

IKS (BIKK657)
IA 2 - QB Answers

1. What is IKS. (5m)

☐ **Super Simple Explanation (Real-life Style):**

Imagine India as a huge, old library that holds wisdom from **thousands of years**—from Ayurveda to Yoga, from temple architecture to zero in math.

This **Indian Knowledge System (IKS)** is like a **Google of ancient times**—covering health, science, art, life skills, and much more.

☐ **IKS Definition – Key Points to Write in Exam (5 Marks Format):**

1. Definition:

- Indian Knowledge System (IKS) refers to the **traditional and ancient knowledge** developed and preserved in India over **thousands of years**.

2. Areas of Knowledge in IKS:

- Covers **mathematics, science, medicine, technology, astronomy, and architecture**.
- Includes **philosophy, literature, languages, arts, music, yoga, and social customs**.

3. Importance of IKS:

- Represents the **cultural and intellectual heritage** of India.
- Shows how ancient Indians had knowledge systems similar to or even ahead of modern science.

4. Passed through generations:

- Preserved through **oral traditions, manuscripts, scriptures, and community practices**.

5. Modern relevance:

- Useful in fields like **sustainable living, wellness (Ayurveda/Yoga), natural farming, and ethical technology development**.

☐ **Quick Revision Table:**

Aspect	Key Info
What is IKS?	Ancient & traditional Indian knowledge system
Time span	Over 1000s of years
Covers	Science, math, medicine, art, tech, culture
Examples	Ayurveda, Yoga, Sanskrit, Zero, Vastu
Importance	Cultural heritage + modern relevance

2. Do you think ancient knowledge is useful for a society? Support your answer with suitable arguments. (10m)

☐ **Super Simple Explanation (Real-life Style):**

Imagine if your grandma's home remedies could help millions, or if farmers used old farming tricks that save soil and water. That's what ancient knowledge does — **helps modern society live smarter, healthier, and more sustainably**. So yes, **ancient knowledge is very useful for society today**.

☐ **Do You Think Ancient Knowledge is Useful for Society? (10 Marks Answer)**

☐ **Yes, ancient knowledge is very useful. Here's how:**

1. *Medicine & Healing Practices*

- **Ayurveda:** Ancient Indian system of natural healing still used worldwide.
- **Yoga & Meditation:** Now accepted by science for stress relief, mental health, and immunity.
- **Herbal Medicine:** Neem, Tulsi, Ashwagandha used in modern herbal products.

2. *Architecture & Urban Planning*

- **Vastu Shastra:** Ancient Indian principles for healthy home design.
- **Sustainable Construction:** Ancient use of local materials (mud, stone) reduces carbon footprint.
- **Example:** Step-wells of Gujarat used for water harvesting — now inspiring modern water storage.

3. *Sustainable Agriculture*

- **Crop Rotation & Mixed Farming:** Traditional methods to maintain soil fertility.
- **Natural Pest Control:** Neem-based pesticides and cow-based farming gaining attention again.
- **Example:** Zero-budget natural farming is based on old Indian practices.

4. *Philosophy & Ethics*

- **Bhagavad Gita & Stoicism:** Teach life values, self-control, mental peace.
- **Use Today:** CEOs, entrepreneurs, and leaders follow ancient philosophy for decision making.

5. *Environmental Practices*

- **Agroforestry:** Mixing trees with crops to protect biodiversity — practiced by tribes.
- **Forest Management:** Indigenous wisdom helps in modern forest conservation programs.

6. *Economic Value*

- **Ayurvedic Products Market:** India exports herbal and natural wellness products.
- **Cultural Tourism:** Temples, yoga centers, ancient cities attract global tourists.
- **Example:** Ancient pigeon pea extract used for natural coloring — opens new market.

□ **Summary Table:**

Area	Ancient Knowledge Used For...
Medicine	Ayurveda, Yoga, herbal healing
Architecture	Eco-friendly building, water conservation
Agriculture	Organic farming, soil fertility, pest control
Philosophy & Ethics	Stress management, leadership, personal growth
Environment	Biodiversity, forest and water conservation
Economy	Health products, tourism, traditional farming techniques

□ **Final Line for Conclusion:**

Ancient knowledge is **not outdated** — it's a **valuable asset** for solving modern problems in a natural, sustainable, and meaningful way.

