राष्ट्रीय डिज़ाइन संस्थान
NATIONAL INSTITUTE OF DESIGN

B.Des./GDPD 2016
DAT Prelims
Test Paper
Part-1

PART-I. Questions 1 to 88 are multiple choice questions. The correct answer must be marked in the OMR answer sheet provided separately. Do not write your name anywhere in the booklet. This may lead to disqualification.

Question numbers 1 to 44 carry 0.5 marks each. Please read the question carefully and select your response from the options provided.

Q1. Colours of Coriander and Cabbage fall under which colour schemes?
(A) Split Complementary
(B) Analogous
(C) Complementary
(D) Harmonious

Q2. What is the full form of EMI?
(A) Equated Monthly Installments
(B) Equal Money Installment
(C) Equal Monthly Investments
(D) Equated Money Investments

Q3. When you buy a mobile phone you look for the SAR value of a handset. SAR value is an indicator of Specific Absorption Rate of _____, to which human body is exposed to
(A) Radio Frequency Electrostatic Field
(B) Radio Frequency Electromagnetic Field
(C) Microwave Frequency Bioelectric Field
(D) Radioactive Electromagnetic Field

Q4. *Cartography* is the study and practice of making
(A) Cars. (B) Maps. (C) Artwork. (D) Carts.

Q5. *"I believe in going with the flow. I don't believe in fighting against the flow. You ride on your river and you go with the tides and the flow. But it has to be your river, not someone else's. Everyone has their own river, and you don't need to swim, float, sail on theirs, but you need to be in your own river and you need to go with it. And I don't believe in fighting the wind. You go and you fly with your wind. Let everyone else catch their own gusts of wind and let them fly with their own gusts of wind, and you go and fly with yours."*
Which one of the following options best sums up the passage above?
(A) Determination
(B) Self-esteem
(C) Decision Making
(D) Growth

Q6. If a human figure is standing in front of a full length rectangular concave mirror how will her/his reflection look like?
(A) Taller and thinner
(B) Shorter and fatter
(C) Taller and fatter
(D) Shorter and thinner

Q7. Among the major processes in making a cloth, *Ginning* is a process of
(A) harvesting ripped cotton bales.
(B) cleaning and opening the cotton bales.
(C) spinning the yarn.
(D) removing the cotton seeds.

Q8. Which is the first silent feature film made in India?
(A) Alam Ara by Ardeshir Irani
(B) Shakuntala by Suchet Singh
(C) Devdas by Naresh Mitra
(D) Raja Harishchandra by Dadasaheb Phalke

Q9. Which airport in India became fully solar powered in 2015?
(A) Cochin International Airport
(B) Bengaluru International Airport
(C) Chennai International Airport
(D) Hyderabad International Airport

Q10. Which is the most abundantly available fossil fuel in India?
(A) Natural Gas (B) Coal (C) Petroleum (D) Biogas

Q11. Which of the following does the term Corporate Social Responsibility (CSR) relate to?
(A) Ethical conduct
(B) Environmental practices
(C) Human rights & employee
(D) All these

Q12. Select the odd one out:
(A) Bimal Roy, Mrinal Sen, Satyajit Ray
(B) Ravindranath Tagore, Mahatma Gandhi, Bal Gangadhar Tilak
(C) Manto, Chugtai, Gulzar
(D) Shabana Azmi, Prasoon Joshi, Sayeed Jaffery

Q13. What is the colour of a Black Box of a commercial aircraft?
(A) Black (B) Green (C) Pink (D) Orange

Q14. Which shape will match the cross section of a Ladyfinger (vegetable)?
(A) Octagon (B) Hexagon (C) Pentagon (D) Septagon

Q15. An example of Interactive Voice Response System (IVRS) that is used in our day-to-day life is
(A) The Telephone Enquiry Service.
(B) The Cloud Computing Service.
(C) The Web Server Service.
(D) None of these

Q16. Which Indian sportsperson attained World Rank number one (Singles title) in 2015?
(A) Saina Nehwal (B) Sania Mirza (C) Jwala Gutta (D) Ashwini Ponappa

Q17. The Industrial Revolution that took place in Europe around 1750 A.D. began in which of the following countries?
(A) Germany (B) France (C) Italy (D) England

Q18. Who is considered to be the Father of India's Atomic Energy Programme?
(A) Raja Ramanna
(B) Homi Bhabha
(C) Vikram Sarabhai
(D) Dr. A P J Abdul Kalam

Q19. With reference to your current location, identify the city, which is most eastward located:
(A) Singapore (B) Hong Kong (C) Manila (D) Jakarta

Q20. Which of the following statements is false?
(A) Mahabharata is narrated by Ved Vyas
(B) Valmiki authored Ramacharitmanas
(C) Meghadootam is composed by Kalidasa
(D) Yayati is written by Girish Karnad

Q21. The death of which rationalist Kannada writer triggered a spate of protests by the Indian literary, artistic, film making and scientific community in 2015?
(A) Govind Pansare (B) Channabasam
(C) Narendra Dabholkar (D) Dr. M.M.Kalburgi

Q22. What are the dates 9/11, 26/11 and 13/11 known for?
(A) Earthquakes (B) Terrorist Attacks
(C) Tsunamis (D) Deaths of famous personalities

Q23. Which of the following is considered among the four old world river valley cultures apart from Indus Valley, Egypt, and Yellow River Valley of China?
(A) Mesoamerica (B) Mesopotamia (C) Andes (D) Byzantium

Q24. The following picture depicts
(A) remote crawler.
(B) hilly-biller space-walker.
(C) stark lemon squeezer.
(D) voyager 12.



