

**QUESTION PAPERS FOR END TERM THEORY  
EXAMINATIONS  
May-2023**



**M.Tech., MTPT, M.Sc., MBA, EMBA, M.Des.,  
2<sup>nd</sup>, 4<sup>th</sup> & 6<sup>th</sup> SEMESTER**

119

Total no. of Pages: 01

Roll no.....

2<sup>nd</sup> SEMESTER

MDes

END TERM EXAMINATION

May-2023

DD512 Virtual and Augmented Reality

Time: 180 Minutes

Max. Marks: 40

**Note:** All questions are compulsory.

1. Provide detailed analysis of your project and how AR/VR best serves as a solution for it?  
[10 Marks]
2. Provide details of your AR/VR experience and in what parameters and heuristics was it different from other interactions?  
[10 Marks]
3. Think around the possibilities of AR/VR in different fields and ideate a quick project different from your sem project, along with your initial thoughts on the topic.  
[10 Marks]
4. Provide the details of your AR/VR project's design and development process.  
[10 Marks]

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2<sup>nd</sup> SEMESTER

MDes

END TERM EXAMINATION

May-2023

DD514 Design for Human Experience

Time: 3 Hours

Max. Marks: 40

**Note:** All questions are compulsory.

Q1.

[15 Marks]

In this question we will make cultural probes for your HED project.

- a) Take 1 **persona** from your research
- b) Make a Stakeholder map/ Empathy map/ Ecosystem map for her/ him.
- c) **Experience map** their journey
- d) Illustrate and explain 2 scenarios of pain points for the persona.
- d) Make **cultural probes** to dig deeper into each of these scenarios with your humans.
- e) Sketch and illustrate the scenarios of how your probes will work.

Q2.

[10 marks]

Write an essay on Assistive Technologies for hearing impaired children. Start by making an opportunity matrix of the technology/ product/ services that influence their Experience.

Choose any two and with relevant examples explain how and on what parameters will you evaluate the lived human Experience of the technologies mentioned by you above.

Q3.

[10 marks]

How may we make more accessible and Inclusive to the deaf and the hard of hearing community, the experience of:

- a) performing arts
- b) listening to music
- c) watching films

Choose any two

- a) Establishes well the problem by sketching and explaining. the problem
- b) what will be your solution and how will you Experience Prototype it.

Q4.

[5 marks]

Marcus Adrian designed for deaf kids. What were his insights and how may you apply these in your own future work.



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## 2<sup>nd</sup> SEMESTER

**May-2023**

## DD516 Usability Evaluation and Testing

**Max. Marks: 40**

**Department of Drinking Water & Sanitation**  
Ministry of Jal Shakti

**Swachh Bharat Mission (Gramin) 2.0**

**G2G**

**Work**

Home

Dashboard

Accounting

Reports

Help

**Total CDF Plus Villages**

0% - 25%    25% - 50%    50% - 75%    > 75%

**CDF Plus Villages**

Total Villages		Total CDF Plus Villages
5,92,221		1,00,000
Approved	2,02,332	33,533
Ranking	100	100

