SAMPLE PAPER - 2

UNDERGRADUATE PROGRAMME IN DESIGN

PAPER-I - GENERAL ABILITY TEST

Time Allowed: 2 Hours   **Max. Marks: 100**
                                                                                      Total Questions: 100

This test comprises of the following sub-tests.
(1) Quantitative Ability
(2) Communication Ability
(3) English Comprehension
(4) Analytical Ability
(5) Business Domain Test
(6) Thematic Apperception Test
  (i)   Each question carries one mark.
  (ii)   Answers are required to be marked only on the OMR/ICR Answer-sheet, which will be provided separately.
  (iii) For each question, four alternative answers have been provided out of which only one is correct. Darken the appropriate circle in the Answer-sheet by using Ball pen only on the best alternative amongst (a), (b), (c) or (d).

1.   The ages of A and B differ by 16 years. If 6 years ago, the elder one be 3 times as old as the younger one, the age of 'A' is:
     (a) 16   (b) 15   (c) 14   (d) 13
2.   One litre of water is added to 5 litres of a 30% solution of alcohol in water. The strength of alcohol in the new solution will be:
     (a) 25%   (b) 18%   (c) 24%   (d) 20%
3.   The price of a garment is reduced by 20% and further by 10%. Nidhi got another 5% discount for detecting a defective button. The total discount for the garment is:
     (a) 35.2%   (b) 34.1%   (c) 32.5%   (d) 31.6%
4.   If A: B is 4:7 and B: C is 9:5 then A: B: C will be,
     (a) 36:58:25   (b) 36:63:35   (c) 26:63:35   (d) 36:63:25
5.   A train 400-m long crossed a platform 1000 m long in 1 minute 24 seconds. The speed of the train in km/hr is:
     (a) 50   (b) 60   (c) 70   (d) None of these
6.   The rate at which a sum of money will double in 7 years in percent is:
     (a) 12.5   (b) 13.75   (c) 14.28   (d) 11.25
7.   A man buys 90 articles at Rs. 8 each. He sells 80% of them at Rs. 9.50 each and the rest at Rs. 7. 25 each. Find his average profit or loss per article sold.
     (a) Rs. 10.50   (b) Rs. 1.05   (c) Rs. 94.50   (d) Rs. 814.50
8.   In a partnership, Kedar, Ghosh and Patnaik divided the money. Ghosh and Patnaik together got Rs. 84320 and Patnaik and Kedar together got Rs. 95480. If Kedar gets twice as much as Ghosh then the amount they divided in Rs. is:
     (a) 106640   (b) 106440   (c)116640   (d) 116440
9.   The value of [(0.02X0.02X0.02) + (0.05X0.05X0.05)] / [(0.05X0.05) – (0.05X0.02) + (0.02X0.02)] is:
     (a) 0.002   (b) 0.001   (c) 0.012   (d) 0.0112
10. Raju walked at 3 kmph and missed the train by 2 minutes. If he walked at 4 kmph, he would have reached earlier by 2 minutes before the arrival of the train. How far in km should Raju walk to reach the station?
     (a) 0.4   (b) 2   (c) 1.6   (d) 0.8
11. The sum of the edges of a cube is equal to its volume. The surface area of the cube in sq. units is:
     (a) 72   (b) 12   (c) 144   (d) 48
12. A number instead of multiplying, when divided by 8/17, gave 225 more than the correct answer. The number is:
     (a) 89   (b) 125   (c) 136   (d) 164
13. How many bullets can be made out of a lead cylinder 12 cm high and with base radius 5 cm, each bullet being 1.5 cm in radius?
     (a) 40   (b) 400   (c) 1038   (d) 533

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14. If $\dfrac{x}{y} = \dfrac{4}{5}$, then value of $\left(\dfrac{5}{8} + \dfrac{y-x}{y+x}\right)$ is

   (a) $\dfrac{16}{69}$ (b) $\dfrac{58}{72}$ (c) $\dfrac{53}{72}$ (d) $\dfrac{49}{72}$

15. Ameesha drove car at 80 kmph and missed the flight by 5 min. If she drove at 100 kmph, she would have reached earlier by 10 min before the closing gates. How far is the airport from her house?
   (a) 80 km   (b) 85 km   (c) 90 km   (d) 100 km

Direction (Q. Nos. 16-20): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, four words are suggested, one of which fits blanks appropriately. Find out the appropriate word in each case.

