DEPARTMENT OF ARCHITECTURE
AU COLLEGE OF ENGINEERING (A)
I/V B. Arch. Degree Examination

MODEL QUESTION PAPER
ARCHITECTURE DESIGN-I
(Effective from the admitted batch of 2022-2023)

SECOND SEMESTER

Time: 5 hours   **Max. Marks: 50**

PART-A IS COMPULSORY

PART-A

1x40=40M

1. Design an internet center for 6 cubicles and 1 reception/billing counter. The space should cater all the basic needs of the center like space for printers, waiting lounge, etc. the proposed site is 8mx 8m, with a 18m wide approach road on north side.
   Drawing to be submitted:
   - Plan (including site)   -1:50
   - Elevation -2nos   -1:50
   - Section-2Nos   -1:50
   - Perspective

PART –B
ANSWER ANY ONE

1x10=10M

2. Define scale. Distinguish between monumental scale and human scale with the help of suitable examples.
3. Discuss the anthropometric data and clearances for
   a. Work station for an office
   b. Kitchen counter

DEDEPARTMENT OF ARCHITECTURE
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MODEL QUESTION PAPER
ARCHITECTURAL DRAWING AND GRAPHICS-II
(Effective from the admitted batch of 2022-2023)

SECOND SEMESTER

Time: 5 hours   **Max. Marks: 50**

PART-A IS COMPULSORY

PART-A
                                                                                        1x20=20M

1. Draw the following
    a. One-point perspective for Figure1A with eye level at 1.5M
    b. Two –point perspective for Figure2 with eye level at 1.5M

PART –B
Answer any **THREE** all question carry **EQUAL** marks
                                                                                        3x10=30M

2. Show the Sciography in plan and elevation for any two objects shown in Figure1
3. Design an art wall at the entrance lobby of a nursery school conveying a theme
4. Answer the following
    a. Differentiate shade and shadow with suitable sketches
    b. Define station point
    c. Explain with neat sketches the symbols for any 5 hard and soft landscapes
5. Draw a freehand perspective of Figure 2 and render with sky, tree and human to understand scale and proportion.
6. Draw a village setting during festive season and render it with color of any medium.