**CDF Plus Subsidies**

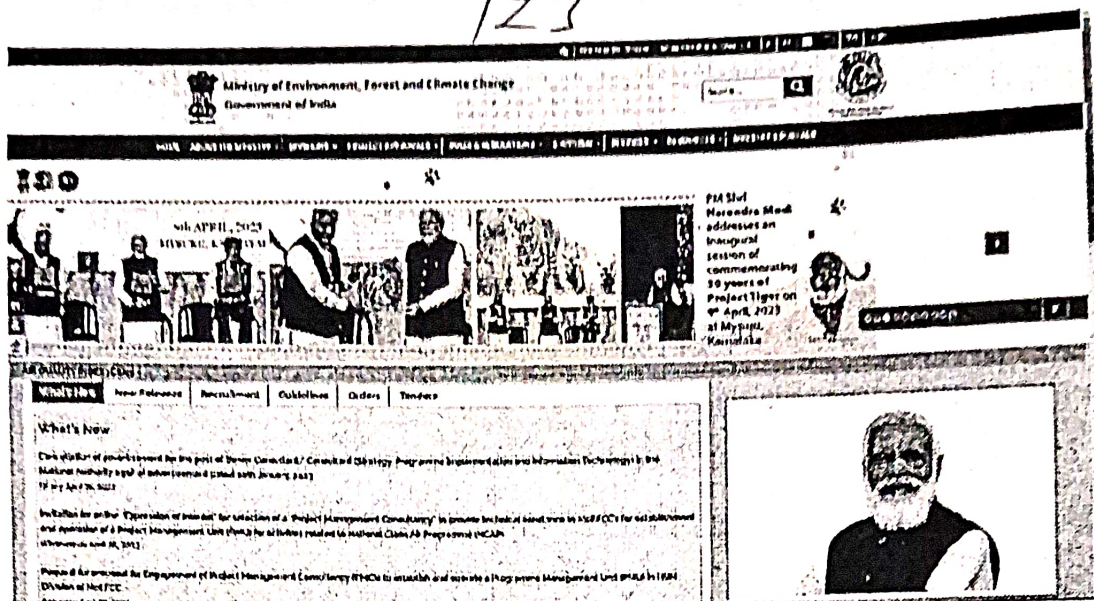
Villages having management of Solid Waste Management	Villages having management of Liquid Waste Management
1,50,608	2,33,892
Villages with Minimal LMR	Villages with Minimal Requirement Water
4,63,846	4,53,401

**Villages with Minimal LMR**

**Villages with Minimal Requirement Water**

**Total CDF Plus Villages**

State	Total Villages	Total CDF Plus Villages	Approved	Ranking
Andhra Pradesh	1,00,000	1,00,000	1,00,000	100
Assam	1,00,000	1,00,000	1,00,000	100
Bihar	1,00,000	1,00,000	1,00,000	100
Chhattisgarh	1,00,000	1,00,000	1,00,000	100
Goa	1,00,000	1,00,000	1,00,000	100
Gujarat	1,00,000	1,00,000	1,00,000	100
Haryana	1,00,000	1,00,000	1,00,000	100
Himachal Pradesh	1,00,000	1,00,000	1,00,000	100
Jharkhand	1,00,000	1,00,000	1,00,000	100
Karnataka	1,00,000	1,00,000	1,00,000	100
Kerala	1,00,000	1,00,000	1,00,000	100
Madhya Pradesh	1,00,000	1,00,000	1,00,000	100
Maharashtra	1,00,000	1,00,000	1,00,000	100
Manipur	1,00,000	1,00,000	1,00,000	100
Mizoram	1,00,000	1,00,000	1,00,000	100
Nagaland	1,00,000	1,00,000	1,00,000	100
Nepal	1,00,000	1,00,000	1,00,000	100
Odisa	1,00,000	1,00,000	1,00,000	100
Punjab	1,00,000	1,00,000	1,00,000	100
Rajasthan	1,00,000	1,00,000	1,00,000	100
Sikkim	1,00,000	1,00,000	1,00,000	100
Tamil Nadu	1,00,000	1,00,000	1,00,000	100
Telangana	1,00,000	1,00,000	1,00,000	100
Uttar Pradesh	1,00,000	1,00,000	1,00,000	100
Uttarakhand	1,00,000	1,00,000	1,00,000	100
West Bengal	1,00,000	1,00,000	1,00,000	100
Yamlo	1,00,000	1,00,000	1,00,000	100



Choose any one website.

- sbm.gov.in
- nwm.gov.in
- moef.gov.in

1.

[5 Marks]

Identify and illustrate the factors influencing UX for the website that you have chosen.

2.

[10 Marks]

What are the Usability concerns that you have identified on the website? Describe in one liner.

3.

[5 Marks]

What are the changes that you recommend based on use by different stakeholders on the website that you have chosen.

4.

[20 Marks]

Design the website according to your recommendations.



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2<sup>nd</sup> SEMESTER

M.Des

**END TERM EXAMINATION**

**May-2023**

**DD518 Creating and Experiencing Forms**

*Time: 03Hours*

*Max. Marks: 40*

**Note:** All questions are compulsory.

Q1. What is Form? [1 Marks]

Q2. What is Shape? [1 Marks]

Q3. What are the 7 elements of design? [7 Marks]

Q4. Get inspired by a **FESTIVAL** and create an **ABSTRACT FORM** using paper, following the design process. Please note following the design process is important!