Q25. The rate of inflation in India is measured generally with respect to movement of
(A) consumer price index. (B) cost of living index of agriculture labour.
(C) wholesale price index. (D) money supply.

Q26. Select the appropriate adjective for the word *RIVER*
(A) Labyrinthine (B) Wolverine (C) Serpentine (D) Intertwine

Q27. Refugees from which country migrated to Europe en masse in 2015?
(A) Serbia (B) Libya (C) Siberia (D) Syria

Q28. Name the states of the folk art forms below in their respective order:



(i) Madhubani



(ii) Warli

(A) Tamil Nadu and Telangana respectively
(B) Bihar and Maharashtra respectively
(C) Orissa and Gujarat respectively
(D) Kerala and Karnataka respectively

Q29. Google doodle pays tribute to which Indian personality in the following image?



(A) Sudhir Tailang
(B) Bal Thackeray
(C) R K Laxman
(D) Neelabh Banerjee

Q30. The symbol © stands for
(A) Rights of Control.
(B) Registered Company Logo.
(C) Copyright.
(D) Contact Information.

Q31. Which astronomer first claimed that the earth, the moon and the other planets revolve around the sun?
(A) Galileo Galilei
(B) Nicolaus Copernicus
(C) Ptolemy
(D) Isaac Newton

Q32. Fostering cultural collaboration is one of the objectives of which of the following UN body?
(A) UNICEF (B) UNIDO (C) UNESCO (D) UNO

Q33. Which of the materials listed below does not have Earth as the source?

(A) Clay (B) Metal (C) Leather (D) Plastic

Q34. Air pollution can be of

(A) natural origin. (B) artificial or man-made origin.

(C) Both (A) & (B) (D) None of these

Q35. Apart from the light bulb, Thomas Edison is attributed to the invention of

(A) Telegraph. (B) Monograph. (C) Phonograph. (D) Seismograph.

Q36. Which country experienced an earthquake, a tsunami and a nuclear accident in March 2011?

(A) Pakistan (B) China (C) Japan (D) India

Q37. Which country recycles most of its garbage to produce electricity, and imports garbage from its neighbours?

(A) Sweden (B) Japan (C) Switzerland (D) Canada

Q38. Who is the creator of Amar Chitra Katha?

(A) Premchand (B) Baba Ram Dev (C) Mohandas Pai (D) Anant Pai

Q39. The following drawing is the inside view of the Basilica of St. Maria Maggiore by Giovanni Batista Piranesi (1768). It is an example of



(A) 2 point perspective drawing. (B) 3 point perspective drawing.

(C) 1 point perspective drawing. (D) None of these

Q40. The Jataka Tales are better known works of which literature?

(A) Upanishads (B) Sangam (C) Jaina (D) Buddhist

Answer the questions 41 to 44 based on the living and non-living things listed below.

(A) Monkey (B) Star Fish (C) Snow Flakes (D) Water Splash

Q41. Which of the living and non-living things demonstrates radial symmetry?

Q42. Which of the living and non-living things demonstrates six-fold symmetry?

Q43. Which of the living and non-living things demonstrates bilateral symmetry?

Q44. Which of the living and non-living things demonstrates five-fold symmetry?

Question numbers 45 to 62 carry 1.0 mark each. Please read the question carefully and select your response from the options provided.

Below is an excerpt taken from the book titled 'Thinking Design', an NID publication. Read the paragraph carefully and answer questions 45 and 46.

"Built environment: rural roots and urban influences-India lives in its villages. Approximately eighty percent of India's population is rural; spread over half a million villages. Rural houses, in contrast to urban houses, are built on line evolved over thousands of years of aesthetic traditions, indigenous techniques and judicious use of the local materials such as mud, grass, bamboo, cane. Palm and coconut leaves predominate in the rural habitat in the lush green South India, while stone and sand create or adorn houses in vast desert areas of Northwest Kutch. Their design makes great ecological sense because of the use of renewable materials and great aesthetic sense because of its being in harmony with the natural surroundings.

The houses and the spaces in and around are arranged to suit the local climate. The Kutch desert houses for example are built with thick walls and small openings and narrow passages between the houses to overcome the gale of strong winds, the dust and the heat".

Q45. Which are the local materials stated for South India?