Figure-1

Elevation   Elevation   Elevation
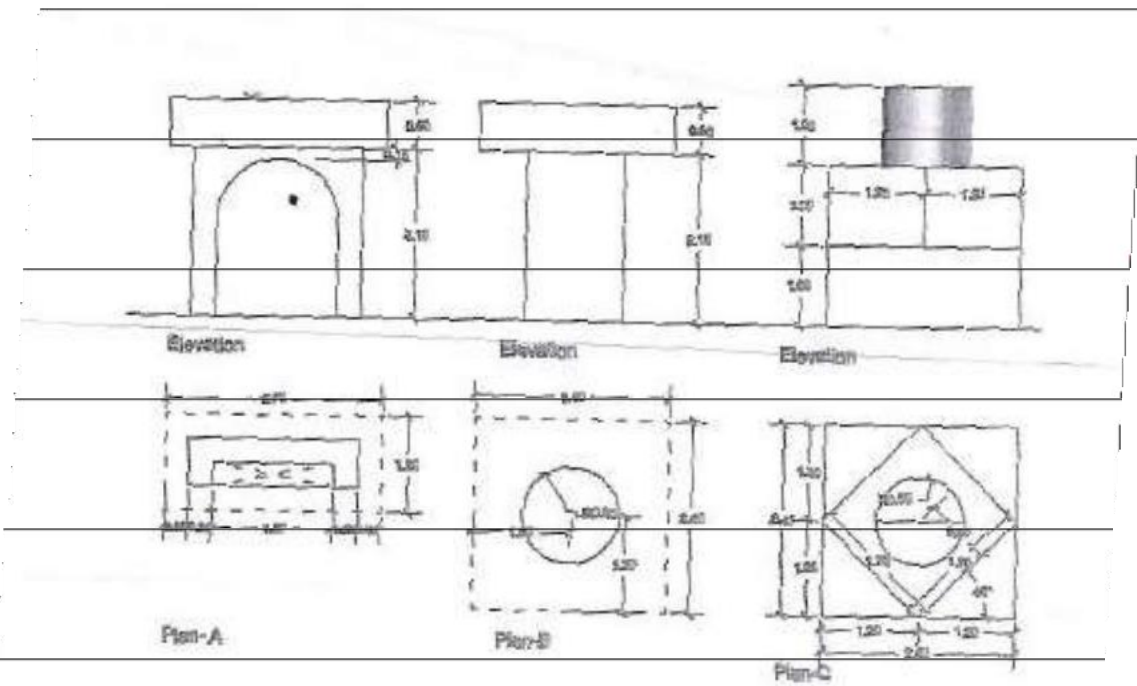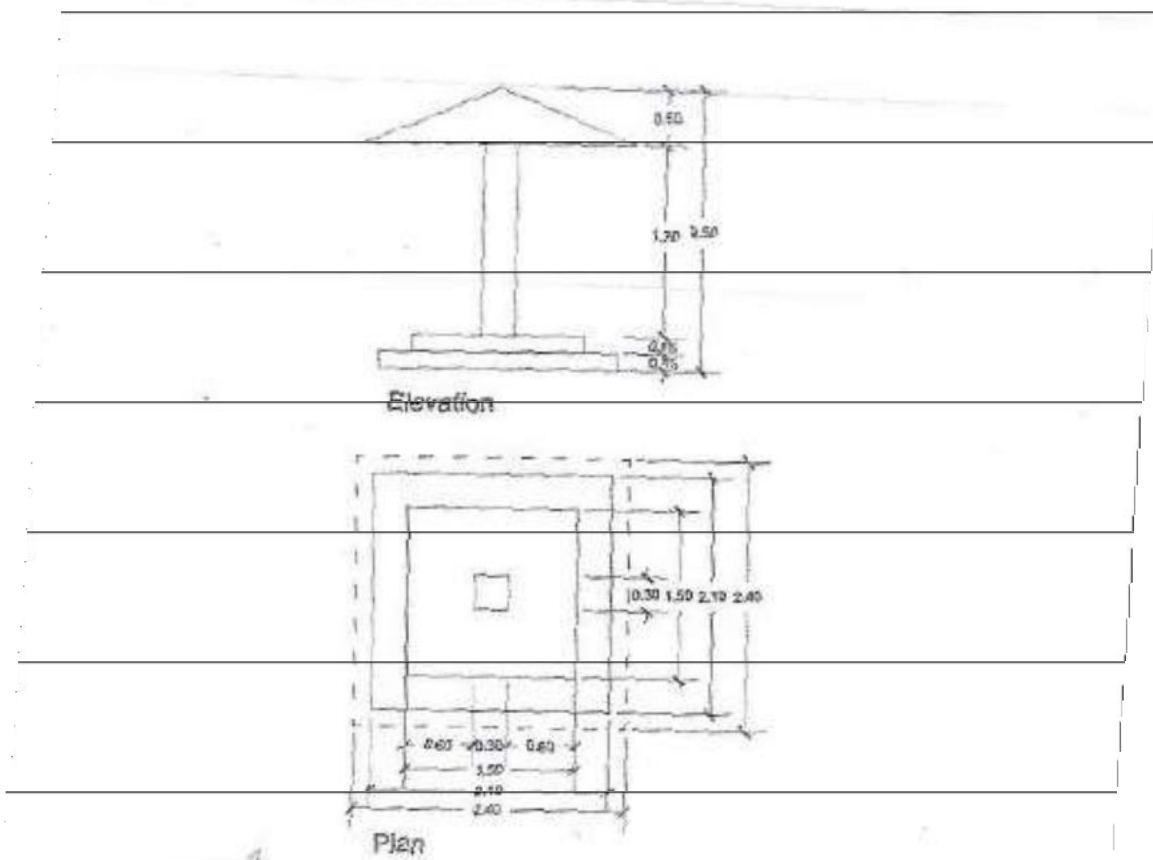
Plan-A   Plan-B   Plan-C

