

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

FIRST SEMESTER EXAMINATION

(2024 ADMISION ONWARDS)

MG1DSCSDV100 – FUNDAMENTALS OF ACOUSTICS

Duration: 2 hrs.

Maximum Marks: 70

Students should attempt at least one question from each course outcome to enhance their overall outcome attainability.

**Remember (K), Understand (U), Apply (A), Analyze (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)*

Part A

Very Short Answer Question

Answer **10** Questions

Each question carries **2** marks

1. What are partials in sound? [U] [CO2]
2. What defines a harmonic sound? [U] [CO2]
3. Identify one factor influencing sound reflection. [K] [CO4]
4. How is sound refraction defined? [U] [CO4]
5. What unit is used to measure acoustic impedance? [K] [CO5]
6. What kinds of materials are effective at absorbing sound? [U] [CO5]
7. What is the role of the outer ear? [U] [CO6]
8. What is the meaning of SIL? [K] [CO6]
9. How would you define sound transmission? [U] [CO3]
10. What does medium density refer to? [K] [CO3]
11. How would you define sound? [U] [CO1]
12. What is the unit of frequency? [K] [CO1]

[2 x 10 = 20]

Part B

Short Answer Type Questions

Answer **6** Questions

Each question carries **5** marks

13. How does temperature affect sound transmission in gases, and why? [U] [CO3]
14. Explain how midrange frequencies contribute to sound clarity in environments like theaters or classrooms. [A] [CO6]
15. Explain the role of the cochlea in hearing. [U] [CO6]
16. How can you sound proof a room? [A] [CO5]
17. Explain the Role of bass traps in acoustic design [U] [CO6]
18. Explain the law of reflection? [U] [CO4]
19. How does the fundamental frequency impact pitch perception in complex sounds [U] [CO2]

20. How do overtones contribute to the perception of timbre in different musical instruments? [U] [CO2]
21. What is phase cancellation? Explain. [U] [CO1]

[5 x 6 = 30]

Part C

Essay Type Questions

Answer **2** Questions

Each question carries **10** marks

22. what is acoustic impedance ? Explain significant factors affecting Acoustic impedance? [U] [CO5]
23. Analyze the relationship between the density of a medium and the speed of sound. Provide examples of how sound travels differently in materials with varying densities. [An] [CO3]
24. Explain the Characteristics of sound and sound wave [U] [CO1]

[10 x 2 = 20]

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

FIRST SEMESTER EXAMINATION (2024 ADMISION ONWARDS)

MG1DSCVCN100 – ART OF STORYTELLING

Duration: 1 ½ hrs

Maximum Marks: 50

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

Part A

Short Answer Questions, Answer any 5 of the following.

Each question carries 2 marks

1. What role does Krishna play in the Mahabharata? [U] [CO3]
2. What is the primary purpose of storytelling? [K] [CO1]
3. What is the role of storytelling in early human communication? [U] [CO2]
4. How is the theme of sacrifice represented in ancient epics? [U] [CO4]
5. Define the term 'verbal communication'. [K] [CO1]
6. What are the key steps in developing a story? [K] [CO5]
7. What is the difference between Paleolithic and Neolithic art? [U] [CO2]

5 x 2 = 10 Marks

Part B

Answer any 4 in one paragraph each.

Each question carries 5 marks

8. Explain the significance of Sita's character and her trials in the Ramayana. [U] [CO3]
9. Analyze how adaptations can reshape the portrayal of heroic figures in epics. [An] [CO4]
10. Evaluate the importance of conflict in driving a narrative forward. [E] [CO5]
11. Discuss the development and significance of cuneiform writing. [U] [CO2]
12. Analyze the moral dilemmas faced by the characters in the Ramayana. [An] [CO3]
13. Explain the importance of the Altamira cave paintings. [K] [CO1]

4 x 5 = 20 Marks

Part C

Essay Questions. Answer any 2 of the following.

Each question carries 10 marks

1. Analyze the significance of mentorship and guidance in the development of epic heroes.
[An] [CO4]
2. Discuss the significance of visual storytelling in ancient civilizations and how it contributed to cultural preservation. [U] [CO1]
3. Write a short story using all key elements: setting, characters, conflict, climax, and resolution. Introduce the setting and characters, build to a climax, and conclude with a clear resolution.
[C] [CO5]
4. Analyze the role of the Latin alphabet in the evolution of modern European languages.
[An] [CO2]

10 x 2 = 20 Marks