3. What is Vedic Corpus (5m)

□ Super Simple Explanation (RealLife Style):

Think of the **Vedic Corpus** like a **library of ancient Indian books**—written thousands of years ago. These texts are the foundation of Indian knowledge, covering **rituals, science, philosophy, and spirituality**. It's like the “**manual**” of ancient Indian wisdom.

□ What is Vedic Corpus? – 5 Marks Answer in Simple Points

1. Definition:

- The **Vedic Corpus** is a **collection of ancient sacred Indian texts** written in **Sanskrit**.
- It forms the base of **Indian Knowledge System (IKS)** and **Hindu philosophy**.

2. Four Main Parts of the Vedic Corpus:

Text	Purpose / Content
Vedas	Oldest scriptures; includes hymns, chants, rituals
Brahmanas	Ritual instructions and meanings of Vedic hymns
Aranyakas	Forest treatises; transition from ritual to philosophy
Upanishads	Deep spiritual and philosophical ideas (soul, God, life)

3. Vedas are Four:

- **Rigveda** – hymns and praises of nature gods
- **Samaveda** – melodies and chants
- **Yajurveda** – rituals and procedures
- **Atharvaveda** – daily life knowledge (medicine, magic, etc.)

4. Time Period:

- Around **1500 BCE to 500 BCE** — over **3000 years old!**

5. Importance:

- Foundation of **Indian philosophy, science, yoga, Ayurveda, and ethics**.
- Influences modern **education, meditation, environment, and moral values**.

□ Quick Revision Table:

Aspect	Info
Meaning	Collection of ancient Vedic texts
Language	Sanskrit
Parts	Vedas, Brahmanas, Aranyakas, Upanishads
Use	Rituals, philosophy, knowledge base
Importance	Core of Indian Knowledge System

4. What is the Meaning of Samhitas? (5 Marks Answer)

□ Super Simple Explanation (RealLife Style):

Imagine the **Samhitas** as the **school textbooks** of ancient India — full of mantras (verses), chants, and hymns. Just like today we start learning from ABCs in school, in ancient Vedic times, people started their learning with Samhitas during the **Brahmacharya phase** (learning stage).

1. Definition:

- **Samhitā** means "**Compilation of Knowledge**".
 - It is the **collection of mantras (hymns and chants)** in **Vedic Sanskrit**.
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2. Part of the Vedas:

- Each **Veda** has a **Samhita section** as its core.
 - **Rigveda Samhita**: hymns to gods (Indra, Agni, etc.)
 - **Samaveda Samhita**: musical chants
 - **Yajurveda Samhita**: ritual formulas
 - **Atharvaveda Samhita**: daily life, healing mantras
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3. Purpose:

- Used in **religious rituals, sacrifices, and spiritual practices**.
 - First stage of learning in **Vedic education system**.
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4. Taught During:

- **Brahmacharya Ashrama** – the **student phase** of life.
 - Students learned **Samhitas by heart (oral tradition)** from early childhood (called *galthuthi*).
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5. Importance:

- Formed the **base of spiritual and ritual knowledge**.
 - Kept alive through **oral tradition** for thousands of years.
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☐ Quick Revision Table:

Aspect	Info
Meaning	Compilation of mantras (hymns, chants)
Found in	Core section of each Veda
Use	Rituals, prayers, spiritual learning
Learning Phase	Brahmacharya (student life)
Importance	Foundation of Vedic education and spiritual life

6. How many Vedangs are there? Name them.

☐ Super Simple Explanation (RealLife Style):

Think of **Vedangs** as the **tools or subjects** needed to **understand and use the Vedas properly**—just like you need grammar and maths to write and solve problems in modern subjects.

☐ How many Vedangas are there? Name them. (5 Marks Answer)

1. Total Vedangas:

- There are **6 Vedangas** in total.
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2. Meaning of Vedanga:

- **Veda** = Knowledge, **Anga** = Limb
→ **Vedanga** = "**Limb of the Vedas**"
 - These are like the **supporting subjects** to understand, teach, and use the Vedas correctly.
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3. Names of the 6 Vedangas:

No.	Vedanga	Meaning / Purpose
1	Shiksha	Phonetics and pronunciation of Vedic chants
2	Vyakarana	Grammar (rules of Sanskrit language)
3	Nirukta	Etymology (meaning of difficult Vedic words)
4	Chandas	Meter (rhythm and structure of verses)
5	Jyotisha	Astrology and astronomy (timing of rituals)
6	Kalpa	Ritual instructions and procedures

4. Importance:

- Vedangas ensure that **Vedic texts are recited, understood, and practiced** correctly.
- Act like a **foundation for Vedic studies**, just like basic subjects help in higher education.