(A) Coconut leaves and stone (B) Palm leaves and sand

(C) Coconut leaves and Palm Leaves (D) Stone and Sand

Q46. What are the building techniques used in Kutch houses to tackle the local climate?

(A) Thick walls (B) Small openings

(C) Narrow space between buildings (D) All these

Q47. Select the odd one out from the given figures:

(A) 7

(B) 4

(C) 1

(D) 6



Q48. Identify the footprints in the sequence:



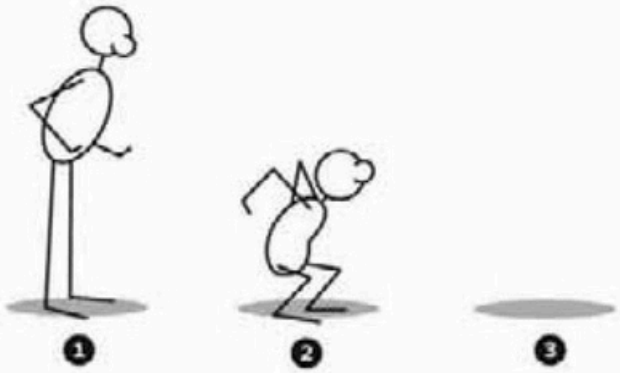
(A) Cat, Man, Tusker, Sparrow

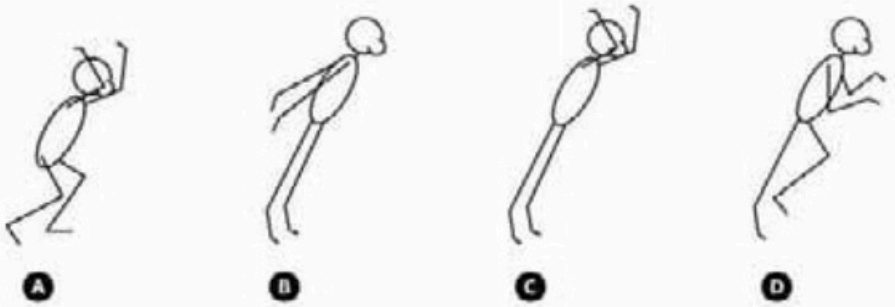
(B) Tiger, Man, Elephant, Crow

(C) Cat, Bear, Elephant, Crane

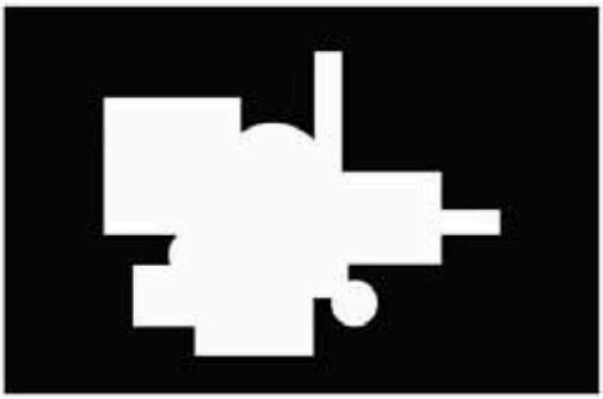
(D) Bear, Cat, Elephant, Crane

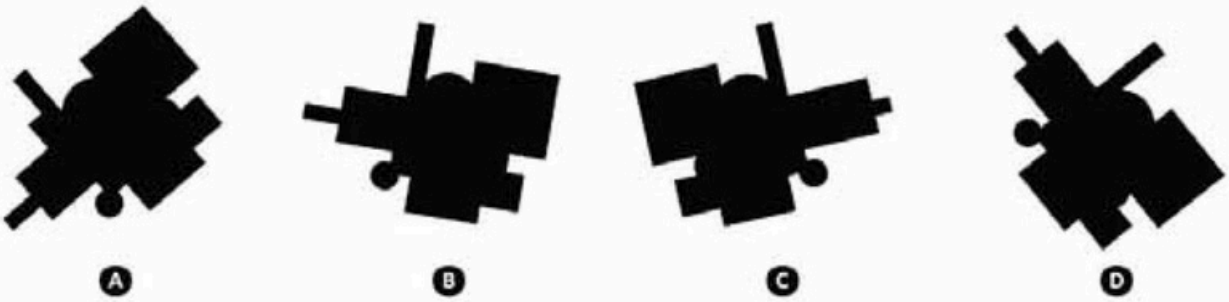
Q49. What will be the most probable pose at position 3, to complete the sequence below?





Q50. Which piece fits the jigsaw below?



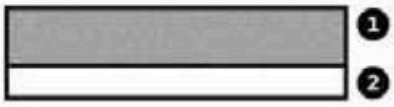


Q51. What is the width to length ratio of the leaf?

