UID- Design Aptitude Test (DAT) 2024 (ONLINE)

UNDERGRADUATE

Time: 3 Hours **TOTAL MARKS - 100**

INSTRUCTIONS TO THE CANDIDATES

Read these instructions carefully before attempting the questions.

1. Please ensure that you are seated alone in a room for taking the examinations. Also ensure that you are seated in a well-lit area for taking the examination.
2. Sufficient A4 Sheets, Lead Pencils (grade B, 2B, 4B, 6B and 8B), coloured pencils, eraser, ruler, sharpener and geometry box for the purpose of examination.
3. Properly functional laptop / desktop with a functional mic and web-camera (either inbuilt or externally attached).
4. Internet Speed should be minimum of 1Mbps.
5. Candidates are requested to deactivate the screensaver & antivirus software and other notification for smooth conduct of the Examination.
6. Kindly keep any one Government ID Proof such as Aadhar Card, PAN Card, Driving License or your School ID Card handy.
7. You are required to be prepared with their system (Laptop/Desktop with inbuilt of fitted webcam arrangement) for the ONLINE test and check out their systems / read manual and check out the virtual video guide to attempt DAT 2024
8. The link will be accessible at least 45 minutes before the commencement of the DAT 2024
9. The test will be conducted through an AI-proctored platform. Use Laptop/Desktop (With a front camera/webcam and microphone facility) is MUST, for easy and convenient execution of examination.
10. Once the examination starts, you will not be allowed to change the examination window program. Navigation alerts are shared on-screen every time you try to navigate from the test window.
11. Before starting the examination, please go through the instruction manual and virtual video guide for attempting DAT 2024

Undergraduate DAT Paper consists of two parts with 33 Questions.

Part 1 GAT – (General Ability Test) carries a total of **40** marks. It contains **30** questions:

SN	No of Questions	Total Marks
1	1 Marks - 20	20
2	2 Marks - 10	20

This part assesses Communication Ability, Comprehension, Quantitative Ability, Analytical Ability, General Knowledge and Current Affairs and Data Interpretation.

Part 2 CAT – (Creative Ability Test) carries a total of **60** marks. It contains **03** questions: This part assesses Creative Thought Process, Critical Analysis, Design Problem Solving Skill, Interpretation and Expression, Visualization & Representations.

Read the following Passage and answer the Question No. 1 to 4

Transforming Creativity through Design and AI

Artificial Intelligence (AI) has become an integral part of various industries, and its impact on design is no exception. The fusion of AI and design has ushered in a new era of creativity and efficiency, redefining the way designers approach their work. Let's explore the role of AI in design and its transformative effects.

AI plays a pivotal role in the design process, assisting designers in tasks ranging from ideation to execution. One key area is generative design, where AI algorithms analyze data and create numerous design alternatives. Designers can then choose the most suitable option, saving time and expanding the scope of creative exploration.

Contrary to the misconception that AI stifles creativity, it often serves as a catalyst for innovation. By handling repetitive and time-consuming tasks, AI liberates designers to focus on more imaginative aspects of their work. Moreover, AI tools can analyze vast datasets, providing designers with valuable insights and inspiration.

Another noteworthy aspect of AI in design is its ability to personalize user experiences. AI algorithms analyze user preferences and behaviors, enabling the creation of tailored designs that resonate with individual users. This personalization enhances user satisfaction and engagement.

In conclusion, AI's integration into the field of design has brought about a paradigm shift. From streamlining workflows to enhancing creativity and personalizing user experiences, AI is a valuable tool for designers. Understanding its role is crucial for aspiring designers looking to navigate the ever-evolving landscape of design and technology.

1. What is generative design in the context of AI?

a) A design process focused on traditional methods.
b) The use of AI algorithms to create multiple design alternatives.
c) A tool for manual sketching and drawing.
d) A term unrelated to the field of design.

2. How does AI contribute to the efficiency of the design process?

a) By replacing human designers entirely.
b) By automating all design decisions.
c) By assisting in tasks such as generative design and speeding up workflows.
d) AI has no impact on the efficiency of design.