Without water___16___ animal can survive. In desert regions the greatest ___17___to life is drying up. But mainly creatures are able to make use of ___18___ little water exists in arid areas. One of nature's masterpieces ___19___creatures equipped to ___20___ with desert life is the hardy camel.

16. (a) every   (b) any   (c) no   (d) exceptional
17. (a) need   (b) worry   (c) inadequacy   (d) threat
18. (a) what   (b) the   (c) very   (d) that
19. (a) for   (b) about   (c) with   (d) among
20. (a) cope   (b) live   (c) resist   (d) mix

Direction (Q. Nos. 21-25): Each of the following sentences has been divided into 4 parts – a, b, c, d. One of them has an error. Choose the one with the error.

21. As soon as I arrived he suggested that / John and I should go ahead / get the tickets for the journey.
      (a)   (b)   (c)
   No error.
    (d)

22. Perhaps because the climate does not suit her / she has been quite seriously ill /
        (a)   (b)
   since the day she has arrived. / No error.
      (c)   (d)

23. She nursed her mother for many months, / sitting with her head in her lap / and
       (a)   (b)
   pressing it all around the nights. / No error
      (c)   (d)

24. One who do not value / savings is more / helpless than even / the poorest of the poor.
     (a)   (b)   (c)   (d)

25. The city people stayed / fearlessly despite of / rumour of earthquake / in the area.
     (a)   (b)   (c)   (d)

Direction (Q. Nos. 26-30): Choose the word/ phrase that are nearest to the meaning of the question followed by 4 choices.

23. BUXOM
   (a) bookish   (b) plump   (c) voluminous   (d) convincing
24. CANDID
   (a) vague   (b) outspoken   (c) experienced   (d) anxious
25. CAMEO
   (a) guest appearance in a movie   (b) camera   (c) computer chip   (d) none of these
26. CHASTE
   (a) loyal   (b) timid   (c) curt   (d) pure
27. CLICHÉ
   (a) increase   (b) vehicle   (c) morale   (d) slogan

Direction (Q. Nos. 31-35): Choose the word/ phrase that are opposite to the meaning of the question followed by 4 choices.

28. FIASCO
   (a) failure   (b) cameo   (c) mansion   (d) success
29. FICKLE
   (a) faithless   (b) unchangeable   (c) disagree   (d) stupid

30.   LUST
         (a) desire   (b) passion   (c) lacking desire   (d) sensuous
31.   LUNATIC
         (a) fickle   (b) insane   (c) stupid   (d) intelligent
32.   HUBBUB
         (a) calm   (b) fury   (c) axle   (d) waxy

Direction (Q. Nos. 36-40): choose the word with correct spelling among the given choices.
33.   (a) inacessible   (b) inaccessible   (c) inaccesibble   (d) inacesible
34.   (a) hidyous   (b) hydeous   (c) hideous   (d) hydyous
35.   (a) heriditery   (b) hereditary   (c) herediitery   (d) heredetary
36.   (a) abstemeous   (b) abstamious   (c) abstemious   (d) abstemeous
37.   (a) abstruce   (b) abstruse   (c) absetruce   (d) absetruse

Direction (Q. Nos. 41-45): Read the passage given below and answer the questions that follows by choosing the correct option.

PASSAGE

Tolstoy's 'God Sees the Truth But Waits' brings out the moral that it is God who alone sees the Truth. It also tells us that 'Forgiveness' is the noblest virtue. Once, there lived a young merchant Aksenov in the town of Vladimar, One summer, Aksenov decided to go to the Nizhny fair to sell his goods. Though his wife requested him not to go he left for the fair. On his way, Aksenov met a merchant of Ryazan whom he knew well. They stayed in adjoining apartments at the same hotel for the night. The next-day, Aksenov set out before dawn.

        Soon he was stopped on the way and arrested by the Police Commisioner. His luggage was searched and a blood-stained knife was found. Though Aksenov pleaded innocence he was imprisoned on the charge of murder. His wife, too, suspected him. Aksenov thought that God only knows the truth and to Him alone we must pray for help.

        Aksenov lived as a convict for twenty six years. His hair turned white and his beard grew longer. He led a respectable life in the prison. His fellow-prisoners called him 'Grandfather' and 'The Saint'. One day, a fresh batch of convicts came to the prison. Among them, there was a strong man named Makir. Later, Aksenov understood that this man had killed the merchant of Ryazan.