□ Quick Recap Table:

Vedanga	Use in Vedic Study
Shiksha	Pronunciation
Vyakarana	Grammar
Nirukta	Word meanings
Chandas	Verse structure (poetic meter)
Jyotisha	Timing rituals based on astronomy
Kalpa	Ritual rules and practices

7. Discuss Traditional knowledge vis-à-vis Indigenous knowledge

□ Super Simple Explanation (Real-life Style):

Imagine **Traditional Knowledge** like the general **grandma's knowledge** that's passed in Indian villages—covering everything from farming to home remedies.

Now imagine **Indigenous Knowledge** as a **special branch** of that knowledge, deeply rooted in **specific tribal or native communities**—like how forest tribes know exact herbs, animals, and forest behavior.

Aspect	Traditional Knowledge (TK)	Indigenous Knowledge (IK)
Definition	Knowledge passed through generations in any society.	Knowledge specific to tribal or native communities .
Source	Comes from cultural practices, daily life, and experiences	Comes from close relationship with land, nature, and ecosystem
Scope	Broad – found in many communities (rural, urban)	Narrower – limited to indigenous peoples
Examples	Ayurveda, yoga, folk arts, farming, home remedies	Forest herbs use by Adivasis, sacred groves, hunting techniques
Connection	Related to traditions and lifestyles	Related to identity and survival of Indigenous tribes
Legal Recognition	Covered under national heritage laws in many countries	Needs special protection under Indigenous rights (e.g. UNDRIP)

□ Key Points Summary:

- **Traditional Knowledge** = General ancient/local knowledge from any culture.
- **Indigenous Knowledge** = A type of **Traditional Knowledge** tied to **Indigenous/tribal people**.
- **Both are valuable** for sustainable development, biodiversity, and environmental conservation.

□ Quick Example Comparison:

Knowledge Type	Example
Traditional Knowledge	Using turmeric for wounds, yoga, Panchang
Indigenous Knowledge	A tribal community using forest herbs to cure snakebites

8. What are the 4 Vedas of Indian knowledge system?

□ Super Simple Explanation (Real-life Style):

Imagine the **Vedas** as four **textbooks** written thousands of years ago, each covering a different **subject of life** — like a combo of science, prayers, music, and practical rituals.

□ What are the 4 Vedas of Indian Knowledge System? (5 Marks)

- There are **4 main Vedas** in Indian Knowledge System:
 1. **Rigveda**
 2. **Samaveda**
 3. **Yajurveda**
 4. **Atharvaveda**

□ Vedas and Their Focus:

Veda	Key Focus	Content Highlights
Rigveda	Oldest, Hymns and praises to gods	1028 hymns, mainly to Agni, Indra, Varuna
Samaveda	Melodic chants and music	Chants from Rigveda set to tunes for rituals
Yajurveda	Rituals and Sacrifices	Instructions for priests during ceremonies
Atharvaveda	Daily life, healing, and magic	Spells, healing rituals, house protection, etc.

□ Key Points:

- **"Veda"** means **knowledge** in Sanskrit.
- Together, they are **the foundation of Indian scriptures**.
- They include **spiritual, scientific, social, and cultural wisdom**.
- Rigveda is considered the **oldest Veda**.

□ Quick Revision Tip:

"R-S-Y-A" → **Rig, Sama, Yajur, Atharva**

(Think: **Recite, Sing, Yagna, Ayurveda**-style magic)

9. What are the 18 Vidyas in Indian knowledge system?

□ Super Simple Explanation (Real-life Style):

Imagine you're in an **ancient Indian university**. You don't just study one subject—you study **18 core disciplines** called **"Vidyas"** that cover **everything** from language, science, music, health, war, and rituals. These made a student "fully educated" in Indian tradition.

