INSTRUCTIONS TO CANDIDATES:

Read these instructions carefully.

1. Write your name, CEED Registration number and the Examination Centre in the space provided on the cover page of this answer book.
   - Make sure that you sign in the space provided in the cover page.
   - Entering your name or registration number anywhere else (other than the space provided in the cover page) is strictly forbidden.
   - No distinctive mark of any sort is to be put anywhere in the answer book.
   -Violation of these instructions or adoption of malpractices in the examination hall will lead to disqualification.

2. Write your answers only in English.

3. Write or draw your answers only in the space provided for each question.

4. Do not remove any sheet from this answer book.

5. Before leaving the examination hall, submit this question-cum-answer paper to the invigilator.

6. Separate pages are provided at the end of this book for rough work.
   - Do not detach any of these pages.
QUESTION 1 ............................................................................................................................................... 20 marks

Make a composition consisting of a candle, a half-open match box and some match sticks spilled out. Use only black pencil. Make the drawing sufficiently large to fit the space provided.

Your drawing will be judged on the basis of
1. Quality of pictorial three-dimensional representation
2. Depiction of details
3. Ability to bring out the material characteristics of the different components of the composition.
QUESTION 2 .......................................................................................................................................... 30 marks

**Answer any one question (A or B)**

**A.** There are different kinds of torches for different uses. Generally all torches use dry cells as power source for illumination. This power source can also be used for incorporating other functions. Innovate and design a torch with more than one function.

State your perception of the problem and the opportunities that your solution provides. Present your concept through sketches, showing the overall form, the different functions and its construction details - either through open view, sectional view or exploded diagram.

Write **FIVE** points about your final design solution in the space provided on page 7.

Your solution will be evaluated on the basis of your imaginative combination of functions, the overall form developed on the basis of it and your ability to express your design graphically.

**OR**

**B.** The Government of India is developing underwater tourism as a new attraction for tourists in India. Design a mascot for the ‘Department of Underwater Tourism’. The mascot should reflect Indian culture, features of underwater imagery and playfulness.

This mascot will be used in various contexts, in colour, black & white, in two dimensional as well as three dimensional form.

Illustrate your design for varied applications of the mascot, taking into consideration different emotions and different contexts of use.

Write down how your design addresses the nature of various applications in **FIVE** points in the space provided on page 7.

Your design will be evaluated on your creativity, originality and your ability to transpose your design solution successfully to multiple usages.

The Mascot of ‘Air-India’ is given here as an example.
Q 2: A or B
Q 2: A or B
Q2 contd: FIVE points about your final design solution.
QUESTION 3 ..................................................................................................................(10 marks)

Develop EIGHT different creative and unconventional ways of using discarded / damaged compact discs (CDs). You may use one or more or a part of the CD, you may also deform the CDs to suit your design. Sketch your designs in the spaces provided below and write the use. Evaluation will be based on creative thinking, varities in application and overall form.
QUESTION 4 .............................................................................................. (10 marks)

Identify TEN major problems in the toilet of a second class sleeper compartment that a passenger would encounter. The problems can be related to ease and comfort of use, safety, hygiene, looks etc. Write down in brief these problems in the space provided below. You will be evaluated on your ability to critically observe.

Problem 1: ............................................................................................................................

Problem 2: ............................................................................................................................

Problem 3: ............................................................................................................................

Problem 4: ............................................................................................................................

Problem 5: ............................................................................................................................

Problem 6: ............................................................................................................................

Problem 7: ............................................................................................................................

Problem 8: ............................................................................................................................

Problem 9: ............................................................................................................................

Problem 10: ..........................................................................................................................
The terms ‘disability’ and ‘handicap’ are not synonymous. A physically disabled person is not necessarily handicapped. A disability is a condition of impairment having an objective aspect that can usually be described by a physician and a handicap is the cumulative result of the obstacles which disability interposes between the individual and his maximum functional level.

A handicap has to be assessed according to the demands of the situation in which the individual finds himself. Even a severe disability need not in specific circumstances be a handicap. A blind person is not handicapped in work which does not require vision.