        A fortnight passed. Makir had dug a tunnel to escape from the prison. Aksenov noticed it. Then, the Governor came for interrogation. But Aksenov did not reveal the truth. That night, Makir came to Aksenov and fell at the feet of Aksenov. He had repented of what he had done a long back. He confessed his crime of murdering the merchant. He, even, confessed his crime to the authorities. Aksenov was found innocent. When the orders for his release came the innocent old man was already dead. God sees the truth but has waited in Aksenov's case. Thus the title of the story 'God Sees The Truth But Waits' is justified.

41.   How was the truth about the murder revealed?
         (a) After the police commissioner searched the luggage
         (b) After Makir confessed before the authorities
         (c) Due to the death of Askenov   (d) Due to prolonged investigation
42.   Which one of the following is not conveyed in the passage?
          (a) God sees the truth   (b) Forgiveness is always noblest
          (c) One has to wait for the truth   (d) If you are in prison, then the truth can be revealed.
43.   Why was Aksenov arrested?
          (a) on charges of murder   (b) for staying in the hotel
          (c) for digging the tunnel   (d) for stealing the merchant
44.   How long did Aksenov stayed in the prison?
         (a) he became the saint   (b) till he became the grandfather
         (c) for 26 years   (d) for a fortnight only
45.   In the first line of the passage, the message conveyed is:
          (a) God always sees the truth late   (b) God waits eagerly to see the truth
          (c) God alone can see the truth   (d) None of these

Direction (Q. Nos. 46-50): Read the passage given below and answer the questions that follow by choosing the correct option.

PASSAGE

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Soapy is a wanderer who spends his time on doing nothing. Madison Square Park is his permanent shelter. With the advent of winter he finds it difficult to keep himself warm. So he wants to go to the island to save himself from the severity of the season. He makes many attempts to get himself arrested. He plans to dine at a posh restaurant and declares his insolvency. But he is not even allowed to set foot inside the restaurant. Then be breaks the plate glass of a shop window with a stone. The policeman refuses to arrest him. He becomes desperate but never gives up making attempts.

He enters a moderate restaurant and consumes many items. He, then, declares that he has no money. Instead of calling the policemen, two waiters beat him hard. After that, he misbehaves with a woman but of no use. He steals an umbrella, the umbrella-man disappears from the scene.

Soapy feels much disgusted. He stands beside an old Church. The calm and serene atmosphere and the anthem played by an organist bring solace to his soul. There comes sudden change in him. He thinks of reforming himself and finding some useful work the next day. The next minute he is arrested by the police who sees him on doing nothing. He is given punishment for three months on the Island.

46.   In the passage, the meaning of the word 'Soapy' means:
 (a) slippery   (b) full of soap   (c) name of the person   (d) none of these
47.   Which of the following is not associated with the events in the passage?
 (I) Soapy dines in a posh restaurant   (II) Soapy steals the umbrella
 (III) Soapy breaks the glass   (IV) Soapy eats in a moderate restaurant
 (a) All except III   (b) All except IV   (c) All except II   (d) All except I
48.   The change in Soapy is due to:
 (a) beating he takes from the waiters   (b) the events in the church
 (c) the events in the posh hotel   (d) none of these
49.   The meaning of 'island' in the passage is:
 (a) a cottage   (b) a resort   (c) a prison   (d) a comparatively hotter place
50.   How many attempts were made by Soapy to go to island?
 (a) four   (b) three   (c) five   (d) none of these

Direction (Q. Nos. 51-55): Read the passage given below and answer the questions that follow by choosing the correct option.

PASSAGE

Fungi form an isolated group within the plant kingdom and indeed are regarded by many as forming a separate kingdom of' their own. They differ from all other plants by their lack of the green pigment chlorophyll, in the construction of thread-like units known as hyphae and their method of reproduction.

Reproduction occurs by spores either of sexual of asexual origin. The spore germinates, sending out a germ-tube that elongates to produce a thread-like, usually septate, filament that then branches out repeatedly. By continued ramification these threads or hyphae (singular hyphae) form a cobweb or felt-like sheet known as a mycelium. In most instances fusion between two hyphae, usually from different mycelia, must occur before a fruit body can be produced. Even then this process will only take place given the correct climatic factors and a sufficient food supply.

