

INSTITUTE OF TEACHING AND RESEARCH IN AYURVEDA
[INSTITUTE OF NATIONAL IMPORTANCE]
MINISTRY OF AYUSH, GOVERNMENT OF INDIA

D. PHARM. (AYU.) I YEAR
SHARIRA (ANATOMY AND PHYSIOLOGY)

Question Bank

SECTION A : SHARIRA RACHANA

Topic- I Definition & terminology with concept of shadang sharira

[10marks]

1. Write the definition & terminology with concept of shadang sharira according ayurved & modern science.

[5marks]

1. Write short note on Shadang sharira

[2marks]

1. Answer the question following
 - a) Define shadang sharira.
 - b) Write the components of shading sharira (name only)

Topic-II Sharira, Shaarira, Koshtha, Aashaya, Sira, Dhamni, Srotasa

[10marks]

1. Write the definition of “Shaarira & Sharira” according to ayurved & modern science in detail.
2. Describe “Aashaya” in detail.
3. Describe “Sira” in detail.
4. Describe “Dhamni” in detail. -
5. Describe “Srotasa” in detail.
6. Describe “Koshtha” in detail. -
7. What is Srotasa? Write detail description of Pranvaha, Raktavaha & Purishvaha Srotasa. -

[5marks]

- A. Write short note of following:
 1. Write the location and Srotodushti lakshana of Pranvaha srotasa.
 2. Write the location and Srotodushti hetu of Raktavaha srotasa.
 3. Definition of Sharira.
 4. Numbers & types of Sira.
 5. Difference between Sira & Dhamni.
 6. Srotas (according to sushrut) –
 7. Yogavaha srotasa

8. Srotodushti lakshana.
9. Explain briefly “Koshta”.
10. Explain briefly “Aashya”.
11. Types of “Aashya”.
12. Explain briefly “Sira”.
13. Explain briefly Dhamni.

[2marks]

A. Answer the question following:

1. Names & Number of Bahirmukh srotas.
2. Names & Number of srotas according to Charka.
3. Names & Number of srotas according to Sushrut.

Topic- III Structure of cell & its function

[10marks]

1. Draw the labeled diagram of a cell. Discuss nucleus in detail.
2. Define cell. Enumerate various cell organelles. Describe any two of them in detail
3. Describe structure & function of a cell.

[5marks]

Write short notes of following:

- a. Nucleus
- b. Mitochondria
- c. Ribosome
- d. Endoplasmic reticulum
- e. Enlist the components of animal cell.
- f. Describe parts of cell & explain any two of them in detail.
- g. Draw the labeled diagram of a cell.

[2marks]

1. Answer briefly of the following:
2. Define cell.
3. Enumerate various cell organelles.
4. Functions of plasma membrane
5. Functions of lysosome.
6. Chromosomes.
7. D. N.A.

TOPIC- IV Bones: Numbers, Types according to Ayurved & Modern science

[10marks]

1. Explain the modern view of bones.
2. Write the numbers & types of bones according to Ayurved & Modern science.
3. Enumerate bones of skull with short description of each.

[5marks]

1. Write short notes of following:

- 1). Types of Bones according to Ayurved
- 2). Types of Bones according to Modern science.
- 3). Classification of Bones according to modern science.
- 4). Nalakasthi
- 5). Valayasthi
- 6). Tarunasthi
- 7). Sesamoid bone
- 8). Long bone

[2marks]

1. Answer in brief:-

- 1) Write the total numbers & names of bones according to Ayurved & modern science.
- 2) Enlist the name of the bones of the skull.
- 3) Write short notes of following:
- 4) Types of Bones according to Ayurved
- 5) Types of Bones according to Modern science.
- 6) Classification of Bones according to modern science.
- 7) Nalakasthi
- 8) Valayasthi
- 9) Tarunasthi
- 10) Sesamoid bone
- 11) Long bone

Topic- v. General introduction of the systems of body with special emphasis to location, measurement & external features of viscera of Digestive, Respiratory, Urinary and Cardiovascular system

[10marks]

1. Explain respiratory system with figure.
2. Describe the components, structure of digestive system and write about small intestine in detail.
3. What is respiration? Explain O₂- CO₂ in detail with diagram.
4. Write the general introduction of systems of the body.
5. Explain urinary system with figure.
6. Describe digestive system with figure.
7. Explain cardiovascular system with figure

[5marks]

1. Write a note on lymph.
2. Enlist the general systems of the body.
3. Describe internal structure of heart with labelled diagram.