3. What is a common misconception about AI and creativity in design?

a) AI limits creativity by imposing rigid rules.
b) AI enhances creativity by handling repetitive tasks.
c) AI has no impact on creativity in design.
d) Creativity and AI are unrelated concepts.

4. How does AI contribute to personalized design experiences?

a) By creating identical designs for all users.
b) By analyzing user preferences and behaviors to tailor designs.
c) AI has no role in personalization.
d) Personalization in design is solely a manual process.

5. What role does AI play in enhancing accessibility in design?

a) Exclusivity
b) Limitation
c) Automation
d) Inclusivity

6. Simplify: $\frac{0.21X0.21X0.21+0.021X0.021X0.021}{0.63X0.63X0.63+0.063X0.063X0.063}$

a) 0.21
b) 0.63
c) $\frac{1}{27}$
d) None of the Above

7. Identify the product of this logo.



a) Super Bikes
b) Luxury Watch
c) Fashion Clothing
d) Shoes

8. By Selling a mobile phone for Rs. 32,500 a shop keeper gains 16%, if the profit is reduced to 9%, then the selling price will be:

a) 27300
b) 29575
c) 30225
d) 30540

9. how many faces and edges does an octahedron have?

a) 9,12
b) 8,12
c) 8, 13
d) 8,8

10. Who is the founder of the Red Dot Award?

a) Dieter Rams
b) Peter Zec
c) Jony Ive
d) Philippe Starck

11. Which movie won the Oscar for Best Animated Feature in 2023?

a) "The Enchanted Forest"
b) "Galactic Adventures"
c) "Ocean Odyssey"
d) “Guillermo del Toro's Pinocchio”

12. Director of movie ‘Salaar’

a) Prashanth Neer
b) Mani Ratnam
c) Sandeep Reddy Vanga
d) Gautham Menon

Study the following table and answer the questions 13 to 17

Classification of 100 Students Based on the Marks Obtained by them in Physics and Chemistry in an Examination.

Subject	**Marks out of 50**				
	40 and above	**30 and above**	**20 and above**	**10 and above**	**0 and above**
Physics	9	32	80	92	100
Chemistry	4	21	66	81	100
Average (Aggregate)	7	27	73	87	100

13. What is the difference between the number of students passed with 30 as cut-off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

a) 3
b) 4
c) 5
d) 6

14. If at least 60% marks in Physics are required for pursuing higher studies in Physics, how many students will be eligible to pursue higher studies in Physics?

a) 27
b) 32
c) 34
d) 41

15. The percentage of students getting at least 60% marks in Chemistry over those getting at least 40% marks in aggregate, is approximately?

a) 21%
b) 27%
c) 29%
d) 31%

16. The number of students scoring less than 40% marks in aggregate is?

a) 13
b) 17
c) 25
d) 27

17. If it is known that at least 23 students were eligible for a Symposium on Chemistry, then the minimum qualifying marks in Chemistry for eligibility to Symposium would lie in the range?

a) 30-45
b) 50-40
c) 20-30
d) Below 15

18. Find the Synonyms: “PROPEL”
    a) Drive
    b) Burst
    c) Modify
    d) Jettison
19. Bagurumba is a dance form of which state in India?
    a) Gujarat
    b) Assam
    c) Odisha
    d) Maharashtra
20. Success in this examination depends …. Hard work alone.
    a) at
    a) over
    b) for
    c) on

Q21 to Q 30 will be 2marks each

21. Match the Following Art works with Artists.

1. 	A. Roy Lichtenstein
2. 	B. Piet Mondrian
3. 	C. Yayoi Kusama
4. 	D. Marcel Duchamp

a) 1D-2C-3B-4A
b) 1C-2D-3A-4B
c) 1D-2C-3A-4B
d) 1C-2D-3B-4A

22. Given Below are images of sculpture, furniture and buildings. Which of the statement(s) is/are TRUE for the images given below?


