



General Instructions

- (i) The examination is conducted in **Computer-Based Test (CBT)** mode.
- (ii) The question paper carries a total of **480 marks**.
- (iii) The question paper contains **120 questions**. All questions are **Multiple Choice Questions (MCQs)** with a **single correct answer**.
- (iv) Each question has **four options** — (A), (B), (C) and (D).
- (v) Each correct answer carries **+4 marks**.
- (vi) For every incorrect answer, **1 mark** will be deducted.
- (vii) No marks will be awarded or deducted for an **unattempted question**.
- (viii) The total duration of the examination is **120 minutes (2 hours)**.

1. What is the classic triad of Horner Syndrome?

- (A) *Ptosis + Miosis + Anhidrosis*
- (B) *Ptosis + Mydriasis + Hyperhidrosis*
- (C) *Proptosis + Miosis + Anhidrosis*
- (D) *Ptosis + Diplopia + Mydriasis*

Correct Answer: (A) Ptosis + Miosis + Anhidrosis

Solution:

Concept:

- Horner syndrome, also known as oculosympathetic paresis, is a clinical condition resulting from a lesion or interruption of the sympathetic nerve supply to the eye and face.

- The sympathetic pathway is a three-neuron chain: first-order (central), second-order (preganglionic), and third-order (postganglionic) neurons.

Step 1: Understanding the sympathetic innervation loss

The sympathetic nervous system is responsible for maintaining pupil dilation, elevating the eyelid (via Müller's muscle), and regulating sweat production on the face.

When this pathway is interrupted, the characteristic triad of symptoms appears.

Step 2: Identifying Ptosis

Ptosis refers to the drooping of the upper eyelid.

In Horner syndrome, this is caused by paralysis of the superior tarsal muscle (Müller's muscle), which is smooth muscle innervated by the sympathetic system.

The ptosis is typically mild (1–2 mm).

Step 3: Identifying Miosis

Miosis is the constriction of the pupil.

It occurs because the dilator pupillae muscle (which normally dilates the pupil via sympathetic stimulation) is paralyzed.

This leaves the sphincter pupillae muscle (innervated by the parasympathetic system) unopposed, leading to a smaller pupil on the affected side.

Step 4: Identifying Anhidrosis

Anhidrosis is the absence or decrease of sweating on the affected side of the face.

The sweat glands receive sympathetic innervation.

Note that the presence or location of anhidrosis can often help localize whether the lesion is preganglionic or postganglionic.

Quick Tip: Use the mnemonic "MAP" to remember the triad: Miosis, Anhidrosis, and Ptosis. The symptoms occur on the same side (ipsilateral) as the nerve damage.

2. Which kidney stone is radiolucent on a plain KUB X-ray?

- (A) *Calcium oxalate stone*
- (B) *Struvite stone*
- (C) *Uric acid stone*

(D) *Calcium phosphate stone*

Correct Answer: (C) Uric acid stone

Solution:

Concept:

- Radiopacity of a kidney stone depends on its mineral composition and density relative to surrounding tissues.
- Stones containing heavy atoms like Calcium (atomic number 20) are radiopaque, meaning they appear white on an X-ray.
- Stones made of light elements (Carbon, Hydrogen, Nitrogen, Oxygen) are radiolucent and do not show up on plain X-ray films.

Step 1: Analyzing radiopaque stones

Calcium oxalate and Calcium phosphate stones are the most common types and are highly radiopaque due to the high density of calcium.

Struvite stones (Magnesium Ammonium Phosphate) are also radiopaque, though often less dense than pure calcium stones.

Step 2: Analyzing radiolucent stones

Uric acid stones are composed of uric acid crystals, which consist of light organic elements. Because these elements do not significantly attenuate X-ray beams, the stones are "invisible" or radiolucent on a plain Kidney-Ureter-Bladder (KUB) X-ray.

Step 3: Clinical Diagnosis

While they cannot be seen on a plain X-ray, uric acid stones can be visualized using other imaging modalities such as:

- Non-contrast CT scan (most accurate).
- Ultrasound (shows as a hyperechoic focus with posterior acoustic shadowing).
- Intravenous Pyelogram (shows as a filling defect).

Quick Tip: The "I Can't See U" mnemonic: "I" for invisible, "U" for Uric acid. Most stones are radiopaque; Uric acid, Crixivan (Indinavir), and Xanthine stones are the primary radiolucent ones.

3. Statement Verification: 1. Methotrexate → Psoriasis. 2. Levothyroxine → Hyperthyroidism.

- (A) Both correct
- (B) Statement 1 correct; Statement 2 wrong
- (C) Statement 1 wrong; Statement 2 correct
- (D) Both wrong

Correct Answer: (B) Statement 1 correct; Statement 2 wrong

Solution:

Concept:

- Medical treatments often involve specific matches between pharmacological agents and the physiological conditions they are intended to treat or manage.
- Verification requires understanding the primary indication for the drugs mentioned.

Step 1: Evaluating Statement 1: Methotrexate → Psoriasis

Methotrexate is a folate antagonist and immunosuppressant.

It is a standard systemic treatment for moderate to severe psoriasis as it slows down the rapid growth of skin cells.

Therefore, Statement 1 is correct.

Step 2: Evaluating Statement 2: Levothyroxine → Hyperthyroidism

Levothyroxine is a synthetic form of the thyroid hormone thyroxine (T4).

It is used as a replacement therapy for patients with hypothyroidism (underactive thyroid).

In hyperthyroidism (overactive thyroid), the body already has too much thyroid hormone; giving levothyroxine would worsen the condition.

Therefore, Statement 2 is wrong.

Step 3: Concluding the verification

Since Statement 1 is correct and Statement 2 is incorrect, the correct choice is (B).

Quick Tip: Remember: "Levothyroxine for Low" (Hypothyroidism). Methotrexate is widely used for both Rheumatoid Arthritis and Psoriasis due to its anti-proliferative effects.

4. Which scheme/project was launched by the Ministry of AYUSH and Ministry of Women & Child Development for anaemia among adolescent girls aged 14-18 years?