Brain Storming and Research [6 Marks]

Story [5 Marks]

Ideation and sketches (Minimum 4 layouts) [10 Marks]

Final Form [10 Marks]

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2<sup>nd</sup> SEMESTER

M.DES.

END - TERM EXAMINATION

MAY-2023

DD522

FORM & SENSES

Time:03:00Hours

Max. Marks: 40

Note: All questions are compulsory.

Assume suitable missing data, if any.

Material Note\*\* 3 x A3 and A4 for rough work as required by students

Q1. Choose any one inspiration board to design 5 accessories.

[30 Marks]

Q2. Discuss the entire design process and decision making process for designing the accessories that you have made.

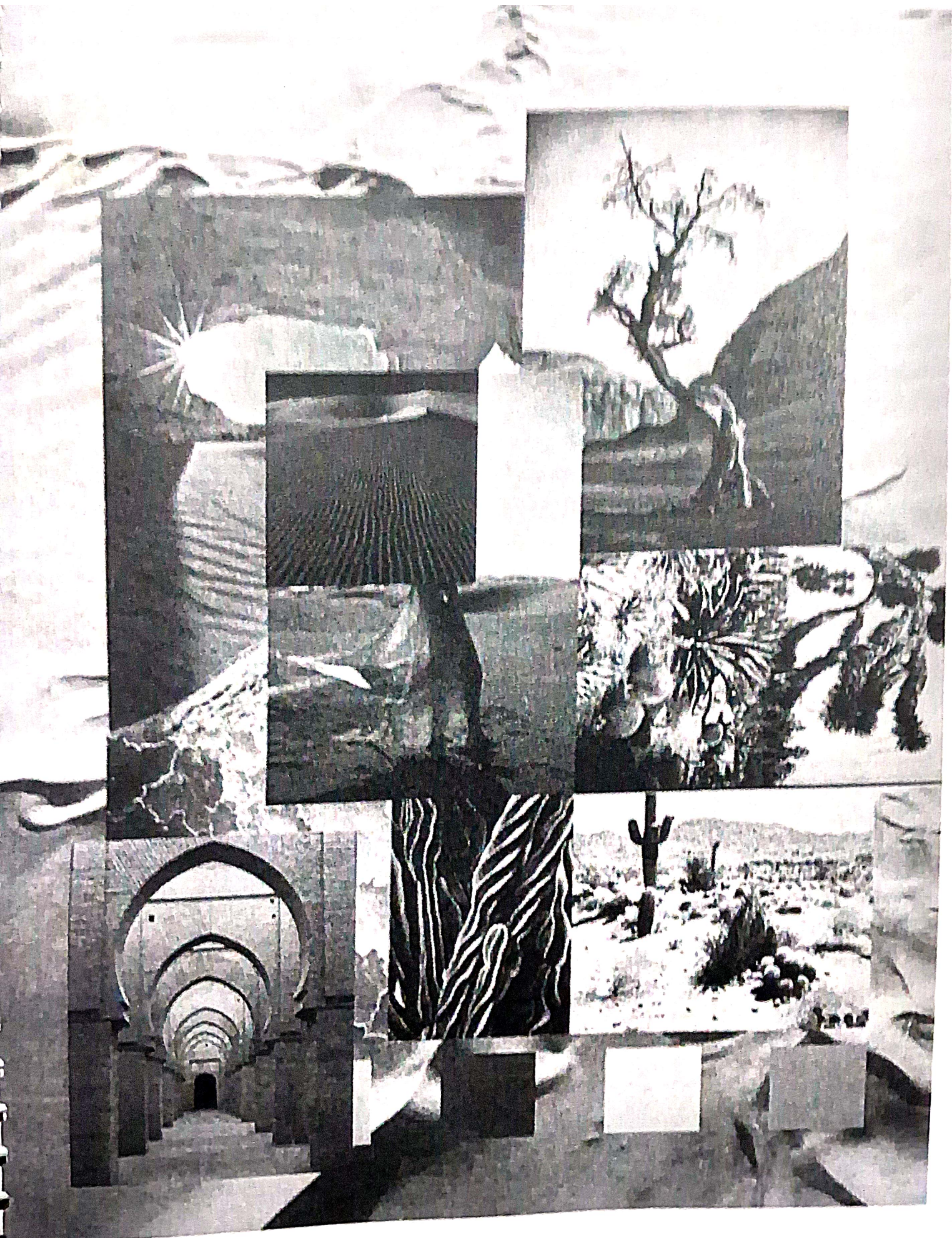
[5 Marks]

Q3. Discuss why you chose the desired material for the accessories you designed and why you chose that material.

