QUESTION PAPERS FOR END TERM THEORY EXAMINATIONS May-2024



M.Tech., MTPT, M.Sc., MBA, EMBA, M.Des., 2^{nd} , 4^{th} & 6^{th} SEMESTER

Total no. of Pages:2

Roll no.....

2nd SEMESTER

M.Des

END TERM EXAMINATION

May-2024

COURSE CODE DD512 COURSE TITLE AR/VR

Time: 03:00 Hours

Max. Marks: 40

Q1. What is the Visual Field and what is the Visual Field of Human Eye? 2 Marks 3 marks Q2. What is Multisensory Perception in VR? Q3 . Which are the most important senses that humans perceive in context 3 Marks of VR? Q4. Explain what is meant by stereo Vision? 3 Marks 3 Marks Q5. What is Latency? Q6. What is SLAM? Explain. 3 Marks Q7. What is Haptic Perception? 3 Marks Q8. "Disparity is an example of a depth cue." Explain. 5 Marks Q9. What is Level of Detail in a Game Engine? 5 Marks

- Q10. What does the volume of most audio sources decreases with increasing distance from the listener, can this be possible in VR. Explain?

 5 Marks
- Q11. How are particle system made and how do they work? 5 Marks

Total no of pages:01	Roll No
END SEMESTER EXAMINATIONS	MASTER OF DESIGN (M.DES.
	•

DD 514: DESIGN OF HUMAN EXPERIENCE

Time: 3:00 Hours

Max. Marks: 40

Note:

- 1. All questions are compulsory.
- 2. Answers to be written on 2Nos of A3 sheet.

Q1: What is an Experience? What are the parameters on which you rate an experience? Describe the above with an example.

(You may use these parameters as the framework for answering rest of the questions.)

[10Marks]

Q2: Explain and Illustrate:

- a. Individual Experiences [5 examples].
- b. Collective Experiences [5 examples].

[10Marks]

Q3: "To understand the whole it is necessary to understand the parts. To understand the parts, it is necessary to understand the whole. Such is the circle of understanding... Ken Wilber"

Show the interlinkages between the whole and the part in perceiving experiences. Create a visual framework / map narrating the same.

[10Marks]

Q4: What is a belief system? What are the common parameters interlinking various belief systems?

Take some examples and illustrate the same.

[10Marks]

P.S: Please attempt the questions with real-life examples and go beyond conventional thinking.

Total no. of Pages: Two

END TERM EXAMINATION COURSE CODE: DD-516

Roll no

May-2024

COURSE TITLE: Usability Evaluation &

Testing

Max. Marks: 40

Time: 03:00 Hours

Note:

- 1. Choose any five questions from 1 to 6 and question number 7 is compulsory.
- 2. Give examples and visuals through drawing by using any medium on the provided drawing sheet.
- 3. No internet/system is required.
- Explain the concept of heuristic evaluation in UX design. Provide a detailed breakdown of at least three commonly used heuristics and how they apply to evaluating user interfaces. Using a real-world example, demonstrate how a heuristic analysis can identify usability issues and suggest improvements.
- 2. Discuss the importance of accessibility in UX design and its impact on user experience. Outline at least three key principles or guidelines for designing accessible interfaces. Provide examples of how implementing these principles can enhance the usability and inclusivity of digital products for users with disabilities. (6)
- 3. Define usability testing and its significance in the design process. Describe the steps involved in conducting a usability test, including planning, execution, and analysis. Provide recommendations on how to effectively communicate and prioritize usability issues discovered during testing to stakeholders and development teams. (6)
- 4. Compare and contrast different design methodologies, such as waterfall, agile, and design thinking. Discuss the strengths and weaknesses of each approach in the context of UX design projects. Using a hypothetical design challenge, outline how you would apply one of these methodologies to create a user-centered solution, including key activities and deliverables at each stage of the process.
- 5. Investigate the role of user feedback in iterative design processes. Describe various methods for gathering user feedback, such as surveys, interviews, and usability testing. Analyze how incorporating user feedback into design iterations can enhance product usability, satisfaction, and overall user experience. (6)
- 6. Explore the concept of user personas in UX design. Discuss their importance in understanding and empathizing with target users. Provide examples of how personas are created and utilized throughout the design process to inform decision-making and improve user-centered design outcomes.