- (A) Mission Indradhanush
- (B) Mission Utkarsh
- (C) Mission Vatsalya
- (D) Poshan Abhiyaan

Correct Answer: (B) Mission Utkarsh

Solution:

Concept:

- Inter-ministerial collaborations in India aim to tackle public health issues through integrated traditional and modern healthcare approaches.
- Anaemia control in adolescent populations is a high-priority national health goal.

Step 1: Identifying the specific initiative

Mission Utkarsh is a collaborative initiative launched specifically by the Ministry of AYUSH and the Ministry of Women and Child Development.

The goal is to improve the nutritional status and control anaemia in adolescent girls.

Step 2: Analyzing the target demographic and method

The project focuses on adolescent girls in the age group of 14-18 years.

It utilizes Ayurveda-based interventions and nutritional supplements to combat iron deficiency.

The pilot was initially aimed at five aspirational districts.

Step 3: Differentiating from other schemes

- Mission Indradhanush is focused on universal immunization for children and pregnant women.
- Mission Vatsalya is related to child protection and welfare services.
- Poshan Abhiyaan (National Nutrition Mission) is a broader umbrella scheme for malnutrition, but the specific joint project for 14-18 year olds under AYUSH is Mission Utkarsh.

Quick Tip: Mission Utkarsh = AYUSH + WCD + Anaemia control (14-18 years). Always look for the specific age bracket and the involved ministries to distinguish between similar-sounding health missions.

5. What is the Pramana of Angara Kosha?

- (A) Rajahasta
- (B) Pradesha
- (C) Hasta
- (D) 12 Angula

Correct Answer: (A) Rajahasta

Solution:

Concept:

- In Ayurveda, specifically in the context of *Rasashastra* (iatrochemistry), a well-defined pharmacy or laboratory (*Rasashala*) is essential.

- Classical texts like *Rasaratna Samuccaya* provide detailed measurements (*Pramana*) for various sections of the *Rasashala* to ensure functional efficiency and safety.

Step 1: Defining Angara Kosha

Angara Kosha refers to the storage area or pit designated for charcoal (*Angara*) within the *Rasashala*.

Since charcoal is a primary fuel for ancient metallurgical and pharmaceutical processes, its storage needs specific dimensions.

Step 2: Understanding units of measurement

Ayurvedic texts use traditional units like *Angula* (finger-breadth), *Hasta* (cubit), and *Rajahasta* (royal cubit).

A *Rajahasta* is generally considered to be a slightly longer cubit, often equivalent to about 28 *Angulas*.

Step 3: Textual correlation for the measurement

According to the principles of *Rasashala* construction, the *Angara Kosha* (charcoal pit/store) should have the dimensions of one *Rajahasta*.

This provides sufficient volume for fuel storage needed for intensive heating processes like *Putas* or smelting.

Quick Tip: Associate "Angara" (Charcoal) with "Rajahasta" for Rasashala setup questions. Remember that most furnace-related measurements in Rasashastra follow standard Hasta or Rajahasta units.

6. What is the Pramana of Para Ojas and Apra Ojas?

- (A) Para Ojas – 8 Bindu; Apra Ojas – 1/2 Anjali
(B) 10 Bindu; 1 Anjali
(C) 5 Bindu; 1/2 Pala
(D) Both are equal

Correct Answer: (A) Para Ojas – 8 Bindu; Apra Ojas – 1/2 Anjali

Solution:

Concept:

- *Ojas* is considered the ultimate essence of all the seven *Dhatus* (tissues) and is the foundation of immunity (*Vyadhikshamatva*) and vitality.
- It is categorized into two types based on its location, function, and quantity: *Para Ojas* and *Apara Ojas*.

Step 1: Defining Para Ojas

Para Ojas (Superior Ojas) is high-quality essence located primarily in the heart (*Hridaya*).

It is vital for life; its destruction leads to immediate death.

Its quantity (*Pramana*) is extremely small, measured as 8 *Bindu* (8 drops).

Step 2: Defining Apara Ojas

Apara Ojas (Ordinary/Inferior Ojas) is the variety that circulates throughout the body via the *Dhamanis* (vessels).

It supports general health and immunity across all tissues.

Its quantity is significantly larger than *Para Ojas*, measured as *Ardha Anjali* (1/2 *Anjali* or half a palmful).

Step 3: Comparing with the options

Option (A) accurately reflects these classical measurements:

- Para Ojas = 8 Bindu
- Apra Ojas = 1/2 Anjali

Quick Tip: Remember "8 drops for life" (Para Ojas) and "Half a palm for health" (Apra Ojas). Para Ojas is qualitative/vital, while Apra Ojas is quantitative/circulating.

7. Which are Mamsa-Pradoshaja Vikara?

- (A) Galaganda and Galashundika
- (B) Pandu and Kamala
- (C) Prameha and Kushtha
- (D) Arsha and Bhagandara

Correct Answer: (A) Galaganda and Galashundika

Solution:

Concept:

- In Ayurveda, *Dhatu Pradoshaja Vikara* refers to diseases caused by the vitiation (*Dushti*) of specific body tissues (*Dhatus*).
- *Mamsa Dhatu* represents the muscle tissue. When the *Doshas* (primarily *Kapha*) affect this tissue, specific clinical conditions arise.

Step 1: Identifying Mamsa-Pradoshaja Vikara

According to *Charaka Samhita* (Sutra Sthana Chapter 28), the diseases resulting from *Mamsa Dhatu* vitiation include:

Adhimamsa (Granuloma/extra growth), *Arbuda* (Tumors), *Galaganda* (Goitre/Neck swelling), *Galashundika* (Tonsillitis/Uvular swelling), *Alaji*, *Ganda*, and *Ganda-mala*.

Step 2: Analyzing Option A

Galaganda is a swelling in the neck region, and *Galashundika* is an inflammatory condition of

the throat/tonsillar region.

Both are classic examples listed under the diseases of muscle tissue (*Mamsa*).

Step 3: Differentiating other options

- *Pandu* and *Kamala* (Option B) are typically related to *Rakta Pradoshaja Vikara* (Blood tissue disorders).
- *Prameha* and *Kushtha* (Option C) are *Bahudosha* conditions involving multiple *Dushyas*, but often categorized under *Medo-pradoshaja* (Fat) or complex tissue vitiation.