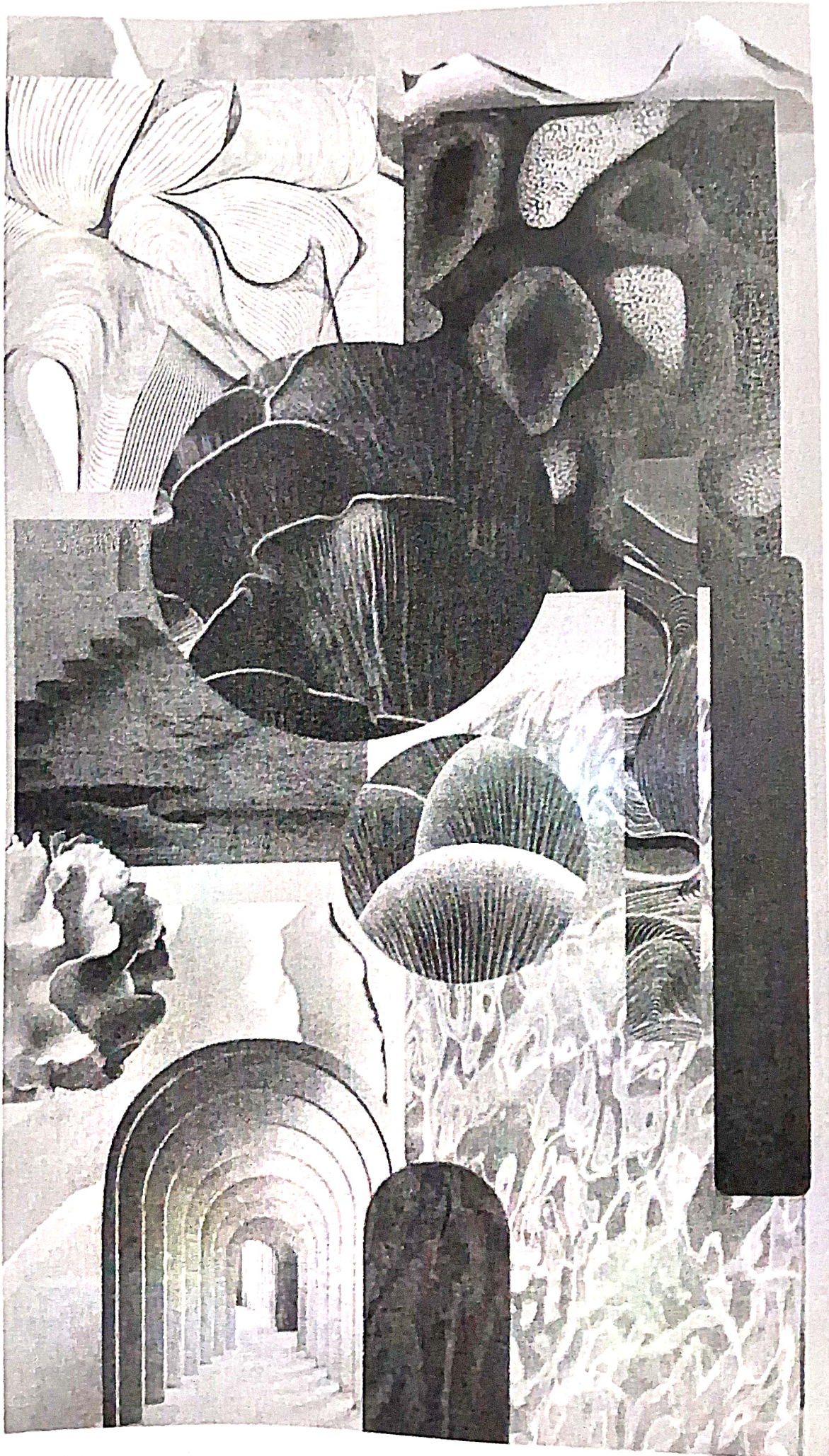
[5 Marks]

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B.Des  
2<sup>nd</sup> Semester

End Term Examination

May-23

DD524 Design for Human Experiences

Time: 3 Hours

Max. Marks: 40

Note: All Questions are compulsory.