(A) 1:1
(B) 1:3
(C) 1:4
(D) 1:10



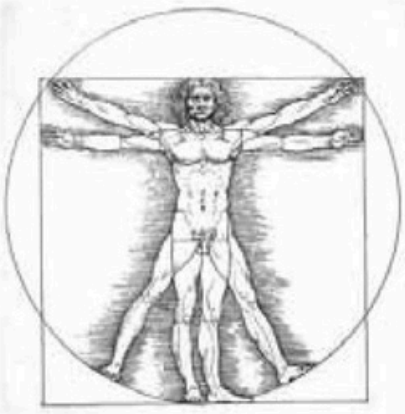
Q52. Strips of two metals 1 and 2 are firmly joined together as shown in figure below.



On heating 1 expands more than 2 does. If this joined strip is heated, it will appear as:



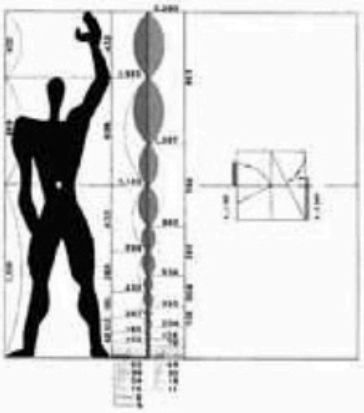
Q53. Choose the correct statement associated with all the three images below:



Vitruvian Man



Vastupurusha Mandala



Le Modular

(A) All of them are artworks

(B) All of them refer to proportions in buildings and objects

(C) Vastupurusha Mandala does not belong to the set of visuals

(D) None of the given above is true

Q54. Select the right set of animals that corresponds correctly to the set of four patterns of animal skins given below:



1 2 3 4

(A) 1 Tiger, 2 Giraffe, 3 Zebra, 4 Hyena

(B) 1 Tiger, 2 Leopard, 3 Zebra, 4 Wild cat

(C) 1 Tiger, 2 Hyena, 3 Zebra, 4 Leopard

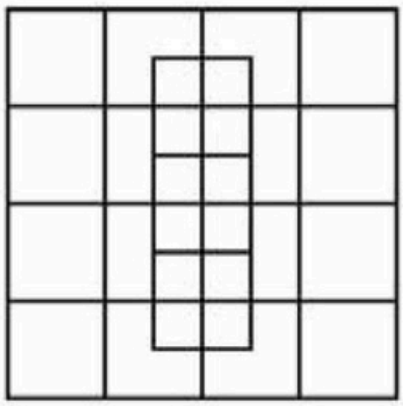
(D) 1 Tiger, 2 Leopard, 3 Zebra, 4 Giraffe

Q55. Find out the next 'Number' in the series:

2 3 5 8 ____

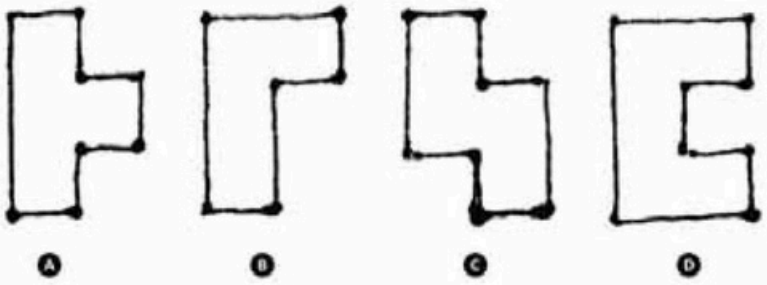
(A) 11 (B) 13 (C) 12 (D) 14

Q56. How many squares do you see in this picture?

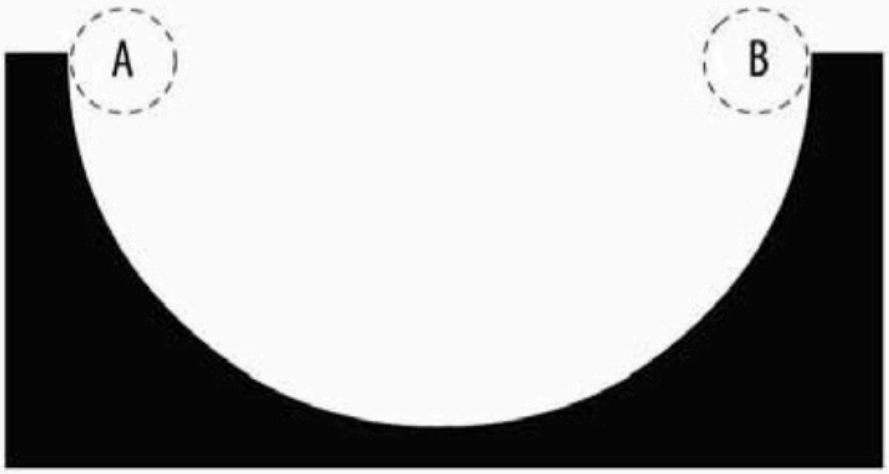


(A) 28 (B) 40 (C) 45 (D) 32

Q57. Which of the following shapes has the largest surface area?