Quick Tip: To remember *Mamsa-Pradoshaja Vikaras*, think of "Growths and Swellings": *Arbuda*, *Adhimamsa*, *Galaganda*, and *Galashundika*. Always refer to Charaka Sutra 28 for the definitive list of Dhatu-wise diseases.

8. Match the clinical signs: 1. Kehr's sign; 2. Boas' sign; 3. Grey-Turner's sign.

(A) 1-A, 2-B, 3-C

(B) 1-B, 2-C, 3-A

(C) 1-C, 2-A, 3-B

(D) 1-A, 2-C, 3-B

Correct Answer: (A) 1-A, 2-B, 3-C

Solution:

Concept:

- Clinical signs are physical findings that aid in the diagnosis of specific internal abdominal or thoracic pathologies.
- These signs are often named after the physicians who first described them (eponymous signs).

Step 1: Analyzing Kehr's sign (1-A)

Kehr's sign is the occurrence of acute pain at the tip of the left shoulder due to the presence of

blood or other irritants in the peritoneal cavity.

It is classically associated with a ruptured spleen, which causes diaphragmatic irritation; the pain is referred to the shoulder via the phrenic nerve.

Step 2: Analyzing Boas' sign (2-B)

Boas' sign refers to an area of hyperesthesia (increased sensitivity to touch) located between the 9th and 11th ribs on the right side posteriorly.

It is a classic clinical sign indicating acute cholecystitis (gallbladder inflammation).

Step 3: Analyzing Grey-Turner's sign (3-C)

Grey-Turner's sign is characterized by bruising or ecchymosis (bluish discoloration) of the flanks (the part of the body between the last rib and the hip).

It indicates retroperitoneal hemorrhage and is commonly seen in severe cases of acute pancreatitis.

Quick Tip: Kehr's = Shoulder (Spleen). Boas' = Back/Ribs (Gallbladder). Grey-Turner's = Flanks/Turn (Pancreatitis). Cullen's sign is similar but occurs around the umbilicus.

9. In statistics, 'P' stands for:

- (A) Power
- (B) Probability
- (C) Population
- (D) Precision

Correct Answer: (B) Probability

Solution:

Concept:

- In statistical hypothesis testing, the P-value is a fundamental metric used to determine the significance of research results.
- It helps researchers decide whether to reject or fail to reject the null hypothesis (H_0).

Step 1: Defining the P-value

The 'P' in P-value stands for **Probability**.

Specifically, it represents the probability of obtaining test results at least as extreme as the results actually observed, under the assumption that the null hypothesis is correct.

Step 2: Interpretation of values

A small P-value (typically $p \leq 0.05$) indicates strong evidence against the null hypothesis, leading researchers to reject it in favor of the alternative hypothesis.

A large P-value ($p > 0.05$) suggests that the observed results are likely due to chance, and the null hypothesis is not rejected.

Step 3: Differentiating from other terms

- **Power:** The probability of correctly rejecting a false null hypothesis ($1 - \beta$).
- **Population:** The entire group from which a statistical sample is drawn.
- **Precision:** The closeness of two or more measurements to each other (reliability).

Quick Tip: P-value = Probability of chance. If "P is low, the Null must go" (meaning if $p < 0.05$, the result is statistically significant).

10. Which therapy is marked contraindicated in the > 70 years age group?

- (A) Vamana
- (B) Virechana
- (C) Basti
- (D) Nasya

Correct Answer: (B) Virechana

Solution:

Concept:

- *Panchakarma* therapies are intensive detoxification procedures that require significant physical and mental strength (*Bala*).

- Classical Ayurvedic texts define age limits for certain procedures to prevent complications due to the natural physiological decline in the elderly (*Vriddhavastha*).

Step 1: Understanding the nature of Virechana

Virechana (medicated purgation) is the specific therapy for *Pitta* disorders.

It involves the induction of multiple bowel movements to expel toxins. This process can be physically exhausting and leads to significant loss of fluids and electrolytes.

Step 2: Physiological state of patients > 70 years old

In the elderly, the body is in a state of *Vata* dominance and *Dhatu Kshaya* (tissue depletion).

Their digestive capacity (*Agni*) and overall immunity (*Ojas*) are reduced.

The strenuous nature of a full-scale *Virechana* can lead to severe dehydration, weakness, and cardiac stress in this age group.

Step 3: Identifying contraindications

While *Basti* (enema) is often considered the "half-treatment" for the elderly due to its nourishing and *Vata*-pacifying nature, *Virechana* is explicitly contraindicated or advised with extreme caution in those aged above 70 years unless it is a very mild form (*Mridu Virechana*).

Quick Tip: *Virechana* is avoided in children (<10 years) and the elderly (>70 years) due to its high-intensity nature. *Basti* is the preferred *Shodhana* therapy for geriatric patients as it manages *Vata* effectively.

11. What is the length of the Dhumayantra for Prayogika Dhumapana?

(A) 24 Angula

- (B) 32 Angula
- (C) 36 Angula
- (D) 48 Angula

Correct Answer: (C) 36 Angula

Solution:

Concept:

- *Dhumapana* (medicated smoking) is a therapeutic procedure where the patient inhales medicated smoke through a specialized tube called the *Dhumayantra*.
- The length of this tube varies according to the therapeutic objective and the intensity of the smoke required.

Step 1: Categorizing the types of Dhumapana

According to *Charaka* and *Sushruta*, there are three main types of medical smoking:

- *Prayogika* (Daily/Habitual)
- *Snaihika* (Lubricating/Mild)
- *Vairechanika* (Purgative/Strong/Sharp)

Step 2: Relating length to smoke intensity

The length of the tube (*Netra*) is inversely proportional to the intensity of the treatment.

A longer tube allows the smoke to cool down and travel further, making it milder, whereas a shorter tube delivers more concentrated and "sharp" smoke.

Step 3: Recalling specific measurements

The standard lengths measured in *Angula* (finger-breadth) are:

- **Vairechanika Dhumapana:** 24 *Angula* (Shortest/Strongest)

- **Snaihika Dhumapana:** 32 *Angula*
- **Prayogika Dhumapana:** 36 *Angula* (Longest/Milder for daily use)

Quick Tip: Use the sequence 24-32-36 to remember: Vairechanika (V) - Snaihika (S) - Prayogika (P).
The longest tube (36) is for the most common/daily type (Prayogika).

