

**FIRST SEMESTER U.G. DEGREE EXAMINATION  
JANUARY 2014**

(UG-CCSS)

Common Course – Sanskrit

(B.Sc. Alternate Pattern)

SK 1A 07 (03) – ANCIENT SCIENCE : SUBHASITAS AND GRAMMAR

(2012 and earlier Admissions)

Time : Three Hours

Maximum : 30 Weightage

*Answers may be written **either** in Sanskrit **or** in English **or** in Malayalam.*

*In writing Sanskrit, Devanagari script should be used.*

I. Choose the correct answer from the bracket :

Answer any *one* of the parts – For students of Core courses related to A – Chemistry, B – Physics, C – Biology and D – Mathematics.

**Part A**

1. Who is the author of Br̥hatsamhitā? (Varāhamihira, Āryabhata, Patañjali)
2. To which country, the invention of gun powder is ascribed? (China, India, Japan)
3. Who proposed atomism for the first time? (Democritus, Lambert, Gregory)
4. Who is the pioneer of Vaisheshika school of thought? (Kanada, Kapila, Gautama)

**Part B**

5. Which philosophical system put forward the Parināmavāda? (Sāṅkhya, Nyaya, Yoga)
6. Who is the founder of Sāṅkhya Philosophy? (Kapila, Gautama, Kanada)
7. What is the Tamasik aspect of Ahaṅkāra? (Bhūtadi, Prakṛti, Puruṣa)
8. Which philosophical system proposes Aśatkaryavāda? (Vaiśeṣika, Nyaya, Sāṅkhya)

**Part C**

9. Who is the author of Mātāṅgalīla? (Nilakantha, Someśvara, Durvinita)
10. By which name, the 29th chapter of Br̥hatsamhitā is known? (Kusumalātadhyāya, Vṛkṣayurveda, Samkrāmaṇaviropaṇa)
11. What is the botanical name of Plaksa? (Ficus microcarpa, Ficus religiosa, Ficus racemosa)
12. Who explains the two methods of grafting of plants? (Utpala, Varāhamihira, Kaśyapa)

**Turn over**

13. Who is the founder of theory of earth's rotation on its axis? (Āryabhaṭa, Haridatta, Paramesvara)
14. Who is the author of Pañcasiddhantika? (Varāhamihira, Sripati, Bhaskara)
15. Who is credited with the innovation of Kaṭapayādi system? (Vararuci, Kautilya, Nilakantha)
16. What digit is indicated by the word Surya, according to Bhūtasamkhya? (12, 11, 10)

17. आशा ङ गगानाम् I  
18. कुसुमस्तबक व वृत्तिर्मनस्विनः  
19. नवति 11d: शतमुखः I  
20. काय यत्त 4,0

21. जरामरणजं नयं केभां
22. लावकः दहति ?
23. गुरु । तृतीयविभक्तौ नरूप लिखत
24. मूढातोर्लिटि मध्यमपुरुषद्विवचनरूपं लिखत ।

30. Name the three Gunas according to Sankhya philosophy.
31. Give another term for Parināmavada.

32. What is the product of combination of Tanmatras?
33. What is the property of earth-atom?
34. Define the term "Photon"?

Part C

35. How many methods for elephant catching are prescribed in Mataṅgalīla? Which are they?
36. From which part of elephant, the Madajala flows?
37. Give the botanical name of Aśvattha?
38. In which season trees having undeveloped branches are to be planted according to Brhatsamhitā?
39. Mention two stars of Mrdu nature.

Part D

40. Who is the author of Vedaṅgajyotisa?
41. Who revised Parahita system?
42. Who introduced Vedic mathematics for the first time? What was the source for that?
43. Define astronomy and astrology.
44. Who is the founder of theory of earth's rotation on its axis?

Part E

(Should be answered by all)

45. रक्षन्ति पुण्यानि ■■■ कृतानि । कम्?
46. ■■■ सुकृतिनः । के?
47. लताशब्दस्य ■■■ लिखत ।
48. ऋधातोलोति प्रश्नपुरुषरूपाणि लखत ।

(9 x 1 = 9 weightage)

III. Answer any *three* of the following in a paragraph from any *one* of the parts – *either* Part A or Part **B** or Part C or Part D related to the core course :

Part A

49. Paramanuvāda.
50. Works on Siddhavaidya.
51. Arthasastra on chemistry.
52. Ayurveda and chemistry.

**Turn over**

## Part B

53. Process of evolution of matter according to Vaisesikas.
54. Ārambhavāda.
55. Satkaryavada.
56. Different ways of extracting energy from Sun.

## Part C

57. Qualities of the supervisor of elephants.
58. Preparation of Kuṇapajala.
59. Preservation of seeds.
60. Division of trees based on structure.

## Part D

61. Kaṭapayadi notation.
62. Parahita system.
63. Works of Kelallur Nīlakantha Somayaji.
64. Contribution of Saṅgamaṅgrāma Madhava.

Answer any *two* of the following (Should be answered by all) :

65. त्वमेव केषां गोचरः  
■ कार्पण्योक्तिं प्रतीक्षसे I I Explain fully.
66. वनशतं च लिखत
67. वन्दू धातुं डि पाणि लिखत

(5 x 2 = 10 weightage)

IV. Answer any *two* of the following from any *one* of the parts – *either* Part A *or* Part B *or* Part C *or* Part D related to the core course :

## Part A

68. Chemistry and Āyurvedic texts.
69. Chemistry and Indian philosophical Systems.
70. Chemistry during Tantric period.

## Part B

71. Sources of energy according to Vedic seers.
72. Vaisesikas on Process of formation.
73. Sankhya system and process of evolution.

## Part C

- 74. Treatment of plants according to the way of Āyurveda.
- 75. Indian texts on elephantology.
- 76. Indian concept of plant gardening and protection of trees.

## Part D

- 77. Basic systems and principles of Kerala astronomy.
- 78. Astronomy in Vedic and post-Vedic period.
- 79. Important works and authors of Kerala astronomy.

(2 x 4 = 8 weightage)