1. Describe how you test your product design, what methodologies you use, and how you evaluate product usability.  
(10 Marks)
2. Describe a recent design project you were particularly challenged by and how you approached the problem.  
(10 Marks)
3. Provide some examples of your experience dealing with human experience and map with the human experience attribute.  
(10 Marks)
4. Redesign the following products considering human experience attributes (any two)
  - (i) Trimmer/ shaver
  - (ii) Hand blender
  - (iii) Screwdriver
  - (iv) Hand drill  
(10 Marks)

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2<sup>nd</sup> Semester

MDES Program (PD)

END TERM EXAMINATION

May-2023

DD526 Design for Sustainability

Time: 3:00 Hours

Max Marks: 40

**Note:** Use of books, notes, mobile phone & internet is not allowed.  
Just Think.  
Assume suitable missing data, if any.

**Q.1**

Sustainability recognizes that our planet is our only source for our life and we must use the resources in a manner that guarantees well being of the planet, ourselves and the future generations.

With this understanding, it is recognized that people, planet, prosperity, partnership, and peace are important for sustainable growth.

A checklist is a list of items required, things to be done, or points to be considered, used as a reminder.

Develop a checklist of at least ten Don't (avoids pitfalls of the past) and at least ten Do's (creates course of action for the future) for each of the 5P above that will ensure that we are wandering off in the wrong direction and moving towards a sustainable future.

[40] [CO-1]



Total No. of Pages: 01

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Roll No.....

M.Des

2<sup>nd</sup> Semester

End Term Examination

May-23

DD528 Medical Technology Innovation

Time: 3 Hours

Max. Marks: 40

Note: Attempt any 8 questions.

Each question carries 5 marks.

1. What is digital prototyping. What are its various techniques?  
What are its pro's and con over physical prototyping? [5 marks]
2. What is full form of TRL? What are the various levels of TRL  
and why is it important for innovation led products? [5 marks]
3. What is the importance of patent in innovative medical  
products? What are various types of IP rights and what is their  
value? [5 marks]
4. Design a roadmap from need identification to product  
commercialization for a medical product. Explain it with the  
help of an example. [5 marks]
5. Explain usability testing and its significance. At what stage of  
product development is it conducted? [5 marks]
6. What are the various market entry barriers for a medical  
product? What are the possible ways to overcome these  
barriers? [5 marks]
7. What is the importance of design element in developing a  
medical product? Discuss an example where a product failed in  
the market due to bad design. [5 marks]
8. Discuss the various stakeholders of MedTech industry. What is  
the role of each stakeholder? [5 marks]
9. What are the various ways of monetizing your MedTech  
innovation? What are the consideration for each of these ways?  
What would be your preferable way and why? [5 marks]

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Total no. of Pages:1

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2nd SEMESTER

**M.Des.**

**END TERM EXAMINATION**

**May-2023**

**DD532**

**Experimental Communication**

**Time: 3 Hours**

**Max. Marks: 40**

**Note: No Internet allowed**

**2 A3 sheets to be given + 1 A4 sheet for Q2**

Q.1 Design an advertisement for your project, in the form of a short story..  
Narrate the story as a short comic strip. Keep in mind the target audience for your product and other relevant things. [35]

Q2. Write a short note describing key design considerations while making the advertisement (3-4 main points, not more than 100 words) [5]

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**MDes\_SEMESTER II**

**END TERM EXAMINATION**

**May-2023**

**DD534 Space and Service Design**

**Time: 03:00 Hours**

**Max. Marks: 40**

**Note:** All questions are compulsory.

1. Enumerate attributes for a good Space & Navigation Design.

or

What are the different mappings necessary for an effective Service Design? [16]

2. Design a user-friendly service for admissions at DTU for MDes programme, clearly identifying different stakeholders as well as optimising their interaction with the service. Please draw a flowchart of the service. [24]



Total no. of Pages: 01

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2<sup>nd</sup> Semester

MDES Program (VC)

END TERM EXAMINATION

May-2023

DD536 Narrative Contexts and Advanced Illustration

Time: 3:00 Hours

Max Marks: 40

Note: All Questions are compulsory.