12. Who is the Minister of State (MoS) for AYUSH?

- (A) Shri Sarbananda Sonowal
- (B) Shri Prataprao Jadhav
- (C) Shri Mansukh Mandaviya
- (D) Shri Rajesh Kotecha

Correct Answer: (B) Shri Prataprao Jadhav

Solution:

Concept:

- The Ministry of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homoeopathy) is headed by a Cabinet Minister and often supported by a Minister of State (MoS).
- Appointment details change according to the central government's cabinet reshuffles or new terms.

Step 1: Identifying the Cabinet Minister

Shri Sarbananda Sonowal is the Union Cabinet Minister for the Ministry of AYUSH (and Ports, Shipping, and Waterways) in the current administration.

Step 2: Identifying the Minister of State

Following the 2024 general elections and the formation of the new cabinet, **Shri Prataprao Jadhav** was appointed as the Minister of State (Independent Charge) for the Ministry of AYUSH.

He also serves as the Minister of State in the Ministry of Health and Family Welfare.

Step 3: Differentiating other names

- Shri Mansukh Mandaviya has previously held portfolios like Health and Chemicals/Fertilizers.
- Shri Rajesh Kotecha is the Secretary to the Ministry of AYUSH (a bureaucrat position, not a political MoS position).

Quick Tip: Current AYUSH Leadership: Cabinet: Sarbananda Sonowal. MoS (Independent Charge): Prataprao Jadhav. Secretary: Rajesh Kotecha.

13. According to Acharya Kashyapa, when should an infant be shown the Sun and Moon?

- (A) First week
- (B) First month
- (C) Third month
- (D) Sixth month

Correct Answer: (B) First month

Solution:

Concept:

- *Samskaras* are various childhood rites or milestones described in Ayurvedic pediatric texts (*Kaumarabhritya*) to ensure proper growth and development.

- *Suryadarshana* (showing the Sun) and *Chandradarshana* (showing the Moon) are among the earliest sensory stimulations provided to an infant.

Step 1: Understanding the ritual significance

These rituals mark the first time the child is taken out of the protective environment of the *Sutikagara* (labor ward/nursery) to be exposed to external light and nature.

It tests and stimulates the infant's visual tracking and adaptation to natural light.

Step 2: Identifying Kashyapa's specific directive

Acharya Kashyapa, the foremost authority on Ayurvedic pediatrics (*Kashyapa Samhita*), prescribes that both the Sun and the Moon should be shown to the infant in the **first month** of life.

Step 3: Comparing with other Acharyas

Other Acharyas have different timelines:

- According to Acharya Sushruta and others, *Nishkramana* (taking the child out) and showing the Sun often occurs in the 4th month.
- However, for exams focusing on *Kaumarabhritya* specifics, Kashyapa's "1st month" rule is the definitive answer.

Quick Tip: Kashyapa = 1st month (Sun/Moon). Others (Sushruta) = 4th month (Nishkramana). Think of Kashyapa as being more aggressive with early milestones in Pediatrics.

14. What is the main indication of Laghusnayadi / Lashunadya Ghrita?

- (A) Unmada
- (B) Atisara
- (C) Rajayakshma
- (D) Prameha

Correct Answer: (A) Unmada

Solution:

Concept:

- Medicated ghee (*Ghrita Kalpana*) is a preferred dosage form in Ayurveda for treating disorders of the nervous system and mind because it can cross the blood-brain barrier.
- *Lashunadya Ghrita* (containing Garlic as the main ingredient) is a potent formulation specifically designed for *Vata-Kapha* dominant conditions affecting the *Manovaha Srotas* (channels of the mind).

Step 1: Understanding the primary ingredient

The key ingredient in this formulation is *Lashuna* (Garlic).

Garlic is known for its *Ushna Virya* (hot potency) and its ability to balance *Vata* and *Kapha* doshas. It acts as a stimulant and rejuvenator for the nervous system.

Step 2: Analyzing the therapeutic indication

In classical texts like *Charaka Samhita* and *Ashtanga Hridaya*, *Lashunadya Ghrita* is highlighted in the treatment of *Unmada* (insanity/psychosis).

It is also indicated for other neurological conditions such as *Apasmara* (epilepsy) and *Jwara* (specific types of chronic fever).

Step 3: Mechanism of action in Unmada

In *Unmada*, the mind is unstable due to the vitiation of doshas.

The penetrating (*Tikshna*) and stabilizing properties of garlic combined with the nourishing property of ghee help to clear the mental channels and restore psychological stability.

Quick Tip: Associate "Lashuna" (Garlic) formulations in Ghrita form with psychiatric and neurological disorders like Unmada and Apasmara. Lashunadya Ghrita is a "must-know" for the management of mental health in Ayurveda.

15. "Angamarda" is a symptom of which Dhatu/Upadhatu Vriddhi?

- (A) Rasa Vriddhi
- (B) Rakta Vriddhi
- (C) Artava Vriddhi
- (D) Shukra Vriddhi

Correct Answer: (C) Artava Vriddhi

Solution:

Concept:

- *Dhatu Vriddhi* and *Upadhatu Vriddhi* represent the clinical signs and symptoms that occur when body tissues or secondary tissues increase beyond their normal physiological limits.
- *Artava* (menstrual fluid) is considered an *Upadhatu* (secondary tissue) of *Rasa Dhatu*.

Step 1: Identifying the specific symptoms of Artava Vriddhi

According to *Ashtanga Hridaya* (Sutra Sthana Chapter 11), the clinical features of *Artava Vriddhi* (excessive increase in menstrual fluid) include:

- *Angamarda* (Generalized body ache/malaise)
- *Atipravritti* (Excessive menstrual flow/Menorrhagia)
- *Daurgandhya* (Foul smell)

Step 2: Defining Angamarda

Angamarda is described as a sensation of "crushing pain" or "breaking pain" throughout the body.

In the context of *Artava Vriddhi*, it reflects the systemic impact of the excessive tissue increase and the associated *Vata* disturbance caused by the heavy flow.

