

Human Physiology – Phase 1B: 2 Marks Questions (Q31–Q60 Solved)

Q31. Define Homeostasis & give examples. (Aug 2018)

Ans 31. Homeostasis is the ability of the body to maintain a stable internal environment. Examples include regulation of body temperature and blood glucose.

Q32. Enumerate different types of white blood cells. (Aug 2018)

Ans 32. White blood cells are neutrophils, lymphocytes, monocytes, eosinophils, and basophils.

Q33. Enumerate different valves of heart. (Aug 2018)

Ans 33. The heart valves are tricuspid valve, mitral valve, pulmonary valve, and aortic valve.

Q34. Isometric and isotonic muscle contraction. (Aug 2018)

Ans 34. In isometric contraction muscle length remains constant, whereas in isotonic contraction muscle length changes.

Q35. Function of saliva. (Aug 2018)

Ans 35. Saliva helps in lubrication of food, digestion of starch, and maintenance of oral hygiene.

Q36. Define muscle tone. (Aug 2018)

Ans 36. Muscle tone is the continuous partial contraction of muscles at rest.

Q37. Define total lung capacity and residual volume. (Aug 2018)

Ans 37. Total lung capacity is the maximum volume of air lungs can hold. Residual volume is air remaining after forceful expiration.

Q38. Define basal metabolic rate. (Aug 2018)

Ans 38. Basal metabolic rate is the minimum energy required to maintain vital body functions at rest.

Q39. Peristalsis. (Aug 2018)

Ans 39. Peristalsis is the wave-like movement of smooth muscles that propels food through the alimentary canal.

Q40. Hormones released from adrenal cortex. (Aug 2018)

Ans 40. Adrenal cortex secretes glucocorticoids, mineralocorticoids, and sex hormones.

Q41. Phagocytosis. (Jan 2019)

Ans 41. Phagocytosis is the process by which cells engulf and digest foreign particles.

Q42. B-lymphocytes. (Jan 2019)

Ans 42. B-lymphocytes are immune cells responsible for antibody production.

Q43. Waves of ECG, duration of J wave & QRS complex. (Jan 2019)

Ans 43. ECG waves include P, QRS, and T waves. Normal QRS duration is about 0.08–0.10 seconds.

Q44. Respiratory membrane. (Jan 2019)

Ans 44. Respiratory membrane is the thin barrier between alveoli and capillaries that allows gas exchange.

Q45. Enumerate muscle proteins. (Jan 2019)

Ans 45. Muscle proteins include actin, myosin, tropomyosin, and troponin.

Q46. Growth hormone. (Jan 2019)

Ans 46. Growth hormone is secreted by anterior pituitary and promotes growth of bones and tissues.

Q47. Bilirubin. (Jan 2019)

Ans 47. Bilirubin is a bile pigment formed from breakdown of hemoglobin.

Q48. Antidiuretic hormone. (Jan 2019)

Ans 48. Antidiuretic hormone regulates water balance by increasing renal reabsorption of water.

Q49. Stroke volume & ejection fraction. (Jan 2019)

Ans 49. Stroke volume is blood ejected per beat, while ejection fraction is percentage of blood pumped out per beat.

Q50. Withdrawal reflex & stretch reflex. (Jan 2019)

Ans 50. Withdrawal reflex removes body from painful stimulus, while stretch reflex maintains muscle tone.

Q51. Sick sinus syndrome. (Jan 2020)

Ans 51. Sick sinus syndrome is a disorder of sinus node causing abnormal heart rhythms.

Q52. Homeostasis. (Jan 2020)

Ans 52. Homeostasis is maintenance of constant internal environment of the body.

Q53. Sarcomere. (Jan 2020)

Ans 53. Sarcomere is the functional unit of muscle fiber between two Z lines.

Q54. Haemoglobin and its type. (Jan 2020)

Ans 54. Haemoglobin is oxygen carrying protein in RBCs. Types include HbA, HbF, and HbA2.

Q55. GFR. (Jan 2020)

Ans 55. Glomerular filtration rate is amount of filtrate formed per minute by kidneys.

Q56. Diabetes Mellitus. (Jan 2020)

Ans 56. Diabetes mellitus is a metabolic disorder characterized by hyperglycemia due to insulin deficiency.

Q57. Hormones of posterior pituitary gland. (Jan 2020)

Ans 57. Posterior pituitary hormones are oxytocin and antidiuretic hormone.

Q58. Refractory errors. (Jan 2020)

Ans 58. Refractory period is time during which a nerve cannot be re-excited.

Q59. Endocochlear potential. (Jan 2020)

Ans 59. Endocochlear potential is positive electrical potential present in cochlea essential for hearing.

Q60. Seminal fluid. (Jan 2020)

Ans 60. Seminal fluid is mixture of sperm and glandular secretions that nourish sperm.