



U7985

Reg. No.:

Name:.....

**University of Kerala**

First Semester Degree Examination, November 2024

Four Year Under Graduate Programme

Multi Disciplinary Course

MUSIC**UK1MDCMUS102 - MUSIC & SCIENCE**

Academic Level: 100-199

Time:1½ Hours**Max. Marks: 42****Part A.****Answer All Questions Objective Type. 1 Mark Each.****(Cognitive Level: Remember/Understand)****6 Marks. Time: 6 Minutes**

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
1.	Identify the Chapu tala variety which takes five units in the ratio 2:1:2.	Remember	CO2
2.	What is the aksharakala value of anudruta	Remember	CO1
3.	Indicate the term used in a tala to identify one unit of measurement	Understand	CO2
4.	Identify the study which is related to the use of raga for the purpose of healing	Understand	CO3
5.	Can you identify how the amplitude of sound wave is measured	Understand	CO1
6.	Give example for a raga in Carnatic Music which is said to have the healing power as per studies on Music Therapy.	Understand	CO3

Part B.**Answer All Questions,Short Answer. 2 Marks Each.****(Cognitive Level: Understand/Apply)****8 Marks. Time: 24 Minutes**

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
7.	Explain Echo.	Understand	CO1
8.	Describe the varieties of Chapu tala	Understand	CO2
9.	Explain Nada and its varieties	Apply	CO1
10.	Illustrate how the swarasthanas figuring in Indian Music arouse feelings in living beings	Apply	CO3

Part C.

Answer all 4 Questions, choosing among options within each question.

Long Answer. 7 marks each.

(Cognitive Level: Apply/Analyse/Evaluate/Create)

28 Marks. Time: 60 Minutes

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
11.	a. Explain how 35 talas are enumerated from the Sapta talas OR b. Demonstrate how the Law of Vibration of Strings is applied to the function of musical instruments	Apply	CO2 CO1
12.	a. Examine how music serves as a powerful form of expressing different emotions OR b. Analyse the relationship between frequency and pitch in sound and also, how a change in frequency influence the perceived pitch of a sound.	Analyze	CO3 CO1
13.	a. Describe how the Sapta talas are characterized mathematically in terms of its beats and sub divisions. OR b. Assess how different audiences respond emotionally to the art of music. Make a note on the factors that might influence these responses.	Evaluate	CO2 CO3
14.	a. Explain the principle of resonance in sound waves. How does the vibration of a tuning fork illustrate this phenomenon OR b. Explain the concept of shadangas and their application in sapta talas	Create	CO1 CO2