Format: A3 drawing sheet, Manual illustration

Assume suitable missing data, if any.

Q.1

- a) How a well defined 'style convention' helps in systematically achieving the consistent look of a visual design project such as book illustration.

Discuss illustrating your style convention derived from the research in the classroom project.

OR

- b) A good storytelling requires 5 basic parts to be presented well- *Exposition, Inciting Incident, Rising action, Climax and resolution*. Discuss and illustrate at least two scenes with details of a story of your choice that has all these parts. [20] [CO-1]

Q.2

A distinct personal style of illustration is cherished by many renowned artists/illustrators in the art world and industry. Name and Discuss any two such Illustrators/ Artists' work that are an inspiration for you.

What are the features of your 'personal style of illustration' that you have discovered in class projects? Give illustrative examples to highlight the features. [20] [CO-1]



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2<sup>nd</sup> Semester

MDES Program (VC)

END TERM EXAMINATION

May-2023

DD538 Motion Graphics and Animation Fundamentals

Time: 3:00 Hours

Max Marks: 40

Note: Assume suitable missing data, if any.

Q.1

Create a 20-30 seconds stop-motion video using at least three props/objects. Explain the 'idea/story' in max. 250 words.

[20] [CO-1]

Q.2

Attempt any two of the following:

- a) Describe the types of motion graphics? Elaborate on the scenarios where motion graphics is the most suitable and effective form of visual communication.
- b) Elaborate on the techniques used in stop motion animations. What are its important characteristics that appeal to the audience at large?
- c) Elaborate on the term 'stop-motion' in animation. How is it different from other types of animations?
- d) Elaborate major learning from your project undertaken in the classroom/studio. What challenges you faced primarily and how did you overcome the issues.

[10x2=20] [CO-1]

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MDes SEMESTER II

END TERM EXAMINATION, May-2023

DD552 Form Exploration

Time: 03:00 Hours

Max. Marks: 40

Note: All questions are compulsory.

Q1. Create an automotive form inspired by following options given below.  
Choose any one inspiration from options

Dragon fly  
Tarantula hawks  
Seahorse

Please follow up the step by step process

1. Abstract metaphors board.
2. Mood-board.
3. Sketches 2,3 point perspective, eagle eye view Front, rear, 1/3rd overall 10sketched
4. Marker rendering (watercolour/ alcohol marker/pastel Colours)
5. Digital rendering / Digital Modelling (with fillets)
6. Final presentation display (min-20slides)

Note:

- a. -This question contains 40marks.
- b. -Narrate a story at least 200-250 words to describe your automotive form.
- c. -Display your work with landscape +portrait format.
- d. -All 7-steps are mandatory to follow and display