□ **What are the 18 Vidyas in Indian Knowledge System? (5 Marks)**

The 18 Vidyas are grouped into **3 categories**:

□ **1. The 4 Vedas (Main Scriptures):**

1. **Rigveda** – Hymns and prayers
2. **Samaveda** – Music and chants
3. **Yajurveda** – Rituals and ceremonies
4. **Atharvaveda** – Daily life, healing, magic

□ **2. 4 Upa-Vedas (Subsidiary Sciences):**

5. **Ayurveda** – Medicine and healing
6. **Dhanurveda** – Military science / warfare
7. **Gandharvaveda** – Music and performing arts
8. **Sthapatya Veda (Silpa)** – Architecture and sculpture

□ **3. 10 Other Disciplines (Purana + Darshanas + Vedangas):**

Sl.	Discipline	Meaning / Use
9.	Purana	Mythology and ancient stories
10.	Nyaya	Logic and reasoning
11.	Mimamsa	Ritual interpretation
12.	Dharmashastra	Law and ethical duties
13.	Shiksha	Phonetics (pronunciation of sounds)
14.	Vyakarana	Grammar
15.	Chhanda	Poetic metre
16.	Jyotisha	Astronomy and astrology
17.	Kalpa	Ritual procedures
18.	Nirukta	Etymology (meaning and roots of words)

□ **Key Point to Remember:**

- These 18 Vidyas covered **everything needed for a full education**—science, language, ethics, law, medicine, music, and rituals.
- They were taught in **Gurukulas** and considered essential to being a wise human in Indian tradition.

□ **Quick Mnemonic:**

“4 + 4 + 10 = 18 Vidyas”

11. Discuss the Key aspects of traditional astronomical and astrological knowledge:

□ **Super Simple Explanation (Real-life Style):**

Think of ancient India as a **sky-watching genius** who not only observed stars and planets but also connected this knowledge to human life — like how your phone’s calendar tells you important dates, ancient Indians used astronomy and astrology to decide festivals, rituals, and even life events.

□ **Key Aspects of Traditional Astronomical and Astrological Knowledge (10 Marks)**

1. **Vedic Era Astronomy:**

- The **Rigveda** has early references to stars, planets, and the sky.

- **Vedanga Jyotisha** is a Vedic text describing the movement of the Sun, Moon, and constellations (nakshatras).
 - Used a **lunisolar calendar** (combining moon and sun cycles) mainly for rituals and festivals.
2. **Indian Astronomy Achievements:**
- Developed accurate calculations for **planetary motions, eclipses**, and even **Earth's circumference**.
 - The **Shunga period (2nd century BCE)** was a golden age for astronomy studies.
3. **Vedic Astrology (Jyotisha):**
- Astrology system connected with Vedas.
 - Uses **12 zodiac signs, sidereal zodiac system** (stars fixed), and planetary positions.
 - Birth charts (horoscopes) are created to interpret personality and future.
4. **Important Texts:**
- Key scriptures: **Parashara Hora Shastra, Saravali** — guidebooks for astrology.
5. **Hindu Calendar:**
- A **lunisolar calendar** balancing moon months for festivals and solar months for daily use.
 - Guides timing for religious and social events.
6. **Cultural Exchange:**
- Knowledge shared and influenced by Babylonian, Greek, and Persian astronomers during the Vedic period, enriching Indian astronomy.

□ Key Points Summary:

Aspect	Description
Vedic Era Astronomy	Early knowledge of sun, moon, stars for rituals
Indian Astronomy	Advanced calculations on planets, eclipses, Earth size
Vedic Astrology (Jyotisha)	Birth charts based on zodiac and planets
Important Texts	Parashara Hora Shastra, Saravali
Calendar	Lunisolar calendar for festivals and daily life
Exchange of Ideas	Interaction with Babylonian, Greek, Persian astronomy

□ Quick Tip:

Ancient India's astronomy wasn't just about stars but also **life's timing and rituals** — a blend of science and spirituality.

13. Explain traditional knowledge in town planning and architecture

Ans:

□ Simple Explanation (Real-life vibe):

Think of traditional town planning and architecture like your grandma's old, smart way of building a house that stays cool in summer, uses local stuff, saves water, and brings the community together — all without modern machines or AC!

□ Traditional Knowledge in Town Planning and Architecture (10 marks)

1. Climate-responsive design:

- Buildings use thick walls, courtyards, and jali (lattice) windows to keep houses cool naturally.

- This reduces the need for electricity or air conditioning.
- 2. **Sustainable materials:**
 - Use of local materials like stone, clay, timber, and lime.
 - Environment-friendly and cost-effective.
- 3. **Water conservation:**
 - Techniques like **stepwells (baolis)** and **johads** (small ponds) store rainwater.
 - Ancient cities like **Harappa** had smart drainage and water systems.
- 4. **Community-based planning:**
 - Towns planned with community involvement, reflecting local culture and needs.
- 5. **Spatial harmony (Vastu Shastra):**
 - Aligning buildings with nature and cosmic principles to create balanced spaces.
- 6. **Preserving cultural heritage:**
 - Incorporating traditional designs keeps cultural identity alive.
- 7. **Disaster resilience:**
 - Traditional methods help buildings withstand earthquakes, floods, and storms.
- 8. **Social cohesion:**
 - Public spaces designed to encourage community interaction.

