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**RV College of Engineering**

(An Autonomous Institution Affiliated to VTU)

R V Vidyanikethan Post  
Mysuru Road Bengaluru - 560 059

**VII Semester B.E. Regular Examination February 2026**

Common to all Programs

**Indian Knowledge System**

Time : 1.5 Hours

Maximum Marks : 60

**Instructions to the students**

1. Answer all questions from Part A.
2. Encircle the correct answer in OMR sheet only.

**Part A**

Question No	Question	M	CO	BT
1.1	The motto **“Satyam vada, dharmam chara”** comes from: a) Taittiriya Upanishad b) Bhagavad Gita c) Arthashastra d) Rigveda	01	1	1
1.2	The term *Indian Knowledge System (IKS)* refers to: a) Western interpretations of Indian culture b) Indigenous systems of knowledge evolved in India over millennia c) Only Vedic scriptures d) Modern Indian scientific research	01	1	1
1.3	In Indian Knowledge Systems, <i>Pratyakṣa</i> refers to: a) Logical inference b) Scriptural testimony c) Direct perception d) Ethical conduct	01	1	1
1.4	Which combination correctly represents kinds of traditional knowledge? a) Ritualistic and industrial b) Ecological, technical, and social c) Commercial and digital d) Political and military	01	2	1
1.5	Western education in India primarily emphasized: a) Oral transmission b) Integrated learning c) Discipline-centric knowledge d) Guru–Śiṣya system	01	1	1
1.6	*Takshashila* and *Nalanda* were: a) Vedic rituals b) Ancient centers of higher learning c) Holy temples d) Trade centers	01	1	1
1.7	Which text belongs to the Vedic Corpus? a) Purāṇas b) Upaniṣads c) Smṛtiś d) Itihāsas	01	1	1
1.8	The concept **“Sa Vidya Ya Vimuktaye”** means: a) Knowledge is wealth b) Knowledge leads to liberation c) Education gives power d) Learning is endless	01	1	1
1.9	Indian philosophical systems differ mainly because they: a) Reject debate b) Share identical metaphysics c) Encourage multiple viewpoints d) Focus only on rituals	01	2	1

1.10	The language predominantly used for transmitting knowledge in ancient India was: a) Pali      b) Tamil      c) Sanskrit      d) Prakrit	01    1    2
1.11	The traditional Indian system of education was centered around: a) Gurukula system      b) British schooling system      c) Online learning      d) Modern universities	01    1    2
1.12	The primary mode of learning in Gurukulas was: a) Debate and memorization (*Shravana*, *Manana*, *Nididhyasana*) b) Written examinations      c) Multiple-choice tests      d) Internet-based study	01    1    2
1.13	Piṅgala's binary ideas emerged primarily from his study of: a) Astronomy      b) Algebra      c) Geometry      d) Chandas	01    2    1
1.14	How many sūtras are there in Pāṇini's Aṣṭādhyāyī? a) 3000      b) 3500      c) 3983      d) 4200	01    2    1
1.15	In Sanskrit grammar, suffixes used for noun declensions are known as: a) Tiṁ      b) Dhātu      c) SuP      d) Vārtika	01    2    2
1.16	In Sanskrit grammar, the basic element from which words are generated is called: a) Pada      b) Dhātu / Prātipadika      c) Vākyā      d) Samāsa	01    2    2
1.17	In Sanskrit phonetics, Sthāna refers to: a) Effort of pronunciation      b) Tone of voice      c) Place of articulation      d) Meaning of sound	01    2    2
1.18	The Bhūtasāṅkhya system represents numbers using: a) Only digits      b) Alphabets with place value      c) Objects, beings, or concepts      d) Binary notation	01    2    2
1.19	In the Kaṭapayādi system, numbers are encoded mainly to: a) Encrypt secret messages      b) Perform calculations faster c) Aid memorization through meaningful words      d) Replace the decimal system	01    2    2
1.20	Which Pramāṇa involves understanding a new object through similarity with a known one? a) Pratyakṣa      b) Anumāna      c) Upamāna      d) Śabda	01    2    1
1.21	Which of the following is a <i>means of valid knowledge (Pramāṇa)?</i> a) Prameya      b) Saṃśaya      c) Pratyakṣa      d) Saṃskāra	01    2    1
1.22	In the Nyāya system, Anumāna (inference) is structured using how many logical steps? a) Three      b) Four      c) Five      d) Seven	01    2    1
1.23	The arrangement of Piṅgala's Ganas corresponds in modern computer science to which concept? a) Finite automaton      b) Binary tree sequence      d) Huffman coding      c) De Bruijn	01    2    2
1.24	In Piṅgala's system, Laghu and Guru syllables correspond respectively to: a) 0 and 1      b) 1 and 0      c) 1 and 2      d) Short and long meters only	01    2    1
1.25	According to Vedāṅga Śāstras, mathematics is compared to which of the following? a) Roots of a tree      b) Crown of a king peacock      d) Wings of a bird      c) Crest on the head of a	01    3    1
1.26	Which system uses consonants to represent numerical values? a) Bhūtasāṅkhya system      b) Binary system      c) Kaṭapayādi system Decimal system      D.	01    3    1

