

CEED 2014

Question Paper



Indian Institute of Technology Bombay

CEED 2014 PART A

There are 50 questions. Each question carries 2 marks for correct answer,

- 0.5 for incorrect answer.

Q1: The film 'Ship of Theseus' was directed by

- A. Anand Patwardhan
- B. Satyajit Ray
- C. Karan Johar
- D. Anand Gandhi

Q2: Author of the book 'India After Gandhi' is

- A. V. S. Ramachandran
- B. Ramachandra Guha
- C. Jawaharlal Nehru
- D. M.J. Akbar

Q3: Zaha Hadid is well known as_____.

- A. a fashion photographer
- B. a fashion designer
- C. a singer
- D. an architect

Q4: The famous temple that was affected in June-July 2013 floods in Uttarakhand is

- A. Badrinath
- B. Somnath
- C. Kedarnath
- D. Bhimashanker

Q5: _____ is an example of monolithic temple architecture.

- A. Trimbakeshwar temple
- B. Meenakshi temple
- C. Kailashnath temple
- D. Akshardham temple

Q6: With a 50 mm lens when you change aperture from 2.8 to 8, the depth of field of the image will

- A. Increase
- B. Decrease
- C. Remain unchanged
- D. None of the above

Q7: Postscript in digital printing was developed by _____ .

- A. Apple
- B. Microsoft
- C. Google
- D. Adobe

Q8: The following lithograph was done by _____ .



- A. Kathe Kollwitz
- B. Edvard Munch
- C. Yeng Li Pen
- D. Wu Tao Zu

Q9: Which of the following animals is not depicted In Ashoka Pillar ?

- A. Bull
- B. Horse
- C. Lion
- D. Tiger

Q 10: Identify the 'India Design Mark' symbol.



A



B



C



D

Q11: Identify the famous Indian artist who painted the picture below



- A. Ghulam Mohammad Shaikh
- B. Amrita Shergil
- C. Raja Ravi Varma
- D. Abhinindranath Tagore

Q 12: Identify the following monument



- A. Bharhut Stupa
- B. Sanchi Stupa
- C. Kushinagar Stupa
- D. Bavikond Stupa

Q13. One of the methods of 3D printing is called _____

- A. Laser Microscopy
- B. Surface scanning microscopy
- C. Stereolithography
- D. Offset Printing

Q14. Boot space of a car refers to _____

- A. Luggage space
- B. Engine Envelope
- C. Place to keep shoes
- D. Petrol Tank

Q15. Identify the organization which uses the symbol shown here.



- A. Trade Fair Authority of India
- B. Indian Institute of Foreign Trade
- C. Indian Institute of Packaging
- D. Trade Union Federation of India

Q16. What is the maximum number of circular discs of equal size, which can be placed around a similar disc, such that the central disc is touched by all others but there is no overlap between any of the discs?

- A. 6
- B. 8
- C. 12
- D. 10

Q17. A platonic solid with 12 sides is called _____.

- A. Tetrahedron
- B. Cube
- C. Icosahedron
- D. Dodecahedron

Q18. Which among these is not a dance form in India?

- A. Kathak
- B. Mohiniyattam
- C. Odissi
- D. Thumri

Q19. Identify the correct sentence

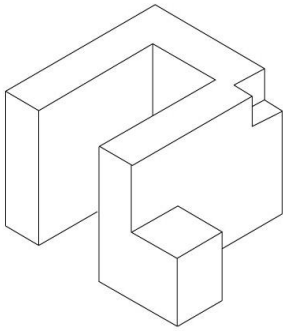
- A. Which of your two colleagues are here
- B. Which of your two colleagues is here
- C. Which of two colleagues are here
- D. Which of the two colleagues are here

Q20. Complete the sentence:

..... his carelessness our car was ruined

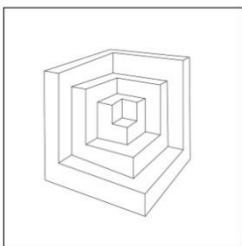
- A. Cause of
- B. Since
- C. For
- D. Due to

Q21. How many surfaces are there in the illustration shown?

