2972

JEE (Adv) 2019 (AAT)

DO NOT WRITE ANYTHING HERE

Time: 3 hours **Maximum Marks: 300**

READ THE INSTRUCTIONS CAREFULLY

GENERAL

- This sealed booklet is your Question Paper. Do not break the seal till you are told to do so.
- Immediately after breaking the seal of the booklet, verify that the booklet contains **24 pages** and that all the **16 questions** along with the options are legible. Report immediately about any missing or torn sheet in this booklet and ask for a replacement of the booklet from the invigilator. No replacement will be allowed after 15 minutes of the starting of the examination.
- Write your Name, Roll Number, JEE (Adv) 2019 Rank and other details in the space provided and nowhere else. No distinctive/identification mark of any type is to be put anywhere else in this booklet.
- Answers are to be written only in the booklet and within the space provided beside/below each Question and nowhere else. Answers written in non-designated place will not be evaluated.
- Blank spaces are provided within this booklet for rough work.
- Do not deface this booklet or detach or mutilate any sheet from the booklet. Such acts lead to disqualification.
- The question paper has five sections.
- **All the Questions are compulsory.**

Total Marks Obtained:

In Numbers: _____

In words: _____

_____

Signature of the Examiner with date

_____

Signature of the Scrutinizer with date

JEE (Adv) 2019 (AAT)

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NAME: _____

ROLL NO: _____

JEE (ADV) 2019 RANK: _____

CATEGORY: _____

CATEGORY RANK (IF APPLICABLE):

_____

EXAMINATION CENTRE:

_____

I HAVE READ ALL THE INSTRUCTIONS AND SHALL ABIDE BY THEM

_____

Signature of the Candidate

_____

Signature of the Invigilator after verification of identity and other details

DO NOT BREAK THE SEAL WITHOUT BEING INSTRUCTED TO DO SO BY THE INVIGILATOR

SEAL

SEAL

See the back cover of this booklet for the marking scheme

Mukat

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SECTION A : Architectural Awareness (Maximum Marks: 60)

This section contains **FOUR** questions. Question 1 carries **30 marks**, Questions 2,3 and 4 carry **10 marks** each. There is **NO** negative marking.

Q.1 This section contains **15 multiple choice questions.** Each question has four options, out of which **ONLY ONE** is correct. Mark the correct option with a tick ☑ mark.

(15 × 2 = 30 Marks)

(i) Which amongst the four is presently the tallest building in India?

- ☐ The Kohinoor Square Tower I
- ☐ The Imperial II
- ☐ Lodha Bellissimo
- ☐ Orchid Enclave 2

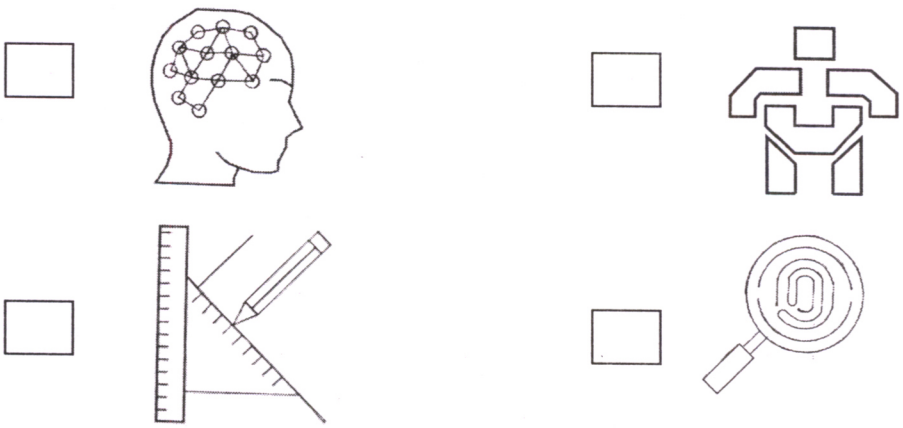
(ii) Which of the following building is the first NET ZERO ENERGY BUILDING in India?