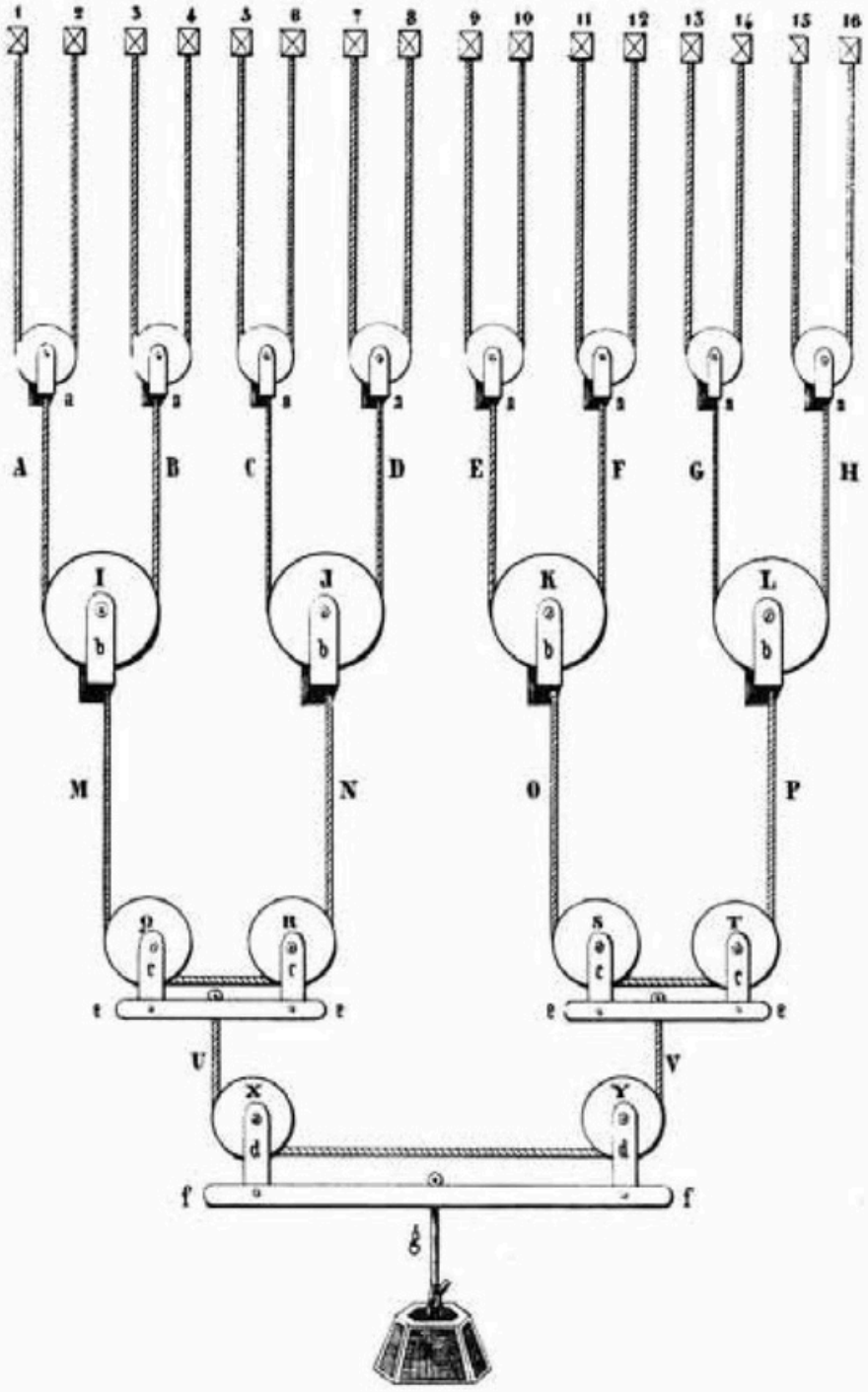


Q58. Which ball will arrive at point B in the given figure, with maximum speed, if released from point A? NOTE: all the balls are solid and are of the same size.



(A) Iron ball (B) Plastic ball (C) Wooden ball (D) Rubber ball

Q59. If we double the weight (W), what happens to M, N, O, P in the figure?



(A) M & N go up and O & P come down

(B) M & O go up and N & O come down

(C) M & N come down and O & P go up

(D) None of these

Q60. Match the following:

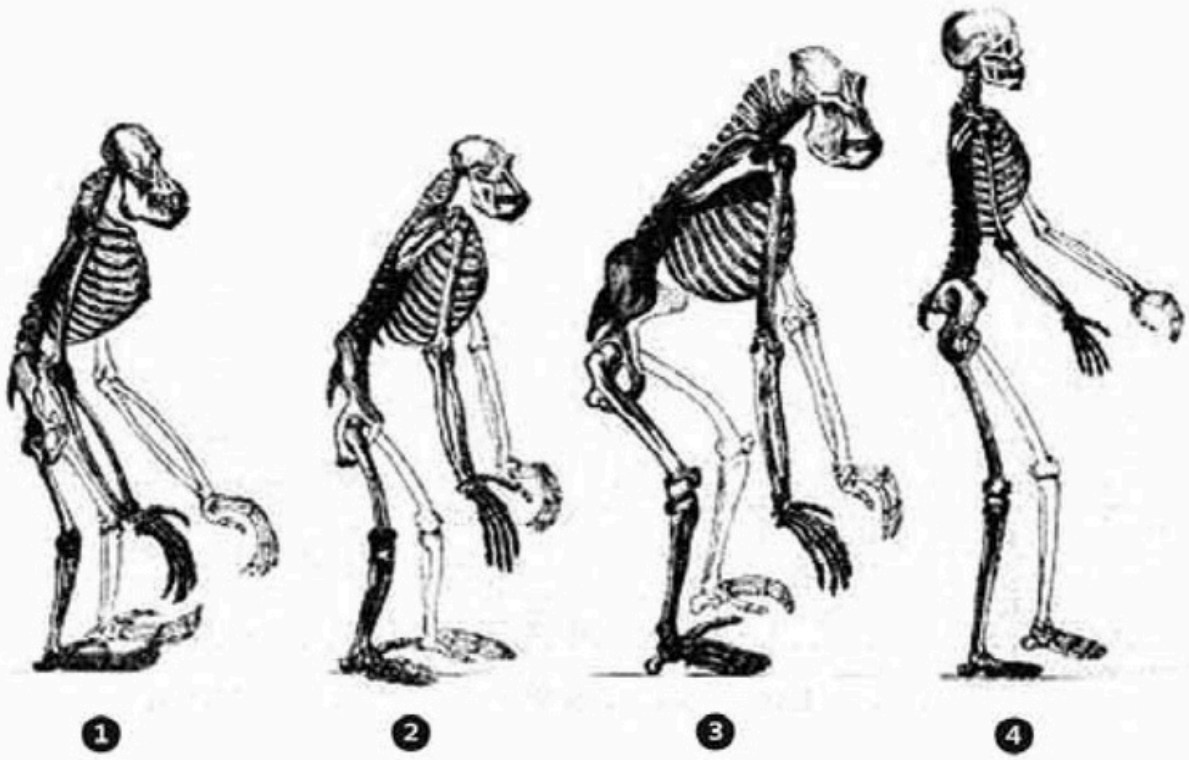
Medium	Disease
p) Air-borne	1. Tetanus
q) Water borne	2. Tuberculosis
r) Contact	3. Cholera
s) Wound	4. Syphlis

(A) p-4, q-3, r-2, s-1 (B) p-3, q-2, r-4, s-1 (C) p-2, q-3, r-4, s-1 (D) p-2, q-3, r-1, s-4

Q61. Identify the odd one out:

(A) Clip (B) Pin (C) Staple (D) Punch

Q62. Match the number of each skeleton to its name:



M-Man, G-Gorilla, O-Orangotang, C-Chimpanzee

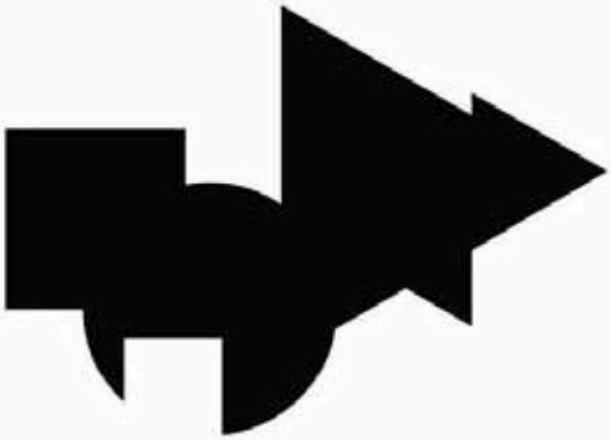
(A) M-4, G-3, O-2, C-1 (B) M-3, G-4, O-2, C-1

(C) M-4, G-3, O-1, C-2 (D) O-1, C-2, G-3, M-4

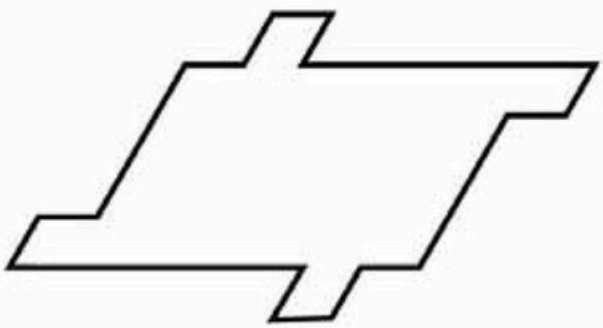
Question numbers 63 to 69 carry 2 marks each. Please read the question carefully and select your response from the options provided.