1.27	Which Indian mathematician formulated rules for zero and negative numbers?	01	3	1
	a) Āryabhaṭa    b) Brahmagupta    c) Bhāskara I    d) Madhava			
1.28	The Bhūtasaṅkhya system represents numbers using:	01	3	2
	a) Only digits    b) Algebraic symbols    c) Names of objects and concepts d) Roman numerals			
	Which text is considered the primary source of Vedic astronomy?			
1.29	a) Sūrya Siddhānta    b) Āryabhaṭīya    c) Vedāṅga Jyotiṣa d) Brahmaśaṅkhaṭasiddhānta	01	1	1
1.30	The Nakṣatra system in Indian astronomy consists of :	01	3	1
	a) 12 constellations    b) 24 constellations c) 27 lunar mansions    d) 30 lunar mansions			
1.31	The concept that Earth rotates on its axis causing day and night was proposed by:	01	3	1
	a) Varāhamihira    b) Brahmagupta    c) Āryabhaṭa    d) Madhava			
1.32	The Panchāṅga consists of how many elements?	01	3	1
	a) Three    b) Four    c) Five    d) Seven			
1.33	Which of the following is NOT a limb of the Panchāṅga?	01	3	2
	a) Tithi    b) Vara    c) Yoga    d) Rāśi			
1.34	In the lost-wax process, the wax model is primarily made from:	01	3	1
	a) Resin    b) Tree gum    c) Beeswax    d) Lac			
1.35	The yantra used to provide uniform heating using sand is:	01	3	1
	a) Dola Yantra    b) Patana Yantra    c) Valuka Yantra    d) Dhupa Yantra			
1.36	Kapha Doṣa is dominantly composed of which Mahābhūtas?	01	3	2
	a) Air and Ether    b) Fire and Water    c) Water and Earth d) Fire and Air			
1.37	Improving sleep and nutrition primarily enhances which component first?	01	3	2
	a) Consciousness    b) Intellect    c) Body    d) Sattva			
1.38	Kapha Doṣa, when imbalanced, is most closely associated with which Guṇa?	01	3	2
	a) Rajas    b) Tamas    c) Sattva    d) None			
1.39	Meditation and ethical living primarily help in increasing:	01	3	2
	a) Rajas    b) Tamas    c) Kapha    d) Sattva			
1.40	Which sequence correctly represents information flow in BMI-C?	01	3	2
	a) Body → Mind → Intellect    b) Mind → Body → Consciousness c) Senses → Mind → Intellect → Action d) Consciousness → Mind → Body			
1.41	Architecture (Vāstu Vidyā) is classified under which category of Kalas?	01	1	2
	a) Performing arts    b) Nature sciences c) Engineering and craftsmanship    d) Games and sports			
1.42	The classical list of 64 Kalas represents:	01	1	2
	a) Religious rituals    b) Military sciences    c) Holistic life skills d) Only fine arts			
1.43	Knowledge of regional languages belongs to which Kala group?	01	1	2
	a) Performing arts    b) Literary and intellectual arts c) Domestic skills    d) Martial arts			

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### Indian Knowledge System

**Time : 1.5 Hours**

**Maximum Marks : 40**

#### Instructions to the students

1. Answer FIVE full questions in the answer booklet given.
2. Answer any one full question from 1 and 2, 3 and 4, 5 and 6, 7 and 8, 9 and 10.

#### Unit-1

Question No	Question	M	CO	BT
1a	Explain any four differences between vedas and vedangas	04	3	3
1b	Discuss the historicity of Indian Knowledge Systems.	04	1	1

#### OR

2a	What are Vedas ? List the four vedas	04	2	2
2b	List four major text types or four portions of Vedas. Explain each briefly	04	2	3

#### Unit-2

Question No	Question	M	CO	BT
3a	Discuss why Pāṇini is often regarded as the “father of linguistics” from both traditional and modern perspectives.	04	2	2
3b	Explain the development of the <i>decimal place-value system</i> in ancient India and its global significance.	04	2	2

#### OR

4a	Explain <i>Anumāna Pramāṇa</i> with reference to the Pañca-Avayava (five-step inference) structure.	04	2	3
4b	Describe how Pingala's arrangement of Ganas relates to the modern concept of the <i>de Bruijn sequence</i> .	04	2	5

### Unit-3

<b>Question No</b>	<b>Question</b>	<b>M</b>	<b>CO</b>	<b>BT</b>
5a	Briefly discuss the contributions of any four ancient Indian mathematicians.	04	3	2
5b	Describe the art of perfume making in ancient India and its cultural significance.	04	3	2
<b>OR</b>				
6a	Explain the concept of Panchāṅga and its five elements.	04	3	2
6b	Describe the metallurgical knowledge reflected in the Delhi Iron Pillar.	04	3	1

### Unit-4

<b>Question No</b>	<b>Question</b>	<b>M</b>	<b>CO</b>	<b>BT</b>
7a	How does Pitta Doṣa influence physiological activities?	04	3	2
7b	Differentiate between Nāgara and Drāviḍa temple styles.	04	3	3
<b>OR</b>				
8a	Apply the concept of 64 Kalas to modern holistic education	04	3	3
8b	How can Vāstu Śāstra principles be applied in contemporary building design?	04	3	3

### Unit-5

<b>Question No</b>	<b>Question</b>	<b>M</b>	<b>CO</b>	<b>BT</b>
9a	Discuss the role of advisors in Rāma's administration.	04	1	3
9b	Name one SDG aligned with Ayurvedic practices.	04	2	1
<b>OR</b>				
10a	Discuss the role of TKDL in safeguarding traditional knowledge.	04	3	3
10b	What are the sources of income for a state as per Arthashastra?	04	4	2