- ☐ CII-Sohrabji Godrej Green Business Center, Hyderabad
- ☐ Unitech Signature Tower, Gurugram
- ☐ Indira Paryavaran Bhawan, New Delhi
- ☐ CMC Limited Building, Mumbai

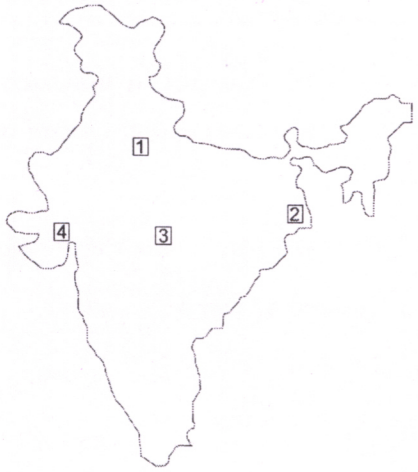
(iii) Which of the following is the name of a natural hazard event?

- ☐ Titli
- ☐ Saptarshi
- ☐ Padma
- ☐ Agni

(iv) Which logo is most appropriate for forensic science?



(v) Numbers 1, 2, 3 and 4 represent four cities in the map. Match the numbers with the buildings designed by Charles Correa from the options given below.



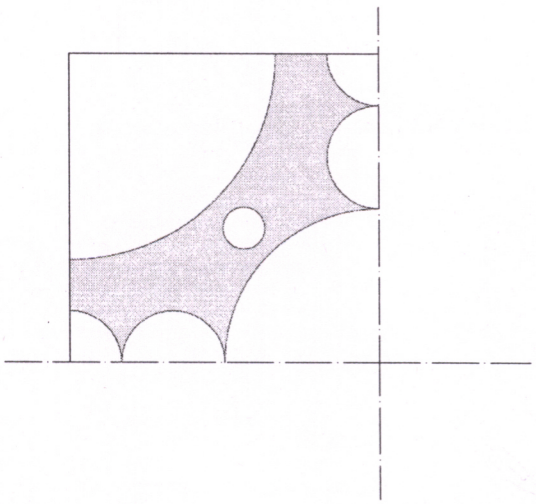
☐ 1-National Crafts Museum, 2-City Center I, 3-Bharat Bhawan, 4-Gandhi Smarak Sangrahalaya

☐ 1-City Center I, 2-National Crafts Museum, 3-Bharat Bhawan, 4-Gandhi Smarak Sangrahalaya

☐ 1-Gandhi Smarak Sangrahalaya, 2-City Center I, 3-National Crafts Museum, 4-Bharat Bhawan

☐ 1-National Crafts Museum, 2-Gandhi Smarak Sangrahalaya, 3-Bharat Bhawan, 4-City Center I

(vi) A square handkerchief after folding twice along the dotted lines shows the pattern given below. How many complete circles are there in the full handkerchief?



☐ Five ☐ Seven

☐ Nine ☐ Eleven

(vii) Which of the structural system is used in Signature Bridge, New Delhi?

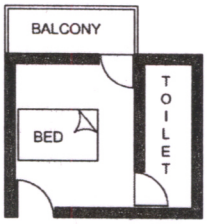
- ☐ Girder
- ☐ Cable Stayed
- ☐ Suspension
- ☐ Arch

(viii) 'Rani ki vav' is a

- ☐ Bore well
- ☐ Hot water spring
- ☐ Step well
- ☐ Lake

(ix) You are offered a hostel room with a bed, an attached toilet and a balcony. Which amongst the four options will you choose considering minimum circulation?

☐



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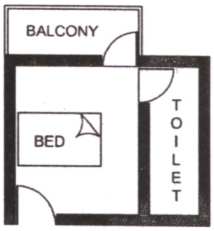

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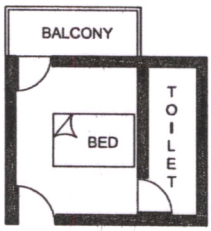

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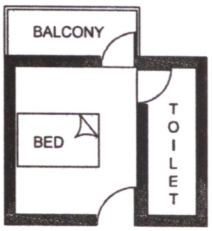


(x) Which of the following instrument works on the principle of repeated reflection of light?