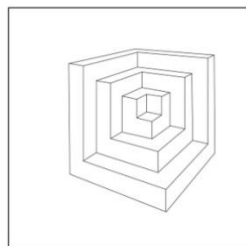


- A. 14
- B. 16
- C. 17
- D. 15

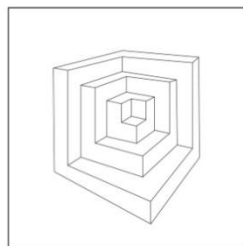
Q22. Identify the drawing with correct perspective.



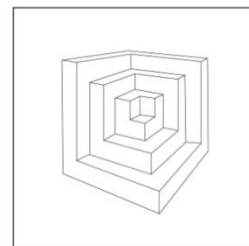
A



B



C



D

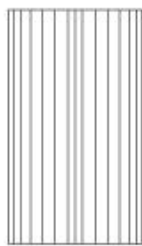
Q23. Identify this tribal art form of India



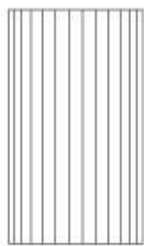
- A. Warli
- B. Saura
- C. Madhubani
- D. Gond

Q24. Plan of a three dimensional object is shown here.

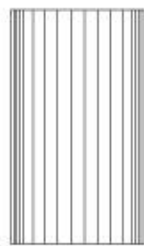
Identify the correct front view of the object from amongst the four images shown below .



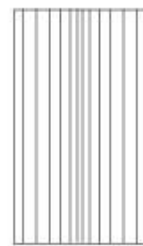
A



B



C



D

Q25. What is the meaning of 'latent'?

- A. Worthy
- B. Veiled
- C. Latterly
- D. Flanking

Q26. What is the full form of MPEG?

- A. Motion Pictures Experts Group
- B. Magnetic Prism Exposure Grid
- C. Motion Picture Entertainment Guild
- D. Media Protocol Entertainment Guild

Q27. The film that Eisenstein is associated with _____.

- A. Blow up
- B. Bicycle Thieves
- C. Battleship Potemkin
- D. Roshomon

Q28. Identify the famous graphic designer from the list

- A. Sabyasachi Mukherjee
- B. Sudarshan Dheer
- C. Dilip Chhabria
- D. Hafeez Contractor

Q29. Identify the car manufacturer based on the visual shown here



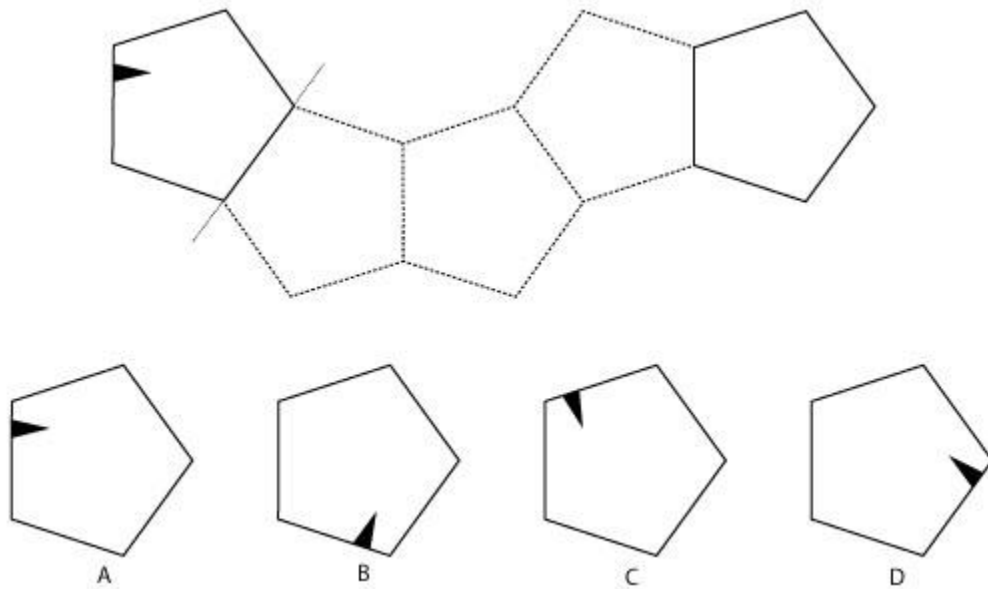
- A. Rolls Royce
- B. BMW
- C. Maruti Suzuki
- D. Land Rover