 (6)

7. Case Study: Usability Testing for a Language Learning App

Suppose you're involved in the development of a language learning app targeted at users in India. Conduct a usability test with a diverse group of participants representing different regions, languages, and cultural backgrounds within India. Utilize methods such as thinking aloud protocols and task-based scenarios to gather insights into how users interact with the app. Identify common usability issues specific to the Indian context, such as difficulties with regional language support, cultural preferences for learning methods, and usability challenges related to varying levels of digital literacy. Based on the findings, recommend improvements such as integrating support for multiple Indian languages, incorporating culturally relevant content and examples, and providing intuitive navigation tailored to users with varying levels of digital proficiency. (10)

OR

Case Study: Accessibility Audit for a Government Service Website

Imagine you're tasked with conducting an accessibility audit for a government service website aimed at Indian citizens. Evaluate the website's compliance with WCAG (Web Content Accessibility Guidelines) standards, particularly focusing on guidelines relevant to diverse user groups in India, including those with disabilities, low literacy levels, and limited access to technology. Identify areas where the website falls short in terms of accessibility, such as lack of text alternatives for non-text content, insufficient keyboard navigation options, and complex language structures. Provide actionable recommendations for enhancing accessibility, such as adding descriptive alt text for images, ensuring proper HTML markup for semantic structure, and simplifying language to improve readability. Additionally, emphasize the importance of accessibility in ensuring equitable access to essential government services for all citizens, regardless of their abilities or technological resources. (10)

Total	No.	of	Pages	01
-------	-----	----	--------------	----

29'3

Roll no.....

2nd SEMESTER

MDES

END TERM EXAMINATION

MAY-2024

COURSE CODE DD522

COURSE TITLE: FORM AND SENSES

Time: 3:00 Hours

Max. Marks: 40

1. All question are compulsory.

- 2. Mobile phone/laptop/internet/notes/books not allowed
- 3. One answer copy and 2 A3 sheets are required to answer the questions
- Q.1 What are primitive shapes? How do primitive shapes contribute to 3D forms? Explain with illustrations [10 Marks]
- Q.2 What are the principle of design illustrate all of them with using combination primitive shapes. Explain its importance in form development. [10 Marks]
- Q.3 Take an inspiration form the nature and create futuristic form of the home furniture. You are required to submit the exploration sheet, detailed drawing, perspective and hand render. [20 Marks]

END

Total N	Vo.	of	Pages	01
---------	-----	----	-------	----

Roll no.....

2nd SEMESTER

MDES

END TERM EXAMINATION

MAY-2024

COURSE CODE DD524
EXPERIENCES

COURSE TITLE: DESIGN FOR HUMAN

Time: 3:00 Hours

Max. Marks: 40

Note: 1. All question are compulsory.

2. Mobile phone/laptop/internet/notes/books not allowed

3. One answer copy and 1 A3 sheets are required to answer the questions

- Q.1 Human experience what is it and why does it matter. Explain with the suitable example in mobility design domain. [10 Marks]
- Q.2 Explain the difference between user experience and human experience in relation with product design. [5 Marks]

Or

Explain the following terms (any two)

- a. User centric Design
- b. Design for inclusivity
- c. Design for all
- d. Design for sustainability
- Q.3 Discuss and present the model to gauge/assess the human experience with the help of case study [25 Marks]

END

Total I	No`.	of	Pag	es	1
---------	------	----	-----	----	---

Roll no.....

2nd SEMESTER

M.Des.

END TERM EXAMINATION

May-202

COURSE TITLE: Medical Technology Innovati **COURSE CODE: DD528**

Time: 3:00 Hours

Max. Marks: 4

Note: Attempts any two of the following.

All questions carry equal marks.