- ☐ Kaleidoscope
- ☐ Microscope
- ☐ Telescope
- ☐ Stethoscope

(xi) The ancient city of Constantinople is presently known as

- ☐ Alexandria
- ☐ Istanbul
- ☐ Cairo
- ☐ Damascus

(xii) Which of the following is considered as a slow onset disaster?

- ☐ Cyclone
- ☐ Earthquake
- ☐ Fire
- ☐ Drought

(xiii) Which of the following is NOT a passive cooling technique?

- ☐ Roof garden
- ☐ Jali
- ☐ Fountain
- ☐ Desert cooler

(xiv) Who is the author of the book titled "My Name is Red"?

[ ] Ayn Rand [ ] Arundhati Roy

[ ] Orhan Pamuk [ ] Paulo Coelho

(xv) Select the flower that blossoms once in twelve years in the Western Ghats, India.

[ ] Neelakurinji [ ] Solanum nigrum

[ ] Crinum lily [ ] Amaryllis

Q.2 Match the TEMPLE in Column I with its location in Column II.

(5 × 2 = 10 Marks)

Column I	Column II
(A) Pantheon [ ]	(P) Japan
(B) Amun Karnak [ ]	(Q) Indonesia
(C) Angkor Wat [ ]	(R) Rome
(D) Borobudur [ ]	(S) Egypt
(E) Renkoji [ ]	(T) Nepal
	(U) Cambodia

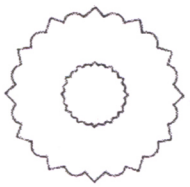
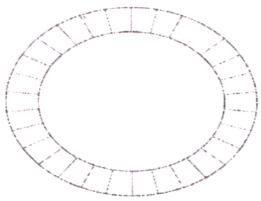
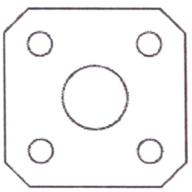
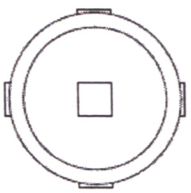
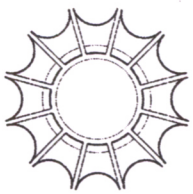
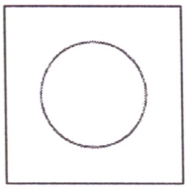
Q.3 Match the material in Column I with its appropriate application area in Column II.

(5 × 2 = 10 Marks)

Column I	Column II
(A) Bamboo [ ]	(P) Railway platform shed
(B) Gypsum board [ ]	(Q) Toilet
(C) Steel truss [ ]	(R) Footpath
(D) Paver block [ ]	(S) Water tank
(E) Ceramic tile [ ]	(T) Auditorium interior
	(U) Temporary structure

Q.4 Match the building in Column I with its corresponding schematic plan in Column II.

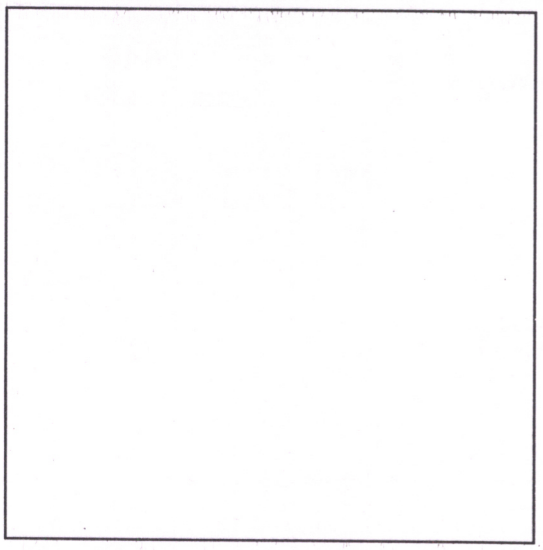
(5 × 2 = 10 Marks)

Column I	Column II
(A) Matri Mandir, Auroville ☐	(P) 
(B) Qutb Minar, New Delhi ☐	(Q) 
(C) Great Stupa, Sanchi ☐	(R) 
(D) Gol Gumbaz, Bijapur ☐	(S) 
(E) Taj Mahal, Agra ☐	(T) 
	(U) 

SECTION B : Geometrical Drawing (Maximum Marks: 60)

This section contains **THREE (03)** questions. Each question carries **20 marks**.