Q30. Identify the car brand from the visual shown

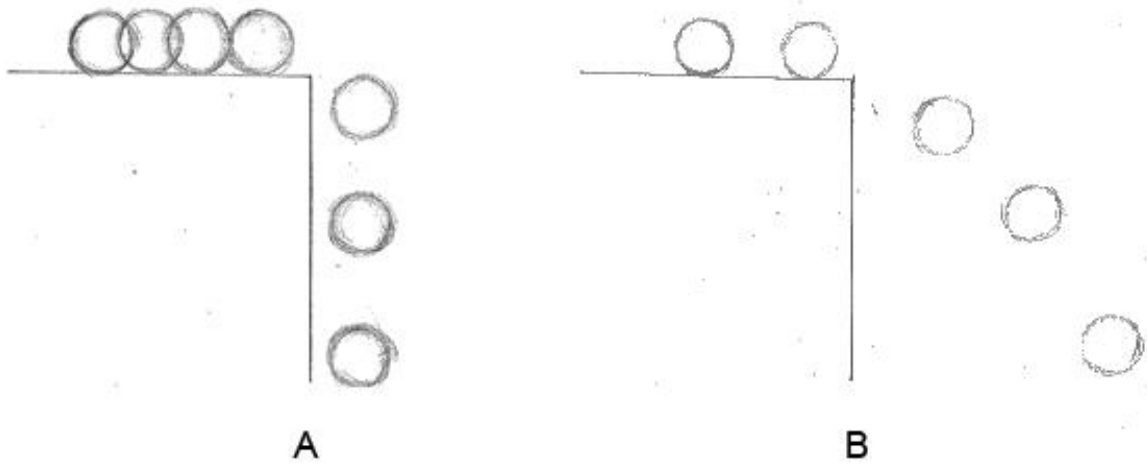


- A. Cadillac
- B. Vauxhall
- C. Citroen
- D. Dacia

Q31. A Pentagon is mirrored four times. What will the final image seen in the last Pentagon be?

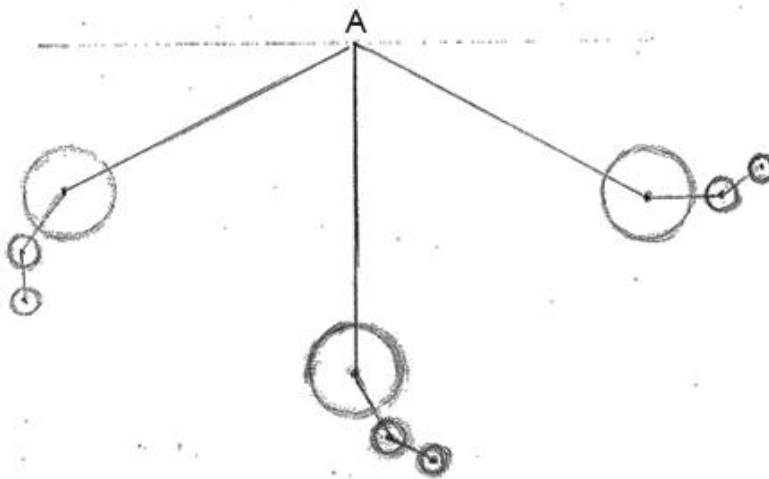


Q32. You are shown two animation sequences (A and B) of a ball falling off a surface. Assuming that they were pushed with the same force, identify which animation sequence depicts the heavier ball ?



- A. Ball in image A is heavier
- B. Ball in the image B is heavier
- C. Ball in image A and B are of equal weight
- D. Can't say