A chairbound person is not handicapped if the work he is doing can be undertaken from a wheelchair and does not demand rapid locomotion. Conversely a handicap may be found where there is no medically identifiable disability. A person whose ambition it is to be a great athlete may regard himself as handicapped if his physical abilities are only average. A physical attribute is therefore a physical handicap only where it constitutes a barrier to the achievement of specific goals.

Apart from any confusion arising from a lack of appreciation of the distinction between the disability and handicap, it ought also to be recognised that there are hazards in talking about ‘disabled people’ or ‘the disabled’. A physically disabled person - unless he is blind, deaf, totally paralysed and mentally deficient - he is not unable to do anything. He is also a physically abled person - there are things which he can do as well as things he cannot do.

It is therefore more responsible to speak of ‘a person with a disability’. The distinction may appear trivial but it is important. The hazard of using the term ‘disabled person’ is that by emphasising the inferiority of a person in terms of physique, judgement of unrelated personality traits may be affected. The tendency to exaggerate the effects of a disability and to relate all aspects of behaviour to it can too easily lead to an evaluation of the individual as being generally inferior.
Q5:

1: ......................................................................................................................................................
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QUESTION 6 .............................................................................................................. (10 marks)

Identify the hidden message in the visual given above and write it down

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Represent DESIGN in similar fashion in the box provided below.

LLITTTT...
TOP CRIMINAL LAWYER ESCAPES GUN ATTACK

PTI. July 15, 2005.
Mumbai: Bike-borne gunmen opened fire at criminal lawyer S.K. Raza from close range as his car reached 1st TPS Road (close to Bhabha Hospital) near his Bandra (West) home, but the bullet only managed to graze the rear right door of the vehicle and no one was injured.

Barely 10 days ago, police commissioner A.N. Patil had assigned armed security to the lawyer after intelligence reports about a threat to his life as he was defending the Ghatkopar bus blast accused.

The 58-year old Raza had set off for the high court as usual around 9.00 am when the black Mitsubishi Lancer was ambushed. His 27-year old son, Aftab, was sitting by the right door while Memon was on the other side of the rear seat. Driver Prasad Matre was at the wheel with police bodyguard P.K. Yadav next to him when the incident took place.

Yadav, who was assigned to Raza on June 27, said, "It was 9.05 am when our car was heading towards the Hill Road junction. Suddenly, we heard a thud and I turned back to see a youth with a gun. I rushed out and tried to nab him, but he fled on a waiting motorcycle." Yadav shot at the fleeing assailants but the duo managed to escape.

The drama was not over. Before Raza, who had turned back after the attack, could reach home, his daughter-in-law, Ameesha, received two threat calls on the landline. Claiming to be Ravi Pujari, a small-time gangster, the caller said in Hindi, "Ab to bach gaya hai lekin agli bar mere admi chhodenge hai, bomb blast ke aropiyon ko bachata hai. main Mumbai police ka shubh chintak hoon."
Write a short note (in two or three sentences) about each of the personalities listed below.

1. Laurie Baker  
2. Mahesh Bhupati  
3. Manjit Bawa  
4. Bejan Daruwala  
5. Smriti Z. Irani
QUESTION 9

A supplier of mineral drinking water wants to introduce a 500ml disposable bottle specially for children (in the age group 3-6 years) using existing material and manufacturing process. What changes in the design will you make to facilitate ease of use by children. Illustrate your design ideas with the help of suitable sketches.
QUESTION 10.................................................................................................................(10 marks)

Draw TWO forms for an outdoor sculpture using at least three of the objects given below.

The objects below may be visualised as planar surfaces, wire frames or solids.
You may change their size, position and orientation. You may also explore union, subtraction and intersection of the objects.
QUESTION 11 ...............................................................(10 marks)

The bronze sculpture (approx 30 cm long) shown here is to be kept on a table. Suggest and draw a suitable support which goes well with the sculpture and makes it stable as well. Justify your answer in two sentences. Your solution will be evaluated on the basis of minimum visual impact of the base and maximum stability.
A bicycle has to be pedalled uphill with the help of a set of four gears (as shown in the figure). Identify the most favourable gear combination and draw the missing chain for the task on the drawing itself.

Justify your answer in two sentences.

You will be evaluated based on your understanding of engineering principles.
SPACE FOR ROUGH WORK. Do not detach.
SPACE FOR ROUGH WORK. Do not detach.
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