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Reg.No :

Name :

MAHATMA GANDHI UNIVERSITY, KOTTAYAM
MGU-UGP (HONOURS) Regular EXAMINATION October 2025

Third SEMESTER

**Discipline Specific Core Course (DSC) - MG3DSCIAA201 - MATERIAL
SPECIFICATIONS - I**

(2024 ADMISSION ONWARDS)

Duration: 2 Hours

Maximum Marks: 70

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

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

Part A

Short Answer Questions

Answer any **10** questions

Each question carries **2** marks

- | | |
|---|-------------|
| 1. How many cement bag in 1m ³ M20 grade concrete? | [U] / [CO2] |
| 2. What are the knot defects of timber? | [U] / [CO1] |
| 3. Write two advantages of emulsion paints. | [K] / [CO3] |
| 4. What is the effect of silica content on the hardness of glass? | [K] / [CO5] |
| 5. Explain English bond. | [U] / [CO1] |
| 6. What is kotta stone? | [U] / [CO1] |
| 7. What is terrazzo flooring? | [U] / [CO1] |
| 8. Identify the type of finish obtained by wax polishing. | [K] / [CO3] |
| 9. What is the role of rock wool in acoustic control? | [K] / [CO5] |
| 10. Note down two defects that can reduce the durability of paints. | [U] / [CO3] |
| 11. What is lime cement? | [U] / [CO2] |

12. What are the types of concrete?

[U] / [CO2]

[2x10 = 20]

Part B

Paragraph Questions

Answer any **6** questions

Each question carries **5** marks

13. Identify the defects in painting such as blistering, flaking, peeling, and cracking, and write about their remedies.

[K] / [CO3]

14. What differentiates an English Bond from a Flemish bond?

[U] / [CO1]

15. Draw a neat diagram that shows the layers of paint application and label each layer.

[U] / [CO3]

16. Explain the application of a gypsum board ceiling.

[U] / [CO2]

17. Explain lengthening joints.

[U] / [CO2]

18. Name various varnishes and list their uses in the building works.

[K] / [CO3]

19. How will you modify the glazing design of a commercial building to reduce solar heat gain using tinted/reflective glass?

[U] / [CO5]

20. Explain the steps involved in the preparation and application of paint on wooden and metal surfaces.

[U] / [CO3]

[5x6 = 30]

Part C

Essay Question

Answer any **1** questions

Each question carries **20** marks

21. What are the key differences between clear finishes and pigmented coatings for wood surfaces? Explain with examples of typical applications.

[U] / [CO4]

22. Explain various wood-finishing treatments.

[U] / [CO2]

[20x1 = 20]