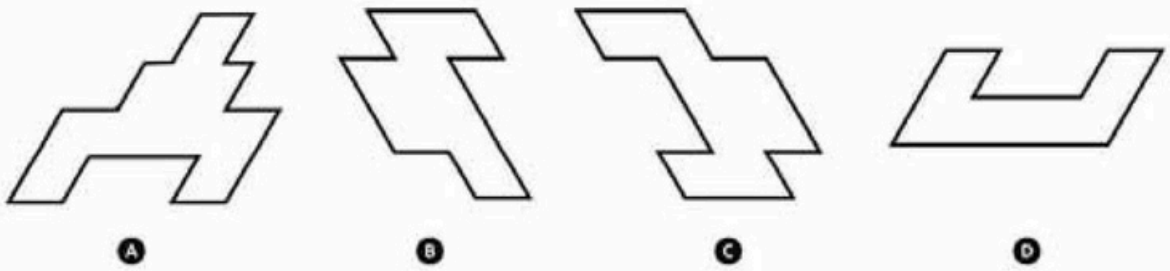
Q63. How many individual circles, triangles and squares can you identify in the image below?

(A) 1 Circle, 1 Square, 1 Triangle
(B) 2 Circles, 2 Squares, 2 Triangles
(C) 1 Circle, 2 Squares, 3 Triangles
(D) None of these



Q64. Which piece can be used multiple times to fill the shape below?





Q65. If we pull the points X and Y in both the cases given below, then which of the following statements is true?



(A) The knot in case (1) loosens and the knot in case (2) is tightens
(B) The knots in both cases are tightened
(C) The knots in both cases become loose
(D) The knot in case (1) tightens and the knot in case (2) loosens.

Q66. In the question given below, two statements are labelled as Assertion (A) and Reason (R).
Assertion (A): In inflation there is increase in money-supply and the rise in the price level.
Reason (R): The rise in price level is due to shortage in supply of essential consumer goods.

In the context of two statements, which of the following is correct?
(A) Both (A) & (R) are true and (R) is the correct explanation of (A)
(B) Both (A) & (R) are true, but (R) is not the correct explanation of (A)
(C) (A) is true, but (R) is false
(D) (A) is false, but (R) is true

Q67. Given below are the average minimum and maximum temperatures of a city measured during the year:

Month	Min^0 C	Max^0 C
January	23	30
February	23	31
March	24	31
April	24	33
May	24	34
June	25	34
July	25	33
August	24	34
September	24	34
October	23	35
November	25	28
December	21	31

Identify the city:
(A) Cape Town (B) Auckland (C) Singapore (D) Ahmedabad

Q68. A film director wants an actress for the lead role of 'Helen' who perfectly fits the description that appears in the original screenplay. He is not willing to consider actresses who do not resemble the character as she is described in the screenplay, no matter how talented they are. The screenplay describes 'Helen' as an average-sized, fourty something redhead, with deep brown eyes, very fair skin, and a brilliant smile. The casting agent has four actresses in mind:

- Actress#1 is a stunning red-haired beauty who is 5'9" and in her mid-twenties. Her eyes are brown and she has an olive complexion.
- Actress#2 has red hair, big brown eyes, and a fair complexion. She is in her mid-thirties and is 5'5".
- Actress#3 is 5'4" and of medium build. She has red hair, brown eyes, and is in her early forties.
- Actress#4 is a blue-eyed red head in her early thirties. She's of very slight build and stands at 5'.

Select the right actress options for the director:

(A) 1 and 2 (B) 2 and 3 (C) 1 and 4 (D) 2 and 4

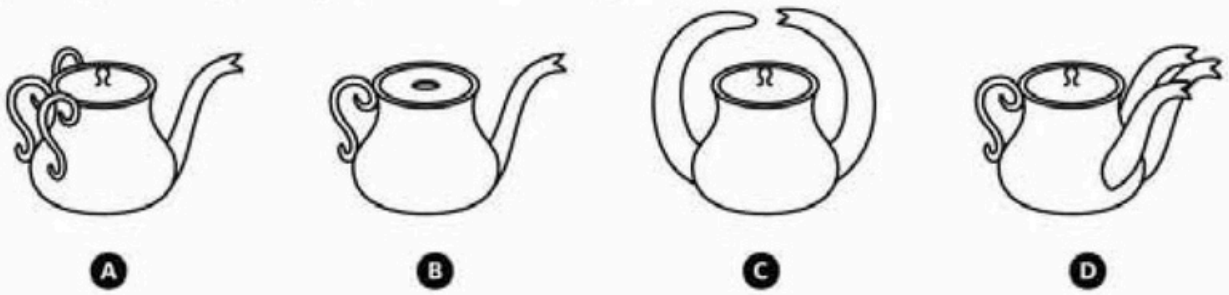
Q69. What is the common word that can be used together with all of the following words?

Blood, Cheese, Music, Moon

(A) Red (B) Blue (C) Bone (D) None of these

Questions 70 to 81 carry 0.75 marks each. Please read the question carefully and select your response from the options provided.

Study the given images carefully and answer the questions 70 to 73.



Q70. Which image represents "all that looks good might not work"?