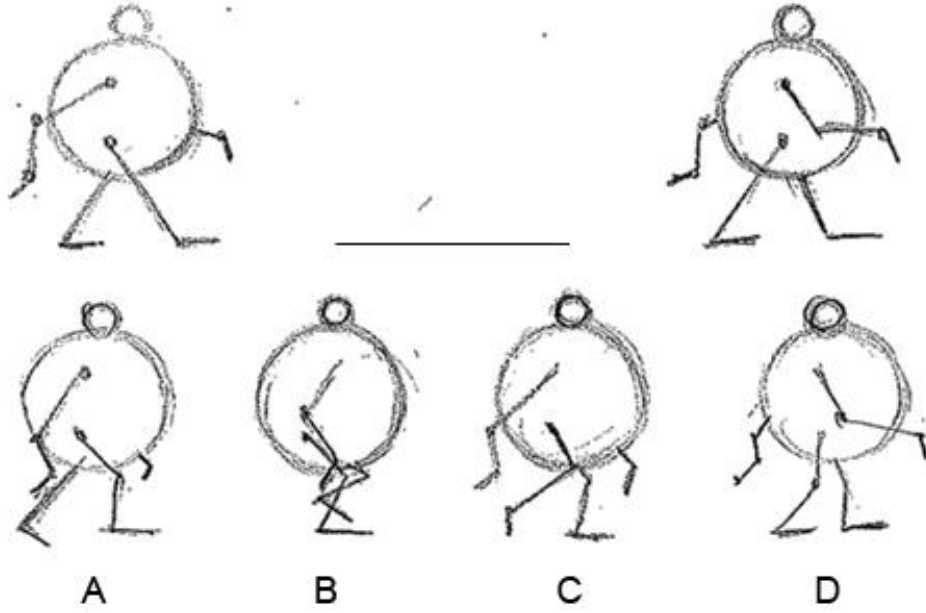
Q33. In the image shown identify the direction of the swinging pendulum around pivot point A.



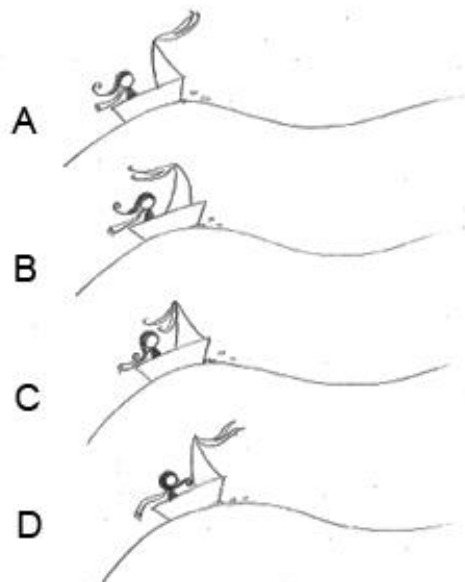
- A. Left to Right
- B. Both the directions

- C. None of the above
- D. Right to Left

Q34. Choose the correct mid-point image to complete the walk cycle



Q35. A girl in a boat is riding a wave. Identify the correct drawing



Q36. Lost wax process is used in _____.

- A. Turning
- B. Casting
- C. Forging
- D. Welding

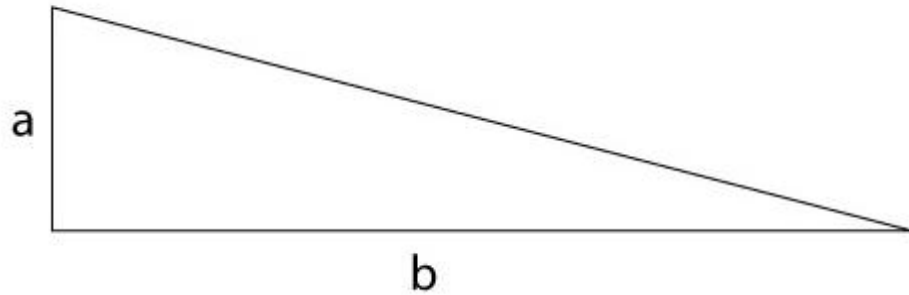
Q37. How many A4 size paper sheets will make A0 size?

- A. 3
- B. 4
- C. 16
- D. 8

Q38. As per DIN standards, the dimension of A4 size paper is _____.

- A. 210 by 297 mm
- B. 297 by 268 mm
- C. 236 by 278 mm
- D. 210 by 297 inches

Q39. Maximum acceptable slope (a:b) for wheel chair ramp is in the ratio of _____.



(Image not to scale)

- A. 1:8
- B. 1:12
- C. 1:3
- D. 1:20

Q40. What is the material used commonly in the manufacture of household plastic buckets?

