

THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(FYUGP)

CC24UENG3FM107(2) - UNDERSTAND KERALA: SCIENCE, CULTURE AND LITERATURE
 (English - MDC)
 (For Science Programmes)
 (2024 Admission - Regular)

Time: 1.5 Hours

Maximum : 50 Marks

Credit: 3

Part A (Short answer questions)Answer ***all*** questions. Each question carries 2 marks.

1. Which digestive disease's intestinal lesions did Mathan study using electron microscopy? [Level:2] [CO1, CO2]
2. What disorder does Dr. Jackson have, according to Ramachandran? [Level:1] [CO1, CO2]
3. Why is curiosity important for scientific temper? [Level:1] [CO1, CO2]
4. Who narrates parts of the film aavasavyuham in a mockumentary style? [Level:1] [CO1, CO2]
5. What unexpected malfunction occurs towards the film's (Android Kunjappan's) climax? [Level:1] [CO1, CO2]
6. "Agriculture, crafts, ritual—govern with equity—only science can." Why does Ayyappan see science as key to fair governance and labor? [Level:2] [CO1, CO2]
7. Who plays the role of Bhaskaran Poduval? [Level:2] [CO1, CO2]
8. Who is thattamma and what happened to her? [Level:2] [CO1, CO2]
9. What is the full form of KUDSIT? [Level:1] [CO1, CO2]
10. How long does it take for Purple Frog tadpoles to metamorphose into new frogs? [Level:2] [CO1, CO2]

(Ceiling: 16 Marks)**Part B (Paragraph questions/Problem)**Answer ***all*** questions. Each question carries 6 marks.

11. Analyze how the Agricultural, Public Health, and Cooperative Departments sustained science communication despite the Committee's closure. [Level:3] [CO3, CO4]
12. Discuss how modernization is portrayed as both triumph and loss in the poem. [Level:4] [CO3, CO4]

13. Describe the obstacles women face in their higher studies and career. [Level:4] [CO3, CO4]

14. Describe how the birth uses visual storytelling to convey its theme. [Level:4] [CO3, CO4]

15. Discuss how modern science was used by the social reform movements of kerala in the 19th century. [Level:3] [CO3, CO4]

(Ceiling: 24 Marks)

Part C (Essay questions)

Answer any **one** question. The question carries 10 marks.

16. Elaborate on Kerala's significant, though often unrecognized, contributions to both mathematics and medicine in its pre-modern era. Provide specific examples of mathematical concepts like Pi values and calculus, which were identified by Kerala mathematicians centuries before their Western counterparts. Furthermore, describe the pre-Ayurvedic or Dravidian medical tradition, identifying the communities involved (e.g., Ezhava, Velan, Vannaan, Kaniyan) and their decentralized family-based practices, and discuss how this indigenous knowledge was eventually subject to "internal colonization" into more mainstream systems, as exemplified by Itty Achudan's pivotal role in the compilation of 'Hortus Malabaricus'.

17. Discuss the origin, objectives, and functions of the Kerala State Council for Science, Technology and Environment. [Level:5] [CO4, CO5]

(1 × 10 = 10 Marks)