Q71. Which image represents the phrase "too much to handle"?

Q72. Which image represents the phrase "with or without you"?

Q73. Which image represents the phrase "too many cooks spoil the broth"?

Study the given images carefully and answer the questions 74 to 77.



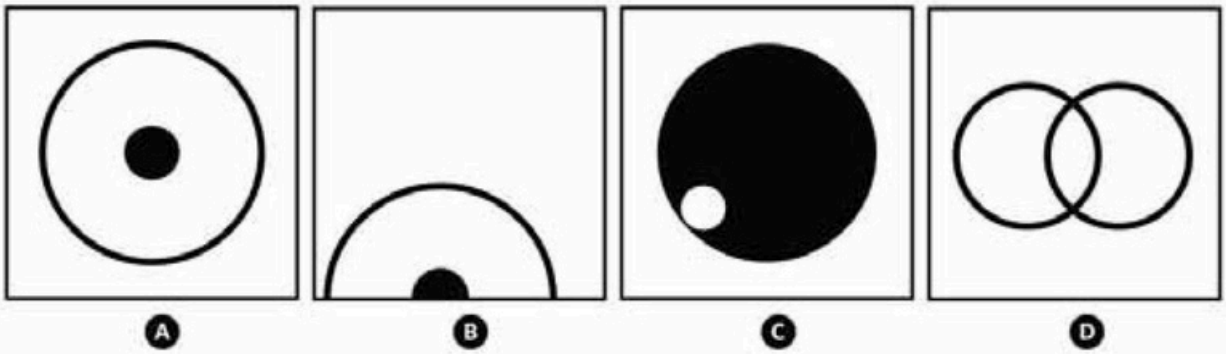
Q74. Which image represents the word 'classic'?

Q75. Which image represents the word 'fragile'?

Q76. Which image represents the word 'fluid'?

Q77. Which image represents the word 'masculine'?

Study the given images carefully and answer the questions 78 to 81.



Q78. Which image represents the word 'stability'?

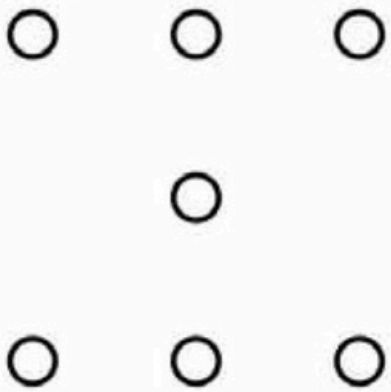
Q79. Which image represents the word 'power'?

Q80. Which image represents the word 'possessive'?

Q81. Which image represents the word 'structure'?

Questions 82 to 83 carries 1.5 marks each.

Answer the questions 82 and 83 based on the image given below.



Q82. How many triangles can you form by joining the above group of dots so that 3 dots are left?

(A) Six (B) Eight (C) Twelve (D) Twenty four

Q83. How many quadrilaterals can you form by joining the above group of dots?

(A) Five (B) Six (C) Nine (D) Twelve

Questions 84 to 88 has more than one correct answer and carries 0.8 marks each. Please read the question carefully and select the most correct option (only one) from the options provided.

Q84. Complete the sentence:

She was .....

(A) almost six feet tall.
(B) the light of my life.
(C) a doctor by profession.
(D) emotionally very vulnerable.

Q85. Complete the sentence:

He was on a roller coaster.....

(A) ride at the fair.
(B) of emotions.
(C) and he felt very scared.
(D) with a group of friends.

Q86. Complete the sentence:

Failure is.....

(A) very bad. No one should fail.
(B) a representation of a person's abilities.
(C) a sad experience. Try again.
(D) an orphan with no takers.

Q87. Complete the sentence:

The Moon is .....

(A) of cultural importance.
(B) like a roti for the poor man.
(C) a satellite of the earth.
(D) a source of light at night.

Q88. Complete the sentence:

Brain is .....

(A) a group of hundred billion cells.
(B) a workshop.
(C) an important part of the human body.
(D) a fountain of dreams.

* * * * * End of Part I * * * * *

Space for Rough Work

B.Des./GDPD
DAT Prelims
Sample Test Paper
Part-II

PART-II. Question numbers 89 to 91 carry 10 marks each. Please read the questions carefully and answer in the space provided.

Q89. The water tap of the wash basin in a bathroom is leaking. It is mid-night and no professional help is available at that hour. Give five ideas to prevent water wastage and represent them through drawings with two-three lines of explanation each.



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Q90. "Once upon a time, monkeys had no long tails and elephants had very short trunks. Until *one day...*" Complete the story and represent the same in FIVE frames given below with a caption of not more than two lines for each frame.



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Q91. Choose one of the three topics given below. Design a poster in Black and White only on the chosen topic. Give a caption to your poster.

(i) Infant Mortality (ii) Rainwater harvesting (iii) Illiteracy

Caption.....

* * * * * End of Part II * * * * *

Space for Rough Work