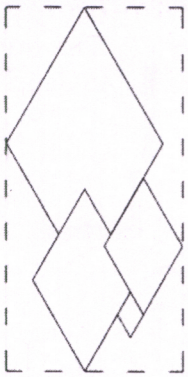
Q.5 You are given a square piece of paper as shown below. Divide it into multiple parts using minimum three geometric shapes in such a way that the entire piece of paper is utilized.



Create a composition using all the parts in the blank space below.

Q.6 Write the word 'QUAKE' expressing its literal meaning in the space provided below. A similar example with the word 'SPLIT' is shown below.

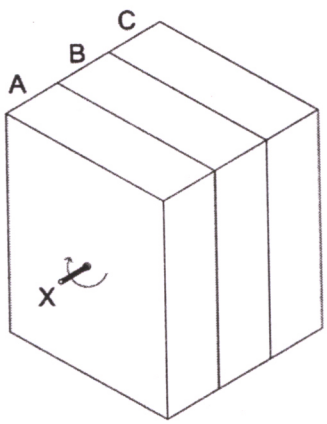
Q.7 Draw the given composition after enlarging it by three times.

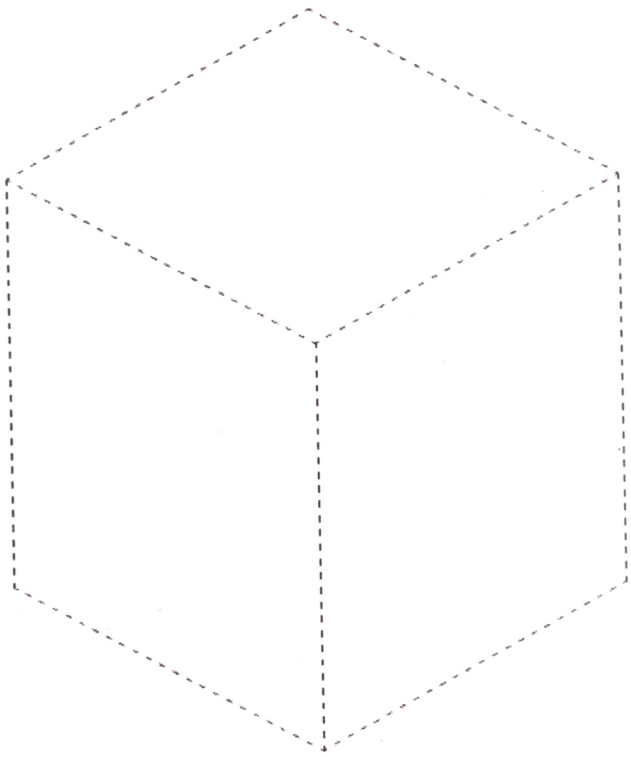


SECTION C : 3D Perception (Maximum Marks: 60)

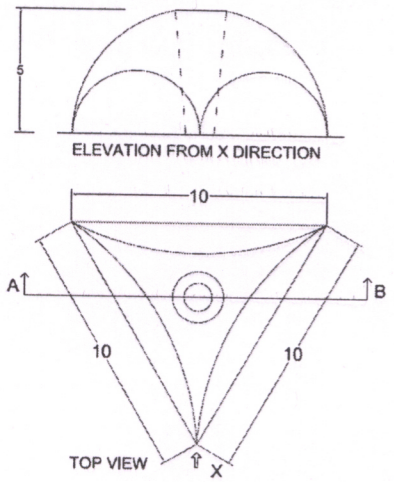
This section contains **THREE (03)** questions. Each question carries **20 Marks**.