You will be assessed on the clarity, creativity, and feasibility of your desi

Q.1 Design a wearable device that can monitor and track the vital signs of elde patients living alone and alert emergency services in case of abnormalities. [20][CO1]

- Q.2 Create a user-friendly interface for a telemedicine platform that allo patients to schedule appointments, consult with doctors, and access their med [20][CO1] records securely.
- Q.3 Develop a prototype for a mobile application aimed at promoting men health awareness and providing support resources for individuals experienc [20][CO1] stress, anxiety, or depression.

Best of Luck!

Total no. of Pages:1

Rall	по	
ווטח	110	

2nd SEMESTER

M.Des

END TERM EXAMINATION

May-2024

COURSE CODE: DD532

COURSE TITLE: Experimental

Communication

Time: 3 Hours

Max. Marks: 40

Note: No Internet allowed

2 A3 sheets to be given + Answersheet

- Q1. Design an advertisement for the final product of your classroom project, in the form of a short story. Narrate the story as a short comic strip or as a visual storyboard. You are free to make any suitable assumptions.[30]
- Q2. Write a short note describing key design considerations while making the advertisement (Answer in brief, not more than 100-150 words) [5]
- Q3. How does your ad effectively capture and communicate, the spirit and scope of your product to the audience? Answer in brief, not more than 100-150 words. [5]

Total no. of Pages: 01

297

Roll no.....

SEMESTER II M.Des.

END TERM EXAMINATION

May-2024

Space & Service Design DD534

Time: 04:00 Hours

Max. Marks: 40

Note: All questions are compulsory.

1. What are the characteristics of a good Space Design? Enumerate an example where these characteristics are evident. [15]

- 2. What are the characteristics of a good Service Design? Enumerate an example where these characteristics are evident.
- 3. Considering Department of Design a public space, critique its Navigation & Space Design and enumerate what would you change, if any, taking good Navigation & Space design [10] characteristics into account.

Total No. of Pages 1

298

Roll no.....

2nd SEMESTER M.Des (VC)

END TERM EXAMINATION

MAY-2024

COURSE CODE DD536, Narrative Contexts & Advanced Illustration

Max. Marks: 40

Time: 3:00 Hours

Note: All questions are compulsory to attempt.

No References/ Internet/ Laptops/ Phones are allowed.

Assume suitable missing data, if any.

Material: 01 Ruled Answer Booklet + 02 A3 Drawing Sheet

Q.1 Attempt ANY ONE of the following:

a) Briefly outline the important stages of the illustrative project undertaken during your course of study.

OR

b) Provide a concise overview of the five-part story structure. Then, craft a brief narrative that incorporates all the essential elements of a compelling story.

[05 Marks] [CO-1,2]

Q.2 Explore a case study of your preference that focuses on comprehending and defining 'Context.' Elaborate on factors such as the Agent, Understanding, Relationship with elements, and the agent's environment. Illustrate your explanation of the Context using a suitable mind map on an A3 Drawing Sheet. (Maximum 500 words)

[10 Marks] [CO-1,2]

Q.3 The "Personal Style of Illustration" is a crucial aspect that professional illustrators value highly. Critically discuss your individualistic style of illustration and its key features. Utilize sketches or drawings to support your explanation. (Maximum 500 words)

[10 Marks] [CO-3]

Q.4 Create a detailed scene from any epic literary work of your choosing, employing the style (Digital/Manual) developed during your major project in the course of study. Describe the key stylistic choices that rendered the style unique and innovative.

Use the Full A3 drawing sheet to illustrate the scene, manual work. Use classroom code i.e *qok4yui* to submit the illustration in PDF/JPG format, if digital.

[15 Marks] [CO-2,3]

Total	No.	of	Pages	1
-------	-----	----	-------	---

Roll no.....

2nd SEMESTER

M.Des.

END TERM EXAMINATION

May-2024

COURSE CODE: DD536

COURSE TITLE: CLAY MODELLING

Max. Marks: 40

Time: 3:00 Hours

Note: All question are compulsory

All questions carry equal marks.

You will be assessed on the clarity, creativity, and feasibility of your design.

Illustration file submit on this email: merajaidrisi@gmail.com

(in given time period).