Step 3: Differentiating from other tissue increases

- **Rasa Vriddhi:** Leads to *Hridaya-utkleda* (nausea) and *Praseka* (excessive salivation).
- **Rakta Vriddhi:** Leads to *Raktanga-akshita* (redness of body/eyes) and skin disorders.
- **Shukra Vriddhi:** Leads to *Atiharsha* (excessive libido) and *Shukra Ashmari* (seminal calculi).

Quick Tip: "Angamarda" + "Excessive Flow" = *Artava Vriddhi*. Remember that *Artava* is the *Upadhatu* of *Rasa*, so its symptoms often overlap with general systemic malaise.

16. Where is the National Institute of Sowa-Rigpa located?

- (A) Gangtok, Sikkim
- (B) Leh, Ladakh
- (C) Dharamshala, Himachal Pradesh
- (D) Darjeeling, West Bengal

Correct Answer: (B) Leh, Ladakh

Solution:

Concept:

- Sowa-Rigpa is one of the oldest, well-documented, and living medical traditions of the world, commonly known as the Amchi system of medicine.
- It is practiced in the Himalayan regions of India, including Ladakh, Himachal Pradesh, Sikkim, and Arunachal Pradesh.
- To promote and preserve this traditional knowledge, the Government of India established a dedicated national institute under the Ministry of AYUSH.

Step 1: Identifying the Nature of the Institute

The National Institute of Sowa-Rigpa (NISR) is an autonomous body under the Ministry of AYUSH.

It was established to provide an apex institution for higher education, research, and standard-setting in Sowa-Rigpa.

Step 2: Determining the Geographic Choice

Leh, Ladakh is considered the heartland of Sowa-Rigpa practice in India.

The region has a vast history of Amchis (practitioners) and a unique biodiversity of medicinal plants that are fundamental to this system.

Step 3: Verifying the Location

The institute was formally approved by the Union Cabinet in 2019 and is situated in Leh, Ladakh.

It serves as a bridge between traditional Himalayan healing practices and modern scientific research.

Quick Tip: Sowa-Rigpa = Leh, Ladakh. Remember that Sowa-Rigpa is the latest addition to the AYUSH acronym (added in 2010). The location is logical given Ladakh's cultural and ecological connection to this system.

17. According to Acharya Kashyapa, Grahani is seen in which condition?

- (A) Parshvashoola
- (B) Garbha
- (C) Balashosha
- (D) Kaphaja disease

Correct Answer: (C) Balashosha

Solution:

Concept:

- *Balashosha* is a pediatric condition characterized by progressive emaciation and wasting in children, often correlated with Protein Energy Malnutrition (PEM).

- Acharya Kashyapa, in his *Kashyapa Samhita*, provides detailed insights into the involvement of digestive fire (*Agni*) and its site (*Grahani*) in pediatric disorders.

Step 1: Defining Balashosha

Balashosha occurs primarily due to *Kapha-avaruddha Rasavaha Srotas* (obstruction of nutrient channels).

When the nutrient juice (*Rasa Dhatu*) cannot reach the tissues, the child begins to waste away despite consuming food.

Step 2: The role of Grahani in wasting

Acharya Kashyapa mentions that in the state of *Balashosha*, the *Grahani* (the anatomical and functional site of digestion) becomes severely compromised.

The failure of *Grahani* to properly transform food into essence (*Sara*) and waste (*Kitta*) is a hallmark of this disease.

Step 3: Clinical Correlation

The child shows symptoms like *Aruchi* (anorexia), *Atisara* (diarrhea), and *Shosha* (emaciation). Kashyapa explicitly links the pathology of *Grahani* as a significant component or an associated condition within the clinical presentation of *Balashosha*.

Quick Tip: *Balashosha* = Kashyapa's Pediatrics. Always associate *Grahani-dosha* with emaciation (*Shosha*) in children, as poor digestion is the root cause of nutritional failure.

18. "Jwalamtam, Agni, Nasa evam Parisphutita" are features of which disease?

- (A) Abhishyanda
- (B) Kukunaka
- (C) Adhimantha
- (D) Timira

Correct Answer: (B) Kukunaka

Solution:

Concept:

- *Kukunaka* is a specific pediatric ophthalmic disorder described in Ayurvedic texts, often compared to Neonatal Conjunctivitis or Ophthalmia Neonatorum.
- It is caused by the consumption of vitiated breast milk (*Dushta Stanya*) by the infant, which leads to the vitiation of *Kapha*, *Rakta*, and *Vata* in the eye.

Step 1: Interpreting the Sanskrit terminology

Jwalamtam and *Agni* refer to the intense burning sensation and heat felt in the eyes.

Nasa evam Parisphutita describes the inflammation or fissures/cracking appearing around the nose and eye corners.

The child typically rubs the eyes, nose, and forehead constantly due to irritation.

Step 2: Analyzing the clinical presentation

In *Kukunaka*, the eyelids show swelling, redness, and a characteristic discharge.

The irritation is so severe that the infant cannot tolerate light and keeps the eyes closed, with constant lacrimation.

Step 3: Confirming the diagnosis

While *Abhishyanda* is a general conjunctivitis and *Adhimantha* is a more severe form (glaucomatous), the specific combination of symptoms involving the nose (*Nasa*) and the severe burning (*Jwalamtam*) in a pediatric context is diagnostic of *Kukunaka*.

Quick Tip: *Kukunaka* = Pediatric Conjunctivitis. Key diagnostic clue: Infant rubbing the nose and eyes repeatedly (*Ghrishyati akshi-nasam*). Always check the mother's milk quality as it is the root cause in this disease.

19. “Kshiprodgama, Kshipravidahapaka, Teevrajwara” are characteristic of which Rohini?

- (A) Vataja Rohini
- (B) Pittaja Rohini
- (C) Kaphaja Rohini
- (D) Sannipataja Rohini

Correct Answer: (B) Pittaja Rohini

Solution:

Concept:

- *Rohini* is a serious inflammatory condition of the throat, often correlated with severe pharyngitis or Diphtheria, characterized by the appearance of fleshy growths in the throat that obstruct the airway.
- There are five types of *Rohini* according to Ayurvedic classics: *Vataja*, *Pittaja*, *Kaphaja*, *Sannipataja*, and *Raktaja*.

Step 1: Analyzing the term "Kshipra"

The word "*Kshipra*" means fast, rapid, or acute.