- A. ABS
- B. PVC
- C. Nylon
- D. HDPE

Q41. Jiggering & Jollying process is associated with _____.

- A. Ceramics
- B. Mild steel
- C. Aluminum
- D. Bakelite

Q42. Carbon Foot Print refers to _____.

- A. Environment Pollution
- B. Photosynthesis in Plants
- C. Carbon dating technique
- D. Carbon Fiber Footwear

Q43. Pet bottles are best made using _____ process.

- A. Vacuum Forming
- B. Injection molding
- C. Blow molding
- D. Roto-molding

Q44. Tyeb Mehta is a well known _____.

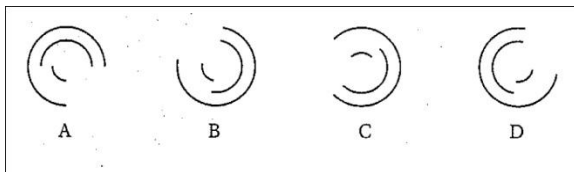
- A. Animator
- B. Painter
- C. Automobile Designer
- D. Fashion Designer

Q45. The symbol shown is associated with



- A. Amul
- B. Life Insurance Corporation of India
- C. Food Corporation of India
- D. Nabard

Q46. Identify the odd one out from the list



Q47. The symbol shown is associated with



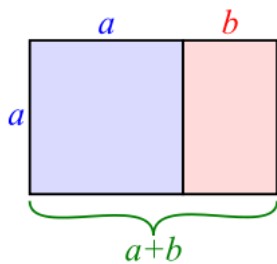
- A. National Savings Scheme
- B. National Textile Corporation
- C. Aadhar
- D. National Literacy mission

Q48. Identify the musical instrument shown in this picture



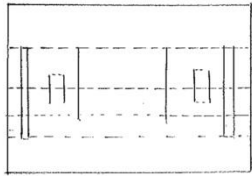
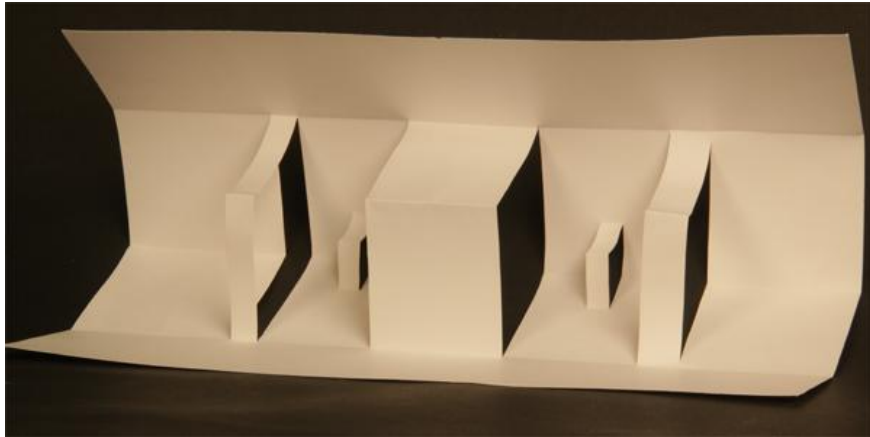
- A. Sarangi
- B. Guitar
- C. Sarod
- D. Sitar

Q49. The visual shown here represents the golden proportion. Identify the correct ratio.

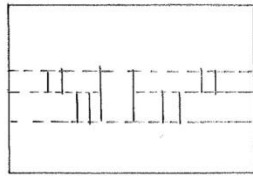


- A. $a:a+b = 1: 1.618$
- B. $a:a+b = 1: 6.182$
- C. $a:a+b = 1: 4.352$
- D. $a:a+b = 1: 1.928$

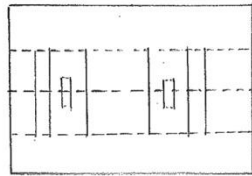
Q50. Identify the correct cut and fold drawing to create the shown image.



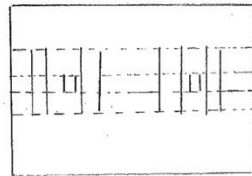
A



B



C



D

CEED 2014 PART B

QUESTION NO: 1 TO 3 ARE MANDATORY.

