- a) Pace maker
- b) A.V. Node
- c) Bundle of his
- d) Purkinje fibres

2. Describe the blood pressure under following head

- a) Define blood pressure

- b) Types of blood pressure
- c) Factors affecting blood pressure
- d) Normal values of blood pressure at different age group

3. Describe the radial pulse under following head.

- a) Define radial pulse
- b) Types of radial pulse
- c) Factor's affecting radial pulse
- d) Explain normal wave for radial pulse

4. Describe cardiac cycle with following head

- a) Definition
- b) Events
- c) Cardiac Sounds
- d) Factor affecting

BODY TEMP & REGULATION

1. Describe the body temp under following head.

- a) Body temp in human being and its monitoring
- b) Heat gain and heat loss mechanism
- c) Pyrexia
- d) Brief about hypothermia

2. Describe thermo regulation with following points

- a) Thermogenesis
- b) Thermolysis
- c) Physical and behavioral changes in Hot and cold atmosphere
- d) Applied physiology.