Laptop is allowed in the exam

- Illustrate a 3D Model of how integrating various transport modes and Q.1 services can enhance the efficiency and sustainability of urban transportation [20][CO1] within the university campus.
- Q.2 Develop a 3D model focusing on sustainable transport and service facilities at DTU.

[20][CO1]

Note: Ensure your responses are clear, concise, and supported with relevant examples and illustrations. Good luck!

II SEMESTER

B.Tech./M.Tech./MBA/Ph.D/ B.Tech. (Eve)/M.Des

END-TERM EXAMINATION

10-May-2024

COURSE CODE: <u>DD538</u>
COURSE TITLE: <u>Motion Graphics and Animation Fundamentals</u>

Time: 3:00 Hours

Max. Marks: 40

Note: Please read the instructions carefully.

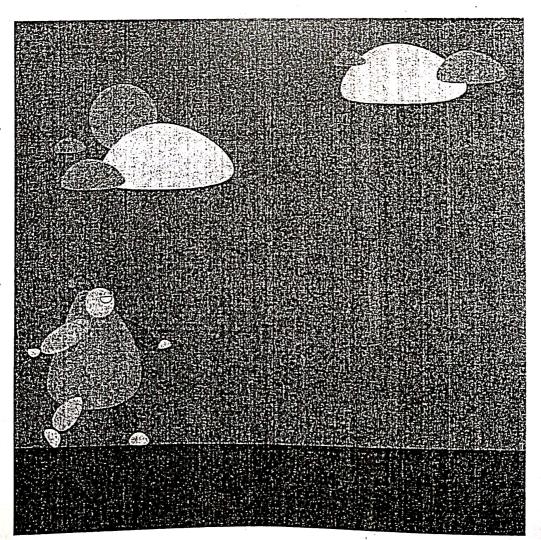
Assume suitable missing data, if any.

Use of any AI (artificial intelligence) tool is prohibited.

Answer to this question paper needs to be submitted digitally on

Google classroom. Class code- sxzwqc5

Q.1 Create one complete walk cycle animation of the given character.



Instructions

- 1. You may use any of the below mentioned medium to create this animation-
 - Digitally using After Effects, Photoshop, Procreate or any similar software
 - Hand drawn frame by frame on paper or similar mediums; however, you will need to record/scan/click pictures and compile the final animation digitally for submission.
- 2. You may alter the colors and style of animation as long as it doesn't alter the integrity of the character.
- 3. An adobe illustrator, adobe photoshop, procreate and jpg file have been provided in the google classroom for your reference.
- 4. Duration of animation is upon your discretion as long as it has one complete walk cycle.
- 5. You will be evaluated on the following grounds-

-	Usage of animation principles	[15]
	Quality of walk cycle/animation	[15]
_	Attention to detail	Γ101

Total No of Pages: 01

2nd SEMESTER 39

di

Roll No.....

₹ND ←MED TERM EXAMINATION

MAY-2024

DD542 BRANDING & PACKAGING DESIGN

Time: 03:00Hours

Max. Marks: 40

Note: All questions are compulsory

Assume suitable missing data, if any.

Material Note** 03 A3 Sheet only

Q1. Design packaging for a line of high-performance outdoor gear targeted at extreme adventurers who tackle the world's harshest environments. The challenge lies in creating packaging that not only reflects the ruggedness and durability of the products but also effectively communicates their advanced features and technical specifications to the target audience. Additionally, the packaging should be lightweight and compact for easy transport during expeditions, yet robust enough to withstand rough handling and extreme weather conditions. It should also incorporate sustainable materials and production methods to align with the outdoor enthusiasts' ethos of environmental stewardship. Furthermore, the packaging must stand out among competitors in outdoor retail stores and online platforms, capturing the attention of adrenaline junkies seeking the next challenge. This design task requires a careful balance of functionality, durability, sustainability, and visual appeal to cater to the demands of the most adventurous souls on the planet.