Q.8 A cube is split into three blocks 'A', 'B' and 'C'. The initial position of the blocks is shown below. Blocks 'A' and 'C' are rotated against X axis by 45 degree. Draw the final view after rotation.

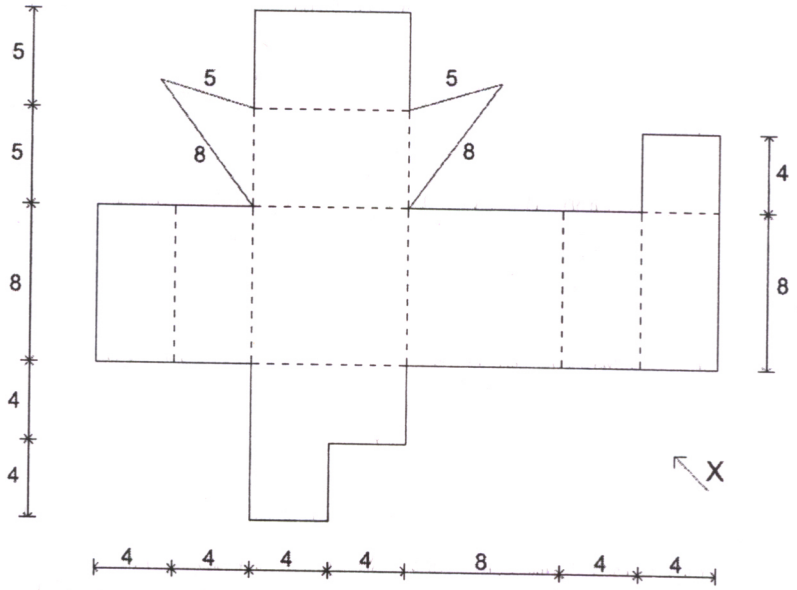




Q.9 The top view and the elevation from X direction of a solid object is given below. Draw the sectional view of the object when cut through AB.



Q.10 Draw a 3-dimensional object as viewed from X direction from the 2D surfaces given below. The dotted lines indicate folding references to generate the 3D object.



SECTION D : Imagination and Aesthetic Sensitivity (Maximum Marks: 60)

This section contains **THREE (03)** questions. Each question carries **20 marks**.

Q.11 A popular car rental company chose to exchange business with an established software company. The logos of the two organizations are given below. Draw appropriate logos for both the companies reflecting their new business.

UBER

Microsoft

Q.12 An architect while designing a school is hesitant whether to put a 'ramp' or a 'staircase' to approach the first floor from the entrance lobby. Imagine a conversation between the 'ramp' and the 'staircase', each trying to convince the architect. They should equally participate in the conversation.

	The Architect's decision:

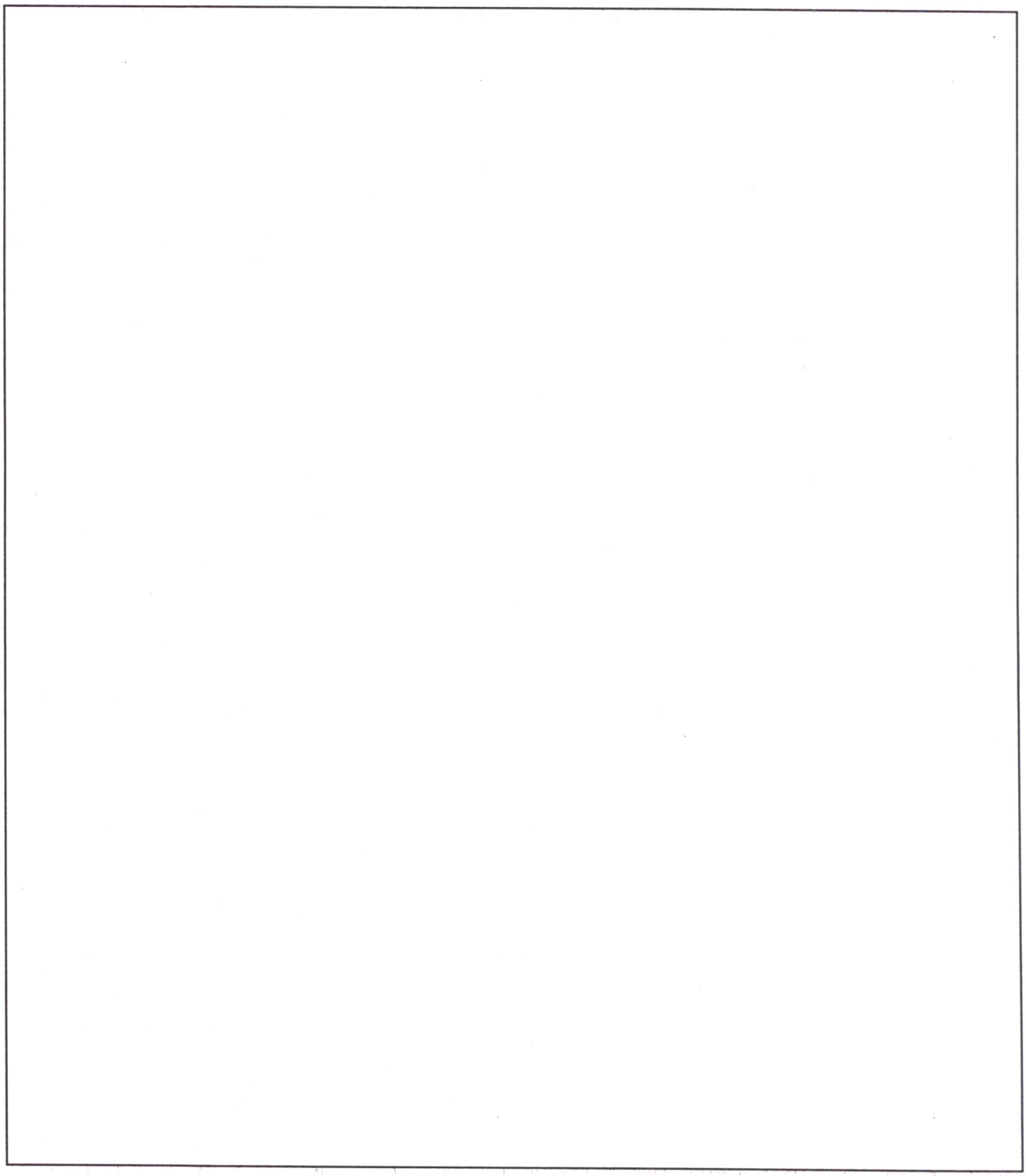
Q.13 A thirsty crow is in search of water in a hot summer day and finally . . .
Complete the story sequentially by putting appropriate visuals in black & white in the spaces provided below.

1)	2)
3)	4)
5)	6)