In Ayurvedic pathology, rapid onset (*Kshiprodgama*) and quick progression are hallmarks of *Pitta dosha* and *Rakta* (blood) involvement.

Step 2: Analyzing "Vidaha" and "Paka"

Vidaha refers to a burning sensation, and *Paka* refers to suppuration or the process of "ripening" into pus.

Since *Pitta* is responsible for heat and metabolic transformation, any condition showing rapid burning (*Kshipravidaha*) and quick suppuration (*Kshiprapaka*) is inherently *Pittaja* in nature.

Step 3: Interpreting "Teevrajwara"

Teevrajwara refers to high-grade or acute fever.

High fever is a systemic manifestation of aggravated *Pitta* during an acute inflammatory process.

Step 4: Final Matching

Combining these features—rapid onset, intense burning, fast suppuration, and high fever—leads to the definitive diagnosis of *Pittaja Rohini*.

In contrast, *Vataja* would have intense pain and dryness, while *Kaphaja* would be slow-growing and steady.

Quick Tip: Remember: "Kshipra" (Fast) + "Paka" (Suppuration) = Pitta. Pittaja Rohini is a medical emergency that requires prompt Raktamokshana (bloodletting) and cooling treatments.

20. Should Snehana Karma be performed in Urustambha?

- (A) Yes
- (B) No
- (C) Only during daytime
- (D) Only after meals

Correct Answer: (B) No

Solution:

Concept:

- *Urustambha* (Stiffness of the thighs) is a unique disease where *Ama* (metabolic toxins) and excessive *Medas* (adipose tissue) along with *Kapha* obstruct the *Vata* in the lower limbs.
- Although it manifests as stiffness and paralysis (suggesting *Vata*), the underlying cause is highly "oily" and "heavy" (*Abhishyandi*).

Step 1: Understanding the pathology

In *Urustambha*, the *Ama* and *Medas* are *Sneha-sadarsha* (similar to oil/fat in properties).

They saturate the channels, making them heavy and immobile. This is described as a "cold and oily" obstruction.

Step 2: The effect of Snehana

Snehana (oleation therapy) involves the application of oils or fats.

Since the disease is already caused by an excess of oily and heavy substances (*Ama/Medas*), performing *Snehana* would be adding "fuel to the fire."

It would further increase the obstruction, making the thighs even stiffer and more difficult to treat.

Step 3: Determining the treatment line

Standard *Vata* treatments like *Snehana* and *Basti* (medicated enemas) are strictly contraindicated in *Urustambha*.

The treatment must always be *Rukshana* (drying treatments) and *Kshapana* (depletion of fat/*Kapha*) to clear the oily obstruction first.

Quick Tip: *Urustambha* is the ONLY *Vata*-dominant disease where *Snehana* and *Basti* are prohibited. Think of it as "Frozen Thighs" due to grease; you need to dry the grease (*Rukshana*), not add more oil.

21. Which drugs constitute Svalpa Triphala?

- (A) Haritaki + Bibhitaki + Amalaki
- (B) Kayaphala + Khadira + Parushaka
- (C) Trikatu + Triphala
- (D) Guduchi + Nimba + Vasa

Correct Answer: (B) Kayaphala + Khadira + Parushaka

Solution:

Concept:

- In Ayurvedic Materia Medica (*Dravyaguna*), drugs are often grouped into sets of three (*Triphala* or *Trayas*) based on their pharmacological properties or clinical indications.
- While the standard *Triphala* is a household name, there are several "Lesser" or "Alternative" *Triphalas* described in various classical texts for specific therapeutic uses.

Step 1: Defining the standard Triphala

The most common *Triphala* consists of *Haritaki* (*Terminalia chebula*), *Bibhitaki* (*Terminalia bellirica*), and *Amalaki* (*Phyllanthus emblica*).

This combination is primarily known for its rejuvenating and laxative properties.

Step 2: Identifying Svalpa Triphala

Svalpa Triphala (also known as the "Small Triphala" or "Lesser Triphala") is a specific grouping of three drugs: *Kayaphala*, *Khadira*, and *Parushaka*.

These drugs are generally astringent (*Kashaya*) in taste and are often used in conditions involving oral health or specific inflammatory conditions.

Step 3: Differentiating other Triphalas

- **Madhura Triphala:** Consists of *Draksha*, *Kashmarya*, and *Kharjura*.
- **Sugandhi Triphala:** Consists of *Jatiphala*, *Lavanga*, and *Ela*.

The grouping in Option (B) is the textbook definition of *Svalpa Triphala* as per the *Dravyaguna* classics.

Quick Tip: Svalpa Triphala = Kayaphala, Khadira, Parushaka. Do not confuse this with the "Trimada" (Vidanga, Musta, Chitraka) or "Trikatu" (Shunthi, Maricha, Pippali).

22. What is the Anupana of Narayana Churna in Udara Roga?

- (A) Madhu
- (B) Ghrita
- (C) Takra
- (D) Dugdha

Correct Answer: (C) Takra

Solution:

Concept:

- *Anupana* (vehicle/adjuvant) is the substance taken along with or after the primary medicine to enhance its absorption, direct it to the target tissue, and minimize side effects.
- *Narayana Churna* is a classical formulation widely used for abdominal disorders, bloating, and constipation.

Step 1: Understanding Narayana Churna

This powder is a complex blend of salts and herbs designed to stimulate *Agni* (digestive fire) and pacify *Vata*.

It is particularly effective in clearing the intestinal channels (*Srotovishodhana*).

Step 2: Defining Udara Roga

Udara Roga refers to abdominal enlargements, including conditions like ascites.

The pathology involves a combination of *Mandagni* (low digestion) and obstruction of the *Prana-Udaka-Anna* channels.

Step 3: The role of Takra (Buttermilk)

In Ayurveda, *Takra* is hailed as the "Amrita" (nectar) for abdominal diseases.

It has *Laghu* (light) and *Deepana* (appetizer) properties.

When *Narayana Churna* is administered with *Takra*, the combination effectively digests *Ama* and relieves abdominal pressure, making it the specific adjuvant for this condition.

Quick Tip: *Takra* is the best Anupana for all types of Udara Roga. *Narayana Churna* + *Takra* = Relief in abdominal distension and fluid accumulation.