[2marks]

1. Answer in brief:-

1. Enlist the organs of Digestive system.
2. Enlist the organs of Respiratory system.
3. Enlist the organs of Urinary system.
4. Enlist the organs of cardiovascular system.
5. Location & measurement of large intestine.
6. Duodenum.
7. Location & external features of Pancreas.
8. Location & measurement of Pancreas.
9. Location, measurement & external features of lungs.
10. External features of left lungs.
11. Location, measurement & external features of liver.
12. Location of Pulmonary veins.
13. Location & length of Trachea
14. Pleura
15. Pericardium
16. Endocardium
17. Division of urethra
18. chambers of the heart
19. Write a note on salivary glands.
20. Nephron
21. Write a note on structural and functional unit of kidney
2. Describe essential structure of heart. Ensure your answer includes chambers & valves.
3. Write short notes of following:
 - i. Reproductive system.
 - ii. Immune system
 - iii. Oesophagus
 - iv. Stomach
 - v. Small Intestine
 - vi. Spleen
 - vii. Pancreas
 - viii. Liver
 - ix. Respiratory system
 - x. Lungs
 - xi. Bronchial Tree
 - xii. Urinary system
 - xiii. Kidney with figure
 - xiv. Heart with figure
 - xv. IVC
 - xvi. SVC
 - xvii. Cardiovascular system

**Topic-vi. Brief introduction to gynendriya & names of the parts of brain
[10marks]**

1. Explain Cerebro-spinal fluid.
2. Define Gynendriya. Write the brief introduction about Gynendriya.
3. Define number, names of Gynendriya.

4. Describe Chakshurendriya, Shroterendriya according ayurved.
5. Describe the structure of Eye according to modern science.
6. Describe the structure of Ear according to modern science.
7. Describe the structure of Tongue according to modern science.
8. Describe the structure and function of Skin according to modern science.
9. Explain names of parts of the brain.

[5marks]

1. Write the short note on following:

1. Gyanendriya
2. Indriya-panchak
3. Chakshurendriya.
4. Shrotrendriya.
5. Rasanendriya.
6. Sparshanendriya.
7. Rods and cones.
8. Optic-disc.
9. Eustachian tube. (Auditory tube)
10. Midbrain
11. Thalamus.
12. Cerebrum
13. Medulla-oblongata.
14. Short note on middle ear.
15. Functions of hypothalamus.
16. Draw a labelled diagram of human ear.

[2marks]

1. Answer in brief:-

- A. Number & name of Gyanendriya.
- B. Explain Brain stem.
- C. Explain Meninges.
- D. Write a note on cerebrum.
- E. Write the interrelation ship of Mahabhuth and Gyanendriya.

SECTION B (KRIYA SHARIRA)

Topic-i. Concept of Dosha. Classification, characteristics and importance for physiological function

[10marks]

1. Explain-“Dosha, Dhatu, Malamulam Hi Shariram”
2. Define Dosha. Describe Nirukti, types, qualities and functions of Kapha Dosha.
3. Write the Definition of Dosha, Describe in detail Vata dosha with its Subtypes, Seats and functions.
4. Write Vyutpatti and Nirukti of Vata dosha. Explain locations, functions and importance of five types of Vata dosha.

5. Describe the Definition, types, subtypes and physiological function of Dosha.
6. Write the Sites (location) and subtypes of Vata dosha in the body.
7. Describe Vata dosha in detail.
8. Explain Pitta dosha in detail.
9. Explain Kapha dosha in detail.

[5marks]

Write the short note on following:

- a. Classification of Dosha.
- b. Write the Guna, karma, Sthana and types of Pitta dosha.
- c. Explain the Sanchaya, Prakota and Prashamama of Tridosha in reference of seasons.
- d. Types of Vata with their location.
- e. Types of Kapha with their location.
- f. Location and function of Pranvayu.
- g. Location and function of Vyan vayu.
- h. Location and function of Alochak pitta.
- i. Udana vayu.
- j. Tarpak-Kapha
- k. Bodhak Kapha
- l. Shleshak Kapha

[2marks]

Explain the following.

- a. Types of Vata Dosha.
- b. Function of Alochak pitta.
- c. Location of Udana vayu.
- d. Location of Vyan vayu.
- e. Seats and functions of Apana vayu.