[20 Marks]

OR

Design packaging for a line of emergency survival kits aimed at individuals and families preparing for natural disasters or other crises. The challenge is to create packaging that conveys a sense of urgency and preparedness while also providing reassurance and practical guidance during stressful situations. The packaging should be compact and lightweight for easy storage and transport, yet robust enough to protect essential supplies like food, water, first aid supplies, and emergency tools. It should include clear instructions and educational materials on how to use the contents effectively, especially for those with limited emergency preparedness knowledge. Additionally, the packaging should be designed to withstand various environmental conditions, from extreme temperatures to moisture and rough handling, ensuring the integrity of the supplies when they are needed most. Balancing the need for functionality, clarity, and durability in packaging for such critical situations poses a tough design challenge.

[20 Marks]

- Q2. Answer the following questions keeping the design problem you have worked upon from the above.
- a) What is the core message or story you want your brand's packaging to convey?
- b) Who is your target audience, and what are their preferences, values, and lifestyle habits?
- c) What are the key features or benefits of your product, and how can they be visually communicated through the packaging?
- d) What materials and production methods align with your brand's sustainability goals while still meeting functional requirements?
- e) What is your budget and timeline for developing the packaging design, and are there any constraints or limitations that need to be taken into account?

 [4X5 Marks]

Total .	no.	of Pages:	One
---------	-----	-----------	-----

D-11						
Roll	10	• • •	 • • •	 • • •	 	

2nd SEMESTER

M.Des Transportation & Service Design, Department of Design, Delhi Technological University

END TERM EXAMINATION COURSE CODE: DD-552

COURSE TITLE: Form Exploration

Time: 03:00 Hours

Max. Marks: 40

May-2024

Note:

1. Choose any two questions from 1 to 3 and question numbers 4 is compulsory.

- 2. Give examples and visuals through drawing by using any medium on the provided drawing sheet.
- 3. Use both answer sheet & drawing sheets.
- 4. No internet/system is required.
- 1. What are the psychological and emotional impacts of different forms and shapes in transportation design on users i.e., passengers, driver and conductor? (10)
- 2. How do emerging technologies impact the creation and experiencing of forms in transportation and service design? (10)
- 3. What methodologies and tools are used in the creation and exploration of forms? Explain with examples? (10)
- 4. Sketch your design concept and provide annotations highlighting key features and design inspirations. Your design should mimic biological or natural principles and incorporate elements from organisms, ecosystems, or any object from the natural world to enhance the vehicle's performance, aesthetics, or environmental impact. Choose one of the following themes for your design concept:
 - a) Bird-inspired Aircraft
 - b) Biomimetic Train

- c) Coral Reef-inspired Submarine
- d) Spider-inspired Autonomous Vehicle

(20)

Roll no.....

II - SEMESTER

M. Des

END TERM EXAMINATION

May-2024

100554-COURSE CODE- 554 COURSE TITLE- Digital Sculpting Tools and Techniques

Time: 03:00 Hours

Max. Marks: 40

Note: All questions carry equal marks.

Use of internet allowed

Assume suitable missing data, if any:

Q.1 By taking the inspiration from any aquatic animal (Bio-mimicry) develop the form of any defence (System) equipment in any software and create all perspective of that.

[20 Marks]

Q.2 Take forward the development of the forms done in previous classes and modify them in different perspective with lighting system at different angles.

[20 Marks]

END

Total no. of Pages: 1

Roll no.....

M. Des

END TERM EXAMINATION

May-2024

COURSE CODE: -DD 556 COURSE TITLE:- Advanced Rendering techniques

Time: 03:00 Hours

Max. Marks: 40

Note:

Assume suitable missing data, if any

*Use to internet and laptop is allowed.

Q.1 What is the purpose of using perspective in transportation design sketches, and how does it enhance the visual impact of the design. [15 Marks]

OR

What are the benefits of incorporating environmental reflections and lightings effects in transportation design 3D renders? Provide a digital 3D example of any render which shows environmental reflections or lighting effects. [15 Marks]

Q.2 Render any transportation means in 3D which demonstrate depth of field effect of camera. (single view only) [15 Marks]

OR

Describe the process of using "Grids" or "Construction line" in sketching to maintain proportion and accuracy in transportation Design. [15 Marks]

Q.3 What are HDRI, Provide 5 HDRI's digitally with crisp background/image quality. [10 Marks]