ATTEMPT ANY ONE FROM QUESTION NO: 4, 5 AND 6.

Sketching

Question No. 1

Marks 20

Draw a **freehand** perspective drawing of a person opening the refrigerator door in the kitchen.

OR

Draw a **freehand** perspective drawing of a person standing next to a scooter parked on the street.

Note:

- DO NOT USE ANY DRAWING INSTRUMENTS LIKE RULER, COMPASS, SET-SQUARE etc.
- DO NOT USE ANY FORM OF COLOUR
- USE ONLY PENCILS

Evaluation Criteria:

- Abilities in perspective drawing
- Light and shade and shadow
- Quality of lines
- Sense of scale and proportions
- Sense of composition

Creativity and Imagination

Question 2

Marks 15



The illustration above is an artist's impression of an incident in a club house. Narrate the incident in your own words, based on your creative imagination.

Limit your description to less than 250 words.

Evaluation Criteria:

- Originality of the narrative
- Imagination and Ideation
- Story telling ability

Question 3

Marks 15

Umbrellas are used mainly during the rainy season and usually remain unused during the rest of the year.

Creatively generate 3 alternative uses of the umbrella other than just as protection from rain or sunshine. Illustrate your ideas in the form of sketches with short descriptions.

Evaluation Criteria:

- Originality of the ideas
- Creativity and Innovation
- Imagination and Ideation

CEED 2014 Part B Optional (Visual Communication and Interaction)

Question 4

Marks 50

Design a graphical user interface (GUI) for a website of a movie theatre complex named 'Navrang Chitrapat' for booking movie tickets online. The complex has 3 theatres with each theatre screening a different film, three shows per day.

Present your design solutions in the form of screen shots. Draw minimum of six screen shots explaining the booking procedure in a sequence.

Support your design solution with a brief note on the design decisions.

The web interface should present the following information to the user:

- **Basic Information about the theatre complex**
- **Name of film**
- **Date**
- **Time**
- **Availability of ticket**
- **Price of tickets**
- **Payment Options**
- **Confirmation of Booking**

Evaluation Criteria:

- **Usability of the Interface**
- **Structure and clarity of Information**
- **Visual quality of icons and overall screens**
- **Logic of design decisions**

CEED 2014 Part B Optional (Animation Design)

Question 5

Marks 50

A woman is walking on a crowded railway platform. A train pulls in and people alight. A man suddenly comes up behind the woman, snatches her bag and runs away. The woman shouts for help. A policeman standing near a vendor's cart looks up and immediately gives chase.

Two women standing by, try to console the shocked woman. The thief runs towards the stairs to the overhead bridge. The policeman smartly throws his baton at the thief's legs. The thief stumbles and comes crashing down on the platform. A group of men pounce on the thief and catch him. They retrieve the bag as the cop reaches and pins the thief down.

A loud cheer goes up amongst the watching public.

Assume you are one of the characters in this story. Visually illustrate the story as you see it unfolding in front of you through a sequence of minimum 20 frames.

Tell this story from the point of view of any one of the following characters:

- The woman or
- The thief or
- The policeman or
- A bystander standing on the platform

Evaluation criteria

- Visual narrative structure
- Quality of illustrations
- Character and Environment development

CEED 2014 Part B Optional (Product Design)

Question 6

Marks 50

Present road side waste containers are normally dirty, stinking and spilling over. Design roadside waste container bin(s) to be used in public places for segregation of the following categories of waste.

- **Different types of packaging**
- **Wet and Dry organic waste**
- **Organic food waste**
- **All other kinds of leftover.**

The container(s) should be rugged, movable so that the waste can be transported for periodic disposal.

Present your design proposal

- With a neat freehand sketch showing the form.**
- An exploded view drawing**
- Indicate the materials and processes used in manufacturing.**
- Support your design with a brief note on the design decisions taken.**

Evaluation criteria

- **Identification of problem areas**
- **Design insights and creativity**
- **User Centric Design considerations**
- **Sustainability parameters recycle, reduce, regenerate, refuse**
- **Ability to meet specific requirements of hygiene, portability and Indian conditions**
- **Originality of ideas**
- **Appropriateness of materials to be used in the manufacturing of the final product.**