Figure-2

Elevation

Plan

DEDEPARTMENT OF ARCHITECTURE
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MODEL QUESTION PAPER
BUILDING MATERIALS AND CONSTRUCTION-II
(Effective from the admitted batch of 2022-2023)

SECOND SEMESTER

Time: 5 hours   **Max. Marks: 50**

Answer any **ONE** question from Part-A
Answer any **THREE** from Part-B, all question carry **EQUAL** marks

                                                                                                        1x20=20M

PART-A

1. Draw a partly paneled and partly glazed door in an opening size of 1.20M x 2.10M in a 0.23M thick brick wall. Draw its plan, elevation and section to a scale of 1:20

2. Draw neatly double joist timber floor of span 4.00M x 6.50M Draw its plan and section showing details and methods of fixing bridging joist to binders. Also mention merits and demerits. (Adopt a suitable scale where details are all clear and legible in the drawing).

PART-B

                                                                                                        3x10=30M

3. Differentiate between
   a) Mullion and Transom
   b) Rolling door and Sliding Door
   c) Gable windows and Dormer Windows

4. Write Short notes on the following timber joints with neat sketches and explain their advantages
   a) Tusk and Tenon
   b) Dovetailing
   c) Butt joint and Rebated Joint
   d) Tongue and Grooved Joint

5. What is meant by seasoning of timber? Write a note on natural and artificial seasoning of timber?

6. Briefly explain the process of painting the following
   a) Newly plastered surface
   b) New wood surface
   c) Iron and Steel Surface

7. Briefly explain the use of steel as a building material in building industry along with its applications and advantages.

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MODEL QUESTION PAPER
HISTORY OF ARCHITECTURE-I
(Effective from the admitted batch of 2022-2023)

SECOND SEMESTER

Time: 3 hours   **Max. Marks: 70**

Answer any **FIVE** questions
All questions carry **EQUAL** marks.

1. Explain briefly about Mesopotamian Architecture
2. Describe briefly the features of Egyptian temples. Explain one of the examples with suitable sketches in detail.
3. Discuss about "Mastaba" and types of mastabas with details sketches
4. Explain different classic Greek orders with detailed sketches.
5. a) Write short notes on temples at Rome with neat sketches
   b) Write short notes on coliseum at Rome
6. Explain characteristic features of Romanesque with typical example
7. With the help of neat sketches explain the features of Byzantine Architecture
8. Discuss at least two structures, built on 'Acropolis", Greek Architecture along with details and sketches.

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MODEL QUESTION PAPER
CARPENTRY AND MODEL MAKING WORKSHOP
(Effective from the admitted batch of 2022-2023)

SECOND SEMESTER

Max. Marks: 50

PRACTICAL & VIVA-VOCE EXAMINATION

DEDEPARTMENT OF ARCHITECTURE
AU COLLEGE OF ENGINEERING (A)
I/V B. Arch. Degree Examination

MODEL QUESTION PAPER
STRUCTURAL MECHANICS-II
(Effective from the admitted batch of 2022-2023)

SECOND SEMESTER

TIME: 3 HOURS   Max. Marks: 70
Answer any **FIVE** Questions
All questions carry **EQUAL** Marks

1. Analyse the continuous beam shown in Fig.1 using the theorem of three moments. E is constant. Draw the shear force and bending moment diagrams.
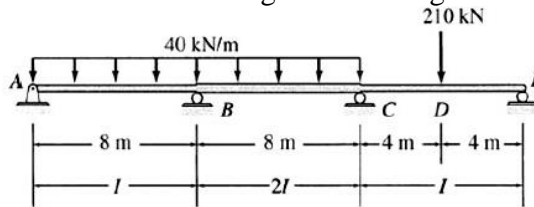
Fig.1

2. Analyse the continuous beam shown in Fig.2 using moment distribution method. EI is constant. Draw the shear force and bending moment diagrams.
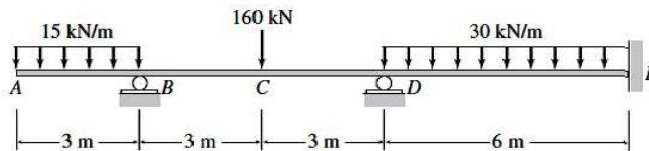