23. Which are the exceptions among wet drugs that are NOT taken in double quantity?

- (A) Guduchi, Kutaja, Vasa
- (B) Haritaki, Bibhitaki, Amalaki
- (C) Shunthi, Maricha, Pippali
- (D) Yavani, Jiraka, Ajamoda

Correct Answer: (A) Guduchi, Kutaja, Vasa

Solution:

Concept:

- A general rule in Ayurvedic pharmacy (*Bhaishajya Kalpana*) states that when a drug is used in its fresh/wet (*Ardra*) state, its quantity should be doubled compared to its dry state to account for moisture content.
- However, there are specific exceptions to this rule for drugs that are highly potent or have specific properties in their fresh form.

Step 1: The "Double Quantity" Rule

The standard *Paribhasha* (definition) states: "*Ardra dravyam tu dvigunam*".

If a formula calls for 10g of a dry herb, and you only have fresh herb, you should use 20g.

Step 2: Identifying the exceptions

Certain drugs are so naturally potent or have such high therapeutic efficacy in their green/fresh state that doubling them would lead to an overdose or excessive bitterness/potency.

According to classical texts (*Sharngadhara Samhita*), the primary exceptions are: *Guduchi* (Tinospora), *Kutaja* (Holarrhena), *Vasa* (Adhatoda), *Kushmanda*, *Shatavari*, and *Sahachara*.

Step 3: Clinical Logic

For *Guduchi*, *Kutaja*, and *Vasa*, the fresh juice or the fresh plant material is considered superior. Therefore, they are used in the same quantity as prescribed in the formula, without doubling (*Sama-bhaga*).

Quick Tip: Mnemonic for exceptions: "G-K-V" (Guduchi, Kutaja, Vasa). These drugs are potent enough fresh that doubling isn't necessary. Always use fresh Guduchi for the best results in Jwara (fever).

24. According to GOLD criteria, what is COPD severity classification by FEV1 % predicted?

- (A) Stage 1 $\geq 80\%$; Stage 2 50 – 79%; Stage 3 30 – 49%; Stage 4 $< 30\%$
- (B) Stage 1 $< 30\%$; Stage 2 30 – 49%; Stage 3 50 – 79%; Stage 4 $\geq 80\%$
- (C) All stages $> 80\%$
- (D) Based only on FVC

Correct Answer: (A) Stage 1 $\geq 80\%$; Stage 2 50 – 79%; Stage 3 30 – 49%; Stage 4 $< 30\%$

Solution:

Concept:

- The Global Initiative for Chronic Obstructive Lung Disease (GOLD) provides a standardized system for the diagnosis and management of COPD.
- One of its key components is the spirometric grading of the severity of airflow limitation.
- Airflow limitation is determined by measuring the Forced Expiratory Volume in 1 second (FEV_1) after administering a bronchodilator.

Step 1: Understanding the SPIROMETRIC criteria

For a clinical diagnosis of COPD, a post-bronchodilator ratio of $FEV_1/FVC < 0.70$ must be present.

Once this ratio confirms airflow obstruction, the severity is then graded based on the FEV_1 percentage of the predicted value.

Step 2: Breaking down the GOLD Stages

The classification is divided into four distinct stages:

- **GOLD 1 (Mild):** $FEV_1 \geq 80\%$ predicted.
- **GOLD 2 (Moderate):** $50\% \leq FEV_1 < 80\%$ (often expressed as 50-79%).
- **GOLD 3 (Severe):** $30\% \leq FEV_1 < 50\%$ (often expressed as 30-49%).
- **GOLD 4 (Very Severe):** $FEV_1 < 30\%$ predicted.

Step 3: Clinical application

These stages help clinicians decide on the appropriate pharmacological therapy and assess the prognosis and risk of exacerbations.

As the stage number increases, the degree of lung function impairment becomes more critical.

Quick Tip: Remember the "80-50-30" rule. Stage 1 is the healthiest ($> 80\%$) and Stage 4 is the most critical ($< 30\%$). Always use the post-bronchodilator value for this classification.

25. According to Sushruta, choose the correct matching for Dagdha Lakshana.

- (A) 1-A, 2-B, 3-C, 4-D
(B) 1-B, 2-C, 3-D, 4-A
(C) 1-C, 2-A, 3-D, 4-B
(D) 1-D, 2-A, 3-B, 4-C

Correct Answer: (A) 1-A, 2-B, 3-C, 4-D

Solution:

Concept:

- *Dagdha* refers to burns caused by fire or heat. Acharya Sushruta, the pioneer of surgery, classified burns into four types based on the depth of tissue involvement and clinical signs (*Lakshana*).
- These classifications are described in *Sushruta Samhita*, Sutra Sthana, Chapter 12.

Step 1: Matching Plusta Dagdha (1-A)

Plusta Dagdha (Scorching): This is the most superficial burn.

Symptoms include discoloration of the skin (*Durvarnyata*) and intense heat/burning without blisters.

Step 2: Matching Durdagdha (2-B)

Durdagdha (Improperly burnt): This involves more heat than Plusta.

Symptoms include severe burning sensation (*Daha*) and the formation of blisters (*Sphota*). It is extremely painful.

Step 3: Matching Samyak-dagdha (3-C)

Samyak-dagdha (Properly/Moderately burnt): The burn is deeper into the skin layers.

Symptoms include the area becoming dark or like the color of a *Tala* fruit (blackish), and it is not very elevated. It forms a stable crust.

Step 4: Matching Atidagdha (4-D)

Atidagdha (Over-burnt): This is a deep-tissue burn involving muscles and sometimes bones.

Symptoms include Charred tissues, severe loss of sensation, and deep destruction of the underlying structures.

Quick Tip: Mnemonic: "P-D-S-A" (Plusta, Durdagdha, Samyak, Ati). Blisters (*Sphota*) only appear in Durdagdha. Samyak looks like a ripe Tala fruit (Black).

26. "Upachaya of the body + Bala + Varna" comes under which Garbhaja Bhava?

- (A) Matrija Bhava
- (B) Pitrija Bhava
- (C) Rasaja Bhava
- (D) Atmaja Bhava

Correct Answer: (C) Rasaja Bhava

Solution:

Concept:

- *Garbhaja Bhavas* are the essential factors that contribute to the formation and development of the fetus.
- There are six factors: *Matrija* (Maternal), *Pitrija* (Paternal), *Atmaja* (Soul), *Rasaja* (Nutritional), *Satvaja* (Psychic), and *Satmyaja* (Wholesomeness).