L


M


N


P


Q


R

a) M and L are by the same designer
b) P and Q are by the same designer
c) L and R are by the same designer
d) P and R by same architect

23. Match the following:

1. Kinematics	A. the regular arrangement of leaves
2. Alkane	B. the obtect pupa of a moth
3. Phyllotaxis	C. Any fully saturated acyclic hydrocarbon
4. Chrysalis	D. Meteorologists
5. Anemometer	E. Geometry of motion

a) 1D-2C-3E-4A-5B
b) 1C-2D-3A-4B-5A
c) 1D-2C-3A-4B-5E
d) 1E-2C-3A-4B-5D

24. Two ships are sailing in the sea on the two side of a light house. The angle of elevation of the top of lighthouse is observed from the ships are 30^0 and 45^0 respectively, if the lighthouse is 100m high, the distance between two ship is:

a) 173 m
b) 200 m
c) 273 m
d) 300 m

25. Collective Noun:

1. A ……. of Dolphins
2. A ……. of Zebras
3. A ……. of Butterflies

4. A ……. of Kangaroos

A. Zeal
B. Pod
C. Troop
D. Kaleidoscope

a) B, A, D, C
b) A, B, C, D
c) C, A, D, B
d) D, B, C, A

26.

this	whole area	if climate change continues, this	a dessert	into	could	turn

a) If climate change continues, this whole area could turn into a dessert.
b) If climate change continues, this could turn whole area into a dessert.
c) If climate change continues, this could turn a dessert into whole area.
d) If climate change continues, this dessert could turn into a whole area.

27 In a group of friends, if Alice is friends with Bob, and Bob is friends with Carol, but Alice is not friends with Carol, what type of relationship exists?

a) Transitive
b) Symmetric
c) Asymmetric
d) Reflexive

28. Count the total number of different font styles from the table given below:

A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A

a) 7
b) 8
c) 9
d) 10

29. Consider a regular pentagon. If the measure of one interior angle is x degrees, what is the value of x?
a) 108 degrees
b) 120 degrees
c) 144 degrees
d) 160 degrees

30. Match the following Sports person with their respective sports.

1. **Geeta Phogat**	A. **Gymnastics**
2. **Hima Das**	B. **Badminton**
3. **Dipa Karmakar**	C. **Wrestling**
4. **P. V. Sindhu**	D. **Athletics**

a) 1A, 2B, 3D, 4C
b) 1C, 2A, 3D, 4B
c) 1C, 2D, 3A, 4B
d) 1D, 2A, 3C, 4B

Part B:
02 questions X 15 marks each = 30 marks
01 questions X 30 marks each = 30 marks

Q No. 31. .....15 marks.

With the advancement of technology, many items in daily life are changing or becoming obsolete. Select an item from your house and envision its evolution over the next few years. Draw the product in the year 2050 and provide a detailed explanation of all of its aspects, including the materials, dimensions, color, and functionality. Write a concept note in 100 words about your new design.

Or

Q No. 31. Draw an open kitchen in one point perspective. The kitchen should have four people facing each other while working. (use color pencil for rendering).**.....15 marks.**

Q No. 32. .....15 marks

Consider a 6-person dining table at a Chinese restaurant in your city and depict the three-dimensional aspect of the table through colour rendering considering the following points:
** There is enough food for six persons to eat at the table.
** All cutleries are in place
** Two of the six humans are younger than six years old.
** It is a local Chinese restaurant in your city
** Some service boys are serving the food.
** It is a 30 years old restaurant

Or

Q No. 32. 2. Using any 3 emojis, create a pattern for a wallpaper in a teenager's room. Draw the selected emojis separately to highlight their characteristics. (Use color pencil for rendering)
.....15 marks.

Q No. 33. ....30 marks

Identify a problem with any ATM booth nearest to your house.
Redesign the booth to resolve the identified problem.
Illustrate each and every detail of the booth in 3D (three-dimensional view). (To be rendered with color pencil only)
Include a pencil drawing of a comprehensive route map showing the path from your house to the identified booth.

INSTRUCTION NOTES for Q 27 to 30

· Number of Papers to be used: 01/02
· Paper size: A4
· Paper orientation: will be decided by the candidate
· Name, Candidate ID & Question no. should be written on the corner of the page
· Use only HB pencil
· Do not use sketch pens or markers
· Use colored pencils only for rendering
· Once completed, Upload the file as instructed