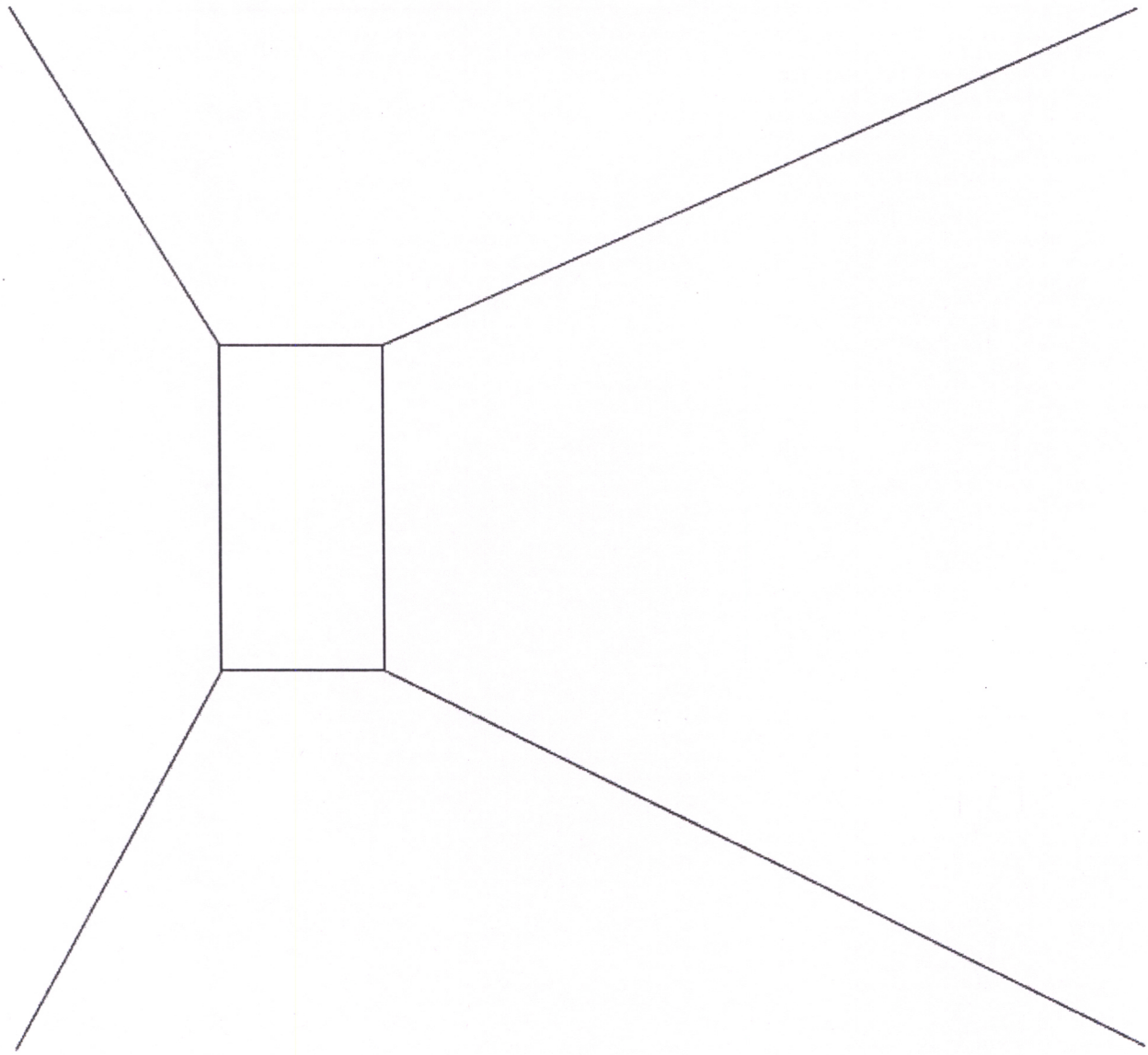
SECTION E : Freehand Drawing (Maximum Marks: 60)

This section contains **THREE (03)** questions. Each question carries **20 marks**.

