

R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT
(An Autonomous College U/s UGC Act 1956)

IMSC-IT. SEMESTER-I, SEMESTER END EXAMINATION - WINTER 2024

Subject Code: 1BS107	Date: 20-12-2024
Subject Name: INDIAN KNOWLEDGE SYSTEM	
Time: 11:00 AM to 12:00 PM	Total Marks: 25

Instructions

1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. The figures to the right of each question indicate full marks, make suitable assumptions wherever necessary.
3. The question paper consists of 25 questions, each carrying 1 mark. Attempt all questions. There is no negative marking.
4. All answers must be marked on the OMR sheet only, matching question numbers, and leave extra fields blank.
5. BL - Bloom's Taxonomy Levels (R-Remember, U-Understanding, A –Application, N –Analyze, E – Evaluate, C -Create), CO - Course Outcomes.

Q. No.	Objective-Type Questions	Marks	BL	CO
1.	Indian Knowledge Systems (IKS) primarily draw from which ancient texts and traditions? <p>A. Greek Philosophical Texts B. Vedic Texts and Scriptures C. Modern Scientific Research D. Medieval European Manuscripts</p>	1	R	1
2.	What is the primary goal of "Yoga" as part of Indian Knowledge Systems? <p>A. To improve physical fitness B. To achieve spiritual growth and self-realization C. To learn meditation techniques for mental relaxation D. To increase strength and endurance</p>	1	R	1
3.	The concept of "Karma" in Indian Knowledge Systems relates to: <p>A. The natural laws governing the universe B. The consequences of a person's actions and their effect on the future C. The practice of ritual sacrifices D. A person's economic wealth</p>	1	U	1
4.	The term "Vidyasthana" in Chaturdasa Vidyasthana refers to: <p>A. A temple for learning B. A place where knowledge is taught C. A sacred river D. A philosophical text</p>	1	R	1
5.	The concept of "Dharma" in Indian Knowledge Systems refers to: <p>A. The pursuit of material wealth B. A set of moral and ethical principles C. Scientific theories of the universe D. Political governance</p>	1	U	1

6. Which of the following is NOT one of the four Vedas? 1 R 2
- A. Rigveda B. Samaveda
 C. Atharvaveda D. Bhagavad Gita
7. Which of the following is the oldest Veda? 1 R 2
- A. Rigveda B. Samaveda
 C. Atharvaveda D. Bhagavad Gita
8. Which of the following Rigvedic hymns is dedicated to the cosmic order and the creation of the universe? 1 R 2
- A. Purusha Sukta B. Nasadiya Sukta
 C. Gayatri Mantra D. Soma Sukta
9. The Atharvaveda has a close connection with which of the following practices? 1 R 2
- A. Yoga and meditation B. Medicine and healing
 C. Music and dance D. Warfare and statecraft
10. According to the Vedas, the pursuit of knowledge (Jnana) leads to: 1 U 2
- A. Material wealth B. Personal fame
 C. Realization of the unity of Atman (self) and Brahman (universe) D. Power and control over others
11. What is the main purpose of the Puranas? 1 U 3
- A. To provide legal codes B. To narrate the history of kings
 C. To preserve mythology and cosmology D. To teach philosophy
12. The Narada Purana is known for its emphasis on: 1 R 3
- A. Mythological narratives B. Rituals and religious practices
 C. Music and arts D. Astronomical concepts
13. The character of Ravana serves to illustrate the dangers of: 1 U 3
- A. Humility B. Knowledge
 C. Pride and ego D. Compassion
14. Which of the following characters represents the ideal of friendship and loyalty in the Ramayana? 1 U 3
- A. Sita B. Hanuman
 C. Bharat D. Vibhishana

15. Which character is known for his unwavering loyalty to the Kauravas? 1 U 3
- A. Yudhishtira B. Arjuna
C. Drona D. Bhishma
16. The unit "Kroshta" was used in ancient India to measure: 1 R 4
- A. Distance B. Weight
C. Time D. Volume
17. The first documented reference to the use of negative numbers in India appears in the works of: 1 R 4
- A. Brahmagupta B. Aryabhata
C. Bhaskara D. Varahamihira
18. The concept of "zero" in the Indian number system was first documented by: 1 R 4
- A. Bhaskaracharya B. Brahmagupta
C. Aryabhata D. Varahamihira
19. Which of the following words in the Bhūta-Saṃkhyā system is used to represent the number one thousand? 1 R 4
- A. Sahasra B. Laksha
C. Dasa D. Bhūta
20. Who is considered the earliest known figure to describe the binary numeral system? 1 R 4
- A. Pythagoras B. Piṅgala
C. Aryabhata D. Brahmagupta
21. The Budhayan theorem is used to relate the sides of which type of triangle? 1 R 5
- A. Equilateral triangle B. Right-angled triangle
C. Scalene triangle D. Isosceles triangle
22. Who gives the formula $\delta_{n+1} = \delta_n - \left(\frac{R_n}{R_1}\right)(\delta_1 - \delta_2)$ which is same as the relation 1 R 5
- $$2 \sin nx - \sin[(n + 1)x] - \sin[(n - 1)x]$$
- $$= \left(\frac{\sin nx}{\sin x}\right)[2 \sin x - \sin 2x]$$
- For finding *R sine* differences?
- A. Aryabhata B. Brahmagupta
C. Nilkantha D. Varahamihira

23. In ancient Indian algebra, the word "mu" or "ka" for 'muḷa' is referred as: **1 R 5**
- A. Addition **B. Subtraction**
C. Multiplication **D. Root**
24. The following verse **1 R 5**
अन्त्यपदस्य वर्गं कृत्वा द्विगुणं तदेव चान्त्यपदम् ।
शेषपदैराहन्यात् उत्सार्योत्सार्यं वर्गविधौ ॥
explain the algorithm for finding:
- A. Square root **B. Square**
C. Cube **D. Cube root**
25. The geometric principle described in the Sulba Sutras for constructing squares and rectangles is based on which mathematical theorem? **1 R 5**
- A. Bhaskara's Theorem **B. The Pythagorean theorem**
C. Archimedes' principle **D. Euler's formula**