Examples from India:

- **Harappan Civilization:** Grid-like streets, advanced drainage.
- **Vastu Shastra:** Guidelines for site and building design based on nature.
- **Jaisalmer Fort:** Uses local sandstone, keeps interiors cool.
- **Nalukettu homes in Kerala:** Central courtyard for natural air flow and light.

Relevance Today:

- Helps **sustainable development** with low resource use.
- Useful for **climate change adaptation** like managing heat and water scarcity.
- Builds **community resilience** through social bonding and shared knowledge.
- Promotes **cultural tourism** boosting local economy.

□ Summary Table:

Key Aspect	Description
Climate-responsive	Natural cooling with walls, courtyards
Sustainable Materials	Local stone, clay, timber
Water Conservation	Stepwells, johads, Harappan drainage system
Community Planning	Local involvement, culture-focused
Vastu Shastra	Aligning buildings with nature and cosmos
Cultural Heritage	Preserving traditional designs
Disaster Resilience	Earthquake and flood resistant methods
Social Cohesion	Public spaces for community bonding

□ Quick Tip:

Traditional knowledge is like an old, proven **manual for smart building** that works with nature, saves resources, and brings people closer.

14. Explain traditional knowledge in health and wellness.

□ Simple Explanation (Real-life vibe):

Traditional health knowledge is like the ancient family recipe for staying healthy—not just by curing sickness, but by balancing your body, mind, and soul naturally using herbs, diet, and lifestyle, passed down for generations.

□ Traditional Knowledge in Health and Wellness (10 marks)

- 1. **Holistic Approach:**
 - Health is seen as full balance: physical, mental, emotional, and spiritual well-being.
 - Not just treating symptoms, but whole-person care.
- 2. **Natural Remedies:**
 - Use of herbs, plants, and natural ingredients to cure diseases and maintain health.
 - Diet and lifestyle changes are important.
- 3. **Cultural Significance:**
 - Health practices are connected deeply to cultural traditions and beliefs.
 - These practices help keep communities united.
- 4. **Sustainability:**
 - Using resources responsibly without harming the environment.
 - Promotes harmony between humans and nature.
- 5. **Empirical Evidence:**
 - These practices are tested through centuries of observation and experience.
 - Many remedies have proven effectiveness.
- 6. **Examples:**
 - Ayurveda, Siddha, Unani from India.
 - Traditional Chinese Medicine (TCM), acupuncture, herbal cures.
- 7. **Modern Medicine Integration:**
 - Today, traditional practices are being combined with modern medicine for better care.

Benefits of Traditional Knowledge in Health:

- **Accessible & Affordable Care:**
 - Especially useful for people in remote or poor areas where modern hospitals are scarce.
- **Cultural Preservation:**
 - Helps keep old traditions and identities alive.
- **Prevention Focus:**
 - Emphasis on healthy diet, exercise, and lifestyle to avoid diseases.
- **Effective Treatment:**
 - Useful for many chronic and common diseases.
- **Improved Overall Well-being:**
 - Promotes harmony and peace of body, mind, and spirit.

□ Summary Table:

Aspect	Description
Holistic Health	Balance of body, mind, emotions, spirit
Natural Remedies	Herbs, diet, lifestyle changes
Cultural Role	Linked to community values & identity
Sustainability	Responsible use of natural resources

Aspect	Description
Empirical Evidence	Tested through centuries of practice
Examples	Ayurveda, Siddha, Unani, TCM
Modern Integration	Combined with modern healthcare
Benefits	Affordable, preventive, effective care

❑ **Quick Tip:**

Traditional health knowledge is like nature's own medicine cabinet, focused on keeping you balanced and well through simple, natural, and time-tested methods.

15. List the United Nations Sustainable development goals

❑ **Simple Explanation:**

The United Nations created 17 big goals in 2015 to make the world a better place by 2030. These goals fight poverty, hunger, and inequality while protecting the planet and improving health, education, and peace for everyone.

❑ **The 17 United Nations Sustainable Development Goals (SDGs):**

1. No Poverty
2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice, and Strong Institutions
17. Partnerships for the Goals

❑ **Quick Tip:**

Remember the SDGs as a global checklist to end poverty and hunger, protect the environment, and ensure peace and prosperity for all.