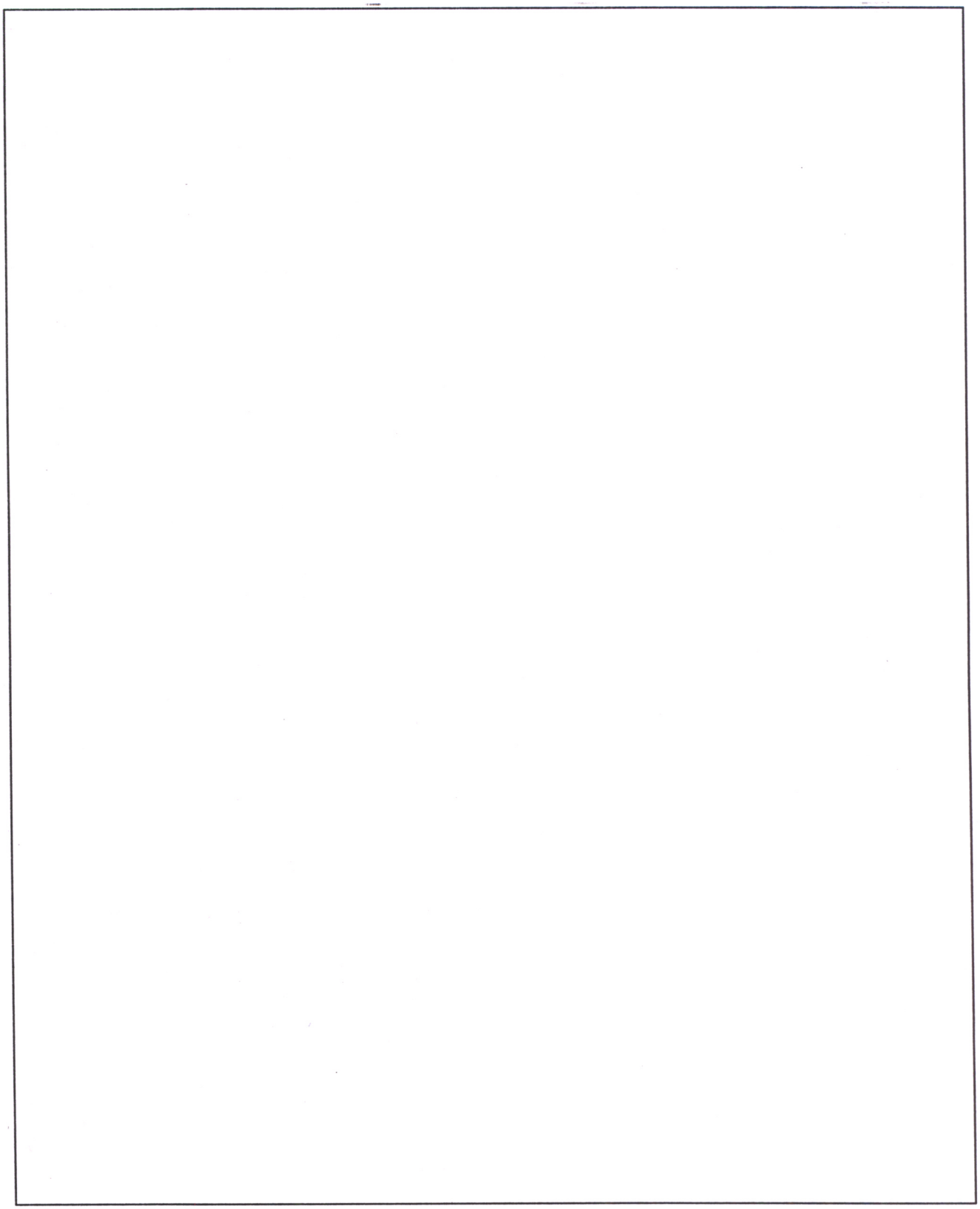
Q.14 Make a color composition using different types of leaves of varied size and shape with 'TECHNOLOGY' as the theme. You may select maximum of three colors.



Q.15 Develop a scene considering the profile given below.



Q.16 Make a pencil sketch with shades and shadows of a road side eatery showing associated activities and people.



END OF THE QUESTION PAPER

SPACE FOR ROUGH WORK ONLY

SPACE FOR ROUGH WORK ONLY

SPACE FOR ROUGH WORK ONLY

SPACE FOR ROUGH WORK ONLY

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Section–wise Distribution of Marks

Sections	Question No.	Page No.	Maximum Marks	Marks Obtained
Section A (Architectural Awareness)	Q. 1	3-6	30	
	Q. 2	6	10	
	Q. 3	6	10	
	Q. 4	7	10	
Section B (Geometrical Drawing)	Q. 5	8	20	
	Q. 6	9	20	
	Q. 7	10	20	
Section C (Three Dimensional Perception)	Q. 8	11	20	
	Q. 9	12	20	
	Q. 10	13	20	
Section D (Imagination and Aesthetic Sensitivity)	Q. 11	14	20	
	Q. 12	15	20	
	Q. 13	16	20	
Section E (Freehand Drawing)	Q. 14	17	20	
	Q. 15	18	20	
	Q. 16	19	20	
TOTAL MARKS			300	