Fig.2

3. Draw the bending moment diagram of a three-pinned circular arch shown in Fig.3.Also determine the horizontal thrust and radial shear at a distance of 5m from the left-hand support.
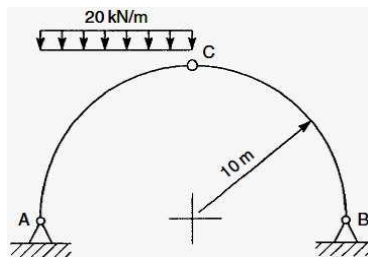

Fig.3

4. Find the deflection at centre and slopes at the supports for a simply supported beam of span 4m with uniformly distributed load of intensity 6kN/m using moment-area method.

5. Draw the shear force and bending moment diagram for a propped cantilever beam of span 6m with two point load 4kN and 6kN acting at a distance of 2m and 4m from fixed end.

6. State the assumption in the theory of simple bending and derive $M/I=f/y=E/R$

7. Draw the shear stress distribution for a symmetrical I-section with thickness of the web as 12mm, thickness of the flange as 12mm, overall depth of the section as 350mm and width of the flange as 200mm if the beam is subjected to a shear force of 20kN.

8. An unsymmetrical I-section beam is used to support an imposed load of 2kN/m over a span of 8m. The beam is additionally subjected to a compressive force **P** of 100kN located at 50mm from the soffit of the beam (Fig.1). Determine the extreme fibre stresses at mid span section. The sectional details are top flange, 300mm wide 60mm thick; thickness of the web= 80mm; overall depth of the beam = 400mm.
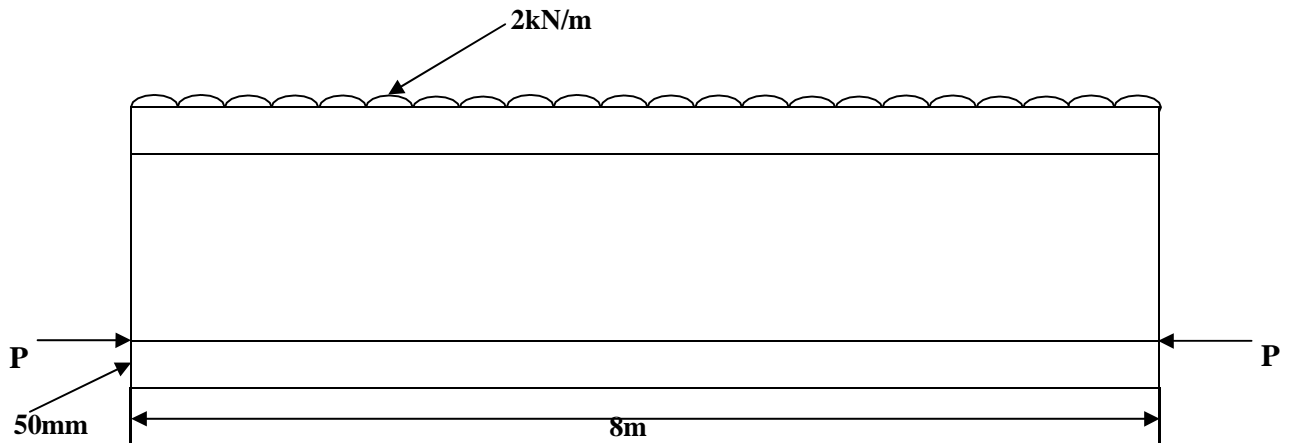

Fig.1

DEDEPARTMENT OF ARCHITECTURE
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I/V B. Arch. Degree Examination

MODEL QUESTION PAPER
ENGLISH LANGUAGE LAB
(Effective from the admitted batch of 2022-2023)

SECOND SEMESTER

Max. Marks: 50

VIVA-VOCE EXAMINATION