Step 1: Defining Rasaja Bhava

Rasaja Bhava refers to the traits and developments that depend on the nutrition (*Rasa*) provided by the mother to the fetus via the placenta.

It represents the "nurture" aspect of fetal growth after the initial genetic blueprint is set.

Step 2: Listing the attributes

According to *Charaka Sharira Sthana*, the following qualities are derived from *Rasaja Bhava*:

- **Abhinirvritti:** Manifestation of the body.

- **Abhivridddhi:** Growth.
- **Tripti:** Satisfaction/Satiety.
- **Bala:** Strength/Vitality.
- **Varna:** Complexion.
- **Sthiti:** Maintenance of life.
- **Upachaya:** Accumulation of tissues/Physical development.

Step 3: Differentiating from others

- **Matrija:** Soft organs like heart, liver, spleen.
- **Pitrija:** Hard structures like bones, hair, teeth, nails.
- **Atmaja:** Longevity, sensory perceptions, desire.

Since "Upachaya, Bala, and Varna" are all dependent on metabolic nourishment, they belong to *Rasaja Bhava*.

Quick Tip: Anything related to growth (*Vridddhi*) and nourishment (*Upachaya*) is ALWAYS *Rasaja*. Think of *Rasa* as the "fuel" for the body's building blocks.

27. Statement: "Vamana is not included in Ashtavidha Shastra Karma."

- (A) True
- (B) False
- (C) True only in Shalya Tantra
- (D) True only in Kayachikitsa

Correct Answer: (A) True

Solution:

Concept:

- *Ashtavidha Shastra Karma* refers to the eight types of surgical procedures described by Acharya Sushruta, the father of surgery.
- These procedures represent the fundamental technical actions a surgeon performs with sharp instruments (*Shastras*).
- Understanding the difference between surgical acts (*Shastra Karma*) and medical purification procedures (*Panchakarma*) is essential in Ayurvedic clinical theory.

Step 1: Listing the Eight Surgical Procedures

According to *Sushruta Samhita* (Sutra Sthana Chapter 5), the eight *Shastra Karmas* are:

1. **Chedana:** Excision (removing a part).
2. **Bhedana:** Incision (opening a cavity).
3. **Lekhana:** Scraping (clearing a surface).
4. **Vedhana:** Puncturing (tapping a fluid collection).
5. **Eshana:** Probing (exploring a tract).
6. **Aharana:** Extraction (pulling out a foreign body).
7. **Visravana:** Draining (releasing blood/pus).
8. **Sivana:** Suturing (closing a wound).

Step 2: Evaluating the role of Vamana

Vamana is the therapeutic induction of vomiting.

It is a medical purification procedure (*Shodhana*) and is part of the *Panchakarma* (five detoxification therapies) primarily used in *Kayachikitsa* (Internal Medicine) for *Kapha* disorders.

It does not involve the use of surgical instruments to cut or alter tissue.

Step 3: Conclusion

Since *Vamana* is a medical therapy and not one of the eight surgical procedures listed in the classical surgical curriculum, the statement that it is "not included" is factually **True**.

Quick Tip: To remember the 8 Shashtra Karmas, use the mnemonic: "C-B-L-V-E-A-V-S". Remember that Vamana and Virechana are medical cleansings, whereas Shashtra Karmas are mechanical surgical actions.

28. What is the Anupana of Haritaki in different seasons under Rituharitaki?

- (A) Varsha-Saindhava; Sharad-Sharkara; Hemanta-Shunthi; Shishira-Pippali; Vasanta-Madhu; Grishma-Guda
- (B) Varsha-Madhu; Sharad-Guda; Hemanta-Sharkara; Shishira-Saindhava; Vasanta-Ghrita; Grishma-Takra
- (C) Varsha-Pippali; Sharad-Shunthi; Hemanta-Madhu; Shishira-Guda; Vasanta-Sharkara; Grishma-Saindhava
- (D) Madhu in all seasons

Correct Answer: (A) Varsha-Saindhava; Sharad-Sharkara; Hemanta-Shunthi; Shishira-Pippali; Vasanta-Madhu; Grishma-Guda

Solution:

Concept:

- *Ritu Haritaki* is a concept of *Rasayana* (rejuvenation) therapy where *Haritaki* (*Terminalia chebula*) is consumed with different adjuvants (*Anupana*) depending on the season (*Ritu*).
- This practice aims to balance the seasonal fluctuations of *Doshas* and maximize the tonic effect of the herb.
- The specific combinations were classically described by Bhavaprakasha.

Step 1: Analyzing the Logic of Adjuvants

The adjuvants are chosen to counteract the environmental effects of the season:

- **Varsha (Rainy):** *Saindhava* (Rock Salt) is used to mitigate the high *Vata* and dampness.
- **Sharad (Autumn):** *Sharkara* (Sugar) is used to cool the *Pitta* which peaks in this season.
- **Hemanta (Early Winter):** *Shunthi* (Dry Ginger) provides warmth during the cold.

Step 2: Continuing the Seasonal Cycle

- **Shishira (Late Winter):** *Pippali* (Long Pepper) acts as a powerful stimulant and *Kapha* pacifier in the coldest part of the year.
- **Vasanta (Spring):** *Madhu* (Honey) is the best *Anupana* to liquefy and remove the *Kapha* that melts during spring.
- **Grishma (Summer):** *Guda* (Jaggery) provides energy and cooling properties to counteract the intense heat.

Step 3: Matching with Option A

By following the chronological order of the six Indian seasons (Varsha, Sharad, Hemanta, Shishira, Vasanta, Grishma), the sequence of Rock Salt, Sugar, Dry Ginger, Long Pepper, Honey, and Jaggery perfectly matches the list provided in Option (A).

Quick Tip: Mnemonic for Ritu Haritaki sequence: "S-S-S-P-M-G" (Salt, Sugar, Shunthi, Pippali, Madhu, Guda). Remember: "Honey in Spring" (Madhu-Vasanta) is a high-yield key to identifying the correct list.