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M.Des SEMESTER II

END TERM EXAMINATION, May-2023

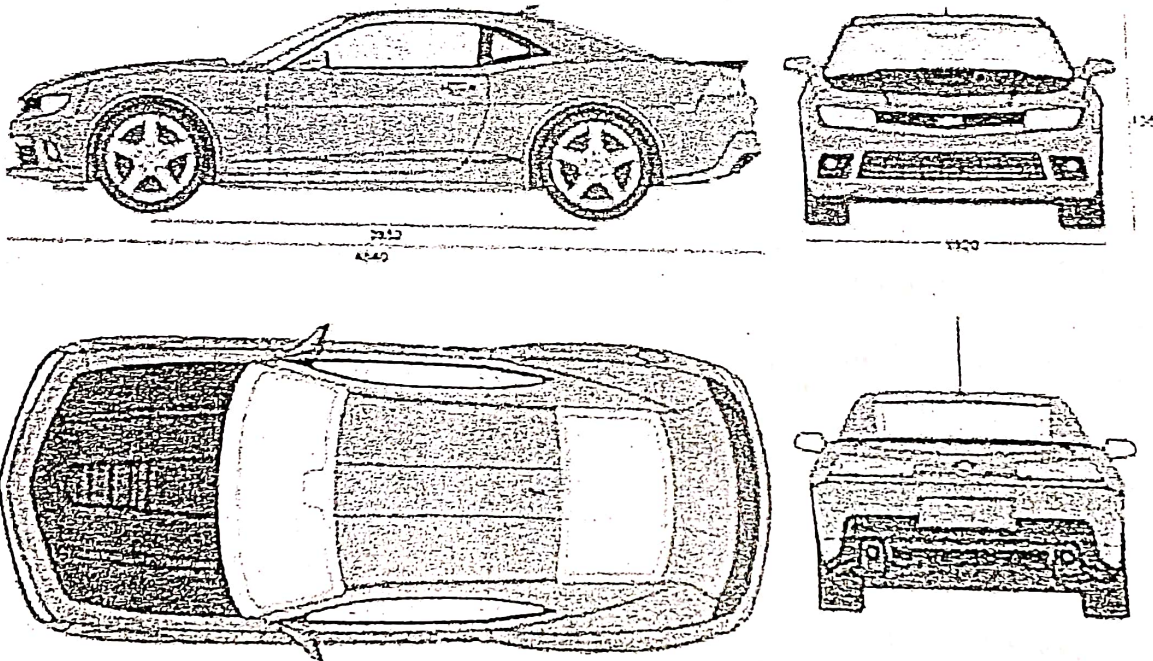
DD554, Digital Sculpting Tools & Techniques

Time: 03:00 Hours

Max. Marks: 40

Note: All questions are compulsory.

1. Select any form and modelling as per basic modelling techniques



**NOTE:**

- All students must to carry their laptop.
- Close the basic volume first than detailing.
- Student can refer to netcarshow website for car actual images reference
- All will use Autodesk Alias software except Neha and Vanshika
- Student can use Internet if they want to refer softcopy of the sketch (Google-Camaro Blueprint)
- All files should be sent teachers' mail ID ([shahidwork20@gmail.com](mailto:shahidwork20@gmail.com) and [arunotpal@dtu.ac.in](mailto:arunotpal@dtu.ac.in)) and in a Pen-drive (With file name- Student Name/Roll No/ MDES/Date)



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M.Des\_SEMESTER\_II

END TERM EXAMINATION, May-2023

DD 556, Advanced Rendering Techniques

Time: 03:00 Hours

Max. Marks: 40

*Note: \* Answer all Questions.*

*\* Students can use their Laptop & mobile for internet.*

Q 1. Make 2D graphic Image depicting any object of your choice and modify it according to today's needs and time, in addition to this cover the following points mentioned below:

- Draw an idea that represents your thoughts.
- Provide a brief description of your 2D graphic image.
- Use any software to make a final 2D image of your choice.

*(Use your imagination and skill)*

*(Final submission is required in the form of JPEG Image, students have to submit 2 JPEG Images, (1000X1000 pixel) + 1 Screen short, compile all together in a form of PDF along with source files).*

[5+10+25 Marks] [CO-1]



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M.Des SEMESTER II

END TERM EXAMINATION, May-2023

DD558 Transport and Clay Modelling

Time: 03:00 Hours

Max. Marks: 40

**Note: All questions are compulsory.**

Q1. Describe in writing and with drawing, the process involved in designing a new vehicle highlighting:

- a. Ideation
- b. Sketching and rough drawings
- c. Details of 3 specific parts like petrol tank, lights, logo, etc.
- d. Materials used in developing a model

(20 Marks)

Q2. Design a poster for a motorcycle

(20 Marks)

*Materials required: Art materials, A4 size paper*

*Laptops allowed*

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M.Des  
2<sup>nd</sup> Semester

End Term Examination

May-23

DD901 Design For All

Time: 3 Hours

Max. Marks: 40

**Note: Attempt all questions.**

**Each question carries 10 marks.**

1. Explain Universal Design (UD) and its principles with suitable example. Identify three key areas of a Department of Design where UD principles are to be applied the most. [10 marks]
2. Briefly explain the Universal Design features of Delhi Metro with a Sketch. [10 marks]
3. What is User Centric Design and how it is different from Universal Design, validate your answer with suitable examples [10 marks]
4. Explain following terms [10 marks]
  - (i) Assistive vs Universal Design
  - (ii) Inclusive Design
  - (iii) User Exclusion
  - (iv) Universal Design Learning