Topic-2. General introduction of Dhatu, Updhatu and Ojus. Nourishment of Dhatu with different Nyaya

[10marks]

1. Write the definition of Dhatu & Updhatu. Describe Rakta dhjatu in detail.
2. Describe Dhatu in detail.
3. Describe the formation & function of Majja dhatu.
4. Explain Updhatu.
5. Describe classification, functions and importance of Updhatu.
6. Explain Ojus.
7. What is "Ojus" and what is called Ojovikriti? Explain the functions and Importance of Ojus.
8. What is Ojus? Describe its quality, quantity, types, functions and vikriti.
9. Describe about various Dhatu-poshananyaya.
10. What is Dhatuposhan Nyaya? Write the types of Nourishment of Dhatus. Describe Khalekapot nyaya.
11. Describe Dhatu-poshana krama with the help of deferent dhatu poshnanyaya.

12. Write about Ek-kala-dhatu poshana nyaya and Ksheeradhadhi nyaya.
13. Write about khalekapota nyaya and kedarikulyanyaya.
14. Write the Definition, classification, characteristics, functions and importance of mala.

[5marks]

Write the short note on following:

- a. Write the Dhatu and their Updhatu.
- b. Function of Dhatu.
- c. Brief Introduction of Dhatu.
- d. Brief Introduction of Updhatu.
- e. Ojus.
- f. Dhatuposhananyaya.
- g. Khalekapotnyaya.
- h. Ksheeradhadhinyaya.
- i. Kedarikulyanyaya.
- j. Ek-kala-Dhatuposhananyaya.
- k. Ojovikriti.
- l. Types and function of Snayu.

[2marks]

1 Answer briefly of the following:-

1. Define Dhatu.
2. Define Updhatu.
3. Define Ojus.
4. Rasa dhatu.
5. Medo- dhatu.
6. Mamsa-dhatu.
7. Majja-dhatu.
8. Sudha rakta-lakshana.
9. Majjakshaya- lakshana.
10. Functions of kandara.
11. Types of snayu.
12. Write the number of Updhatu.
13. Difference between khalekapotnyaya and kedarikulyanyaya.
14. Ojoviyapad lakshana.
15. Ojovistransa lakshana.
16. Symptoms of ojokshaya.
17. Types of ojus.

Topic-iii. Concept of three principal Mala, Their characteristics and function.

[10marks]

[5marks]

[2marks]

Answer briefly of the following:-

- a. Write the classification of Mala.

- b. Write the functions of Mala.
- c. Write the sweda kshaya lakshana.
- d. Write the Mutra vridhi lakshana.
- e. Definition of Mala.
- f. Write the short note on following:
- g. Explain Mala
- h. Describe “Mala” in detail.

Topic-iv. Names of Dhatu Mala

[10marks]

1. What is Mala? Why the Mala is accepted as a moola of Sharira? Explain various Dhatu mala and its importances.
2. Describe Dhatumala in detail.

[5marks]

1. Write the short note on following:
 1. Explain Dhatu mala.

[2marks]

1. Answer briefly of the following:-
 1. Enlist Dhatu and Dhatu mala.
 2. Write the mala of Raktadhatu & Mamsa dhatu.

Topic-5. Concept of Agni. Classification and importance. Ayurvedic and modern concept of digestion and metabolism

[10marks]

1. What is Agni? Describe in detail.
2. Write the classification and functions of Agni. What is the role of Agni according to Ayurved?
3. Describe about Agni and modern concept of digestion.
4. What is Agni? Write its classification and describe Bhutagni & Dhatvagni in detail.
5. Write about Metabolism in detail.

[5marks]

1. Write the short note on following:
 1. Introduction of Agni.
 2. Jatharagni.
 3. Dhatvagni.
 4. Bhutagni.
 5. Definition and characteristics of Vishmagni.
 6. Metabolism.

[2marks]

Answer briefly of the following:-

1. Classification of Agni. (Name only)

2. Jatharagni.
3. Bhutagni.
4. Definition of vipaka.
5. Avasthapaka.
6. Nishthapaka.
7. Write the types of Jatharagni on the basis of Balabheda.

Topic-6. Introduction of blood and its components like WBC, RBC, Platelets, Haemoglobin and plasma

[10marks]

1. Explain “Blood” in detail
2. What is “Blood”? Write the components and functions of Blood.
3. Classify WBCs and write about its functions.
4. Write functions of Red Blood Cells and white blood cells.

[5marks]

1. Write the short note on following:
 - a. Red blood cells.
 - b. White blood cells.
 - c. Plasma.
 - d. Haemoglobin.
 - e. Platelets.
 - f. Functions of Blood.

[2marks]

1. Answer briefly of the following:-
 1. Enlist the composition of Blood.
 2. Enlist the types of white blood cells.
 3. Functions of RBC.
 4. Functions of WBC.
 5. Functions of Platelets.
 6. Enlist the Agranulocytes WBC.