Fungi differ from the higher plant forms by the absence of the green pigment chlorophyll, which enables plants to photosynthesize, By this process green plants to obtain their carbohydrates; the chlorophyll in their leaves fixes atmosphere carbon dioxide in the presence of sunlight and water to manufacture sugar for their nutrition. As fungi are unable to do this they have to obtain their carbohydrates from decomposed animal or plant tissues. Hence they are found in habitats rich in rotting vegetation such as woodland, grassland, compost heaps, sawdust piles, on dung or manure heaps and on burnt ground colonized by moss. Fungi obtaining their food materials directly from living plants or animals are the woody bracket fungi and mildews respectively; diseases of man such as athlete's foot, ringworm and farmer's lung are also caused by parasitic fungi.

51.   What are Fungi?
 (a) Fungi are plants   (b) They are animals   (c) They are cells   (d) Fungi are dead matter
52.   Point out the correct statement?
 (a)All plants have chlorophyll   (b) All plants other than Fungi have chlorophyll
 (c) Only Fungi have chlorophyll   (d) Fungi have no chlorophyll
53.   How do Fungi reproduce?
 (a) They reproduce through   (b) They reproduce severally or asexually
 (c) Spores are the means for their reproduction   (d) They reproduce from seeds

54.   Which is correct?
        (a) Fungi form cobwebs   (b) Fungi are like spiders in their capacity to produce
        (c) Spores produce hyphae which sometimes look like cobwebs
        (d) A mycelium is nothing but cobwebs
55.   Fungi grow on rotten negation or animals because
        (a) They cannot produce their own food
        (b) Their habitat provide them with the food they need
        (c) Their habitat contains the chlorophyll which they need to produce carbohydrates
        (d) They are parasites

Direction (Q. Nos. 56-60): Read the passage given below and answer the questions that follow by choosing the correct option.

PASSAGE

It is generally said that sport creates good-will among nations. Indeed, sport is an activity meant for the fun and exercise. It should be played according to rules. It should be played in a friendly and fair atmosphere. It should inculcate the sportsman spirit and mutual good-will. In the middle ages games were played with much physical brutaily. But they were not mixed up with politics. Today, politics and games are badly mixed up. Each team is identified with a country or a large power unit. Running, jumping and kicking a ball are taken as tests of national virtue.

      The game cricket which demands grace rather than strength is also causing much ill-will. The visit of the Australian team in 1921 is a good example. The game, football in which everyone gets hurt is far worse. The football matches played at Arsenal and Glasgow are good examples. Worst of all is boxing. The rise of nationalistic feelings and strong passions of rivalry are both recent developments. As soon as strong feelings of rivalry are aroused, the notion of playing the game according to the rules, vanishes. People want to see one side on top and the other side humiliated.

      The fact is-the spectators and the nations are working themselves into furies over these absurd contests. So sport has become a war-fare and the sportsmen have turned to be warriors. The modern sport adds something to the vast fund of ill-will existing in the world at this moment.

56.   Who are modern sportsmen compared to in the passage?
        (a) Cricketers   (b) footballers   (c) warriors   (d) boxers
57.   What do the spectators now like to witness in sports?
        (a) Fight between Arsenal and Glasgow   (b) ill-will
        (c) politics   (d) humiliating one side
58.   What is the above passage talking about?
        (a) sporting spirit   (b) politics in sports
        (c) sports to be played like a war   (d) spectators role in sports
59.   Which of the following is not influencing factor for change in sporting spirit?
        (a) increasing rivalry among the nations   (b) Use of politics in sports
        (c) spectators willingness to see fair game   (d) none of the above
60.   How was a middle age game different from modern games?
        (a) middle age game was played with lot of enthusiasm   (b) there was physical brutality
        (c) full of politics existed in middle age   (d) spectators were working into furies

Direction for questions 61 to 65:
Each problem contains a question and two statements, which give certain data. You have to select the correct answer from (a) to (d) depending on the sufficiency of the data given in the statements to answer the questions.
Mark (a): If statement A alone is sufficient to answer the question and statement B alone is not sufficient to answer the question.
Mark (b): If statement B alone is sufficient to answer the question and statement A alone is not sufficient to answer the question.
Mark (c): If statements A and B together are sufficient to answer the question but neither statement alone is sufficient.
Mark (d): If statements A and B together are not sufficient to answer the question and additional data specific to the problem are needed.

61.   What is the length of the train?
        (A) The speed of the train is 36 km/ hr.   (B) The train crosses an electric pole in 30 secs.

62. What is the value of x-y?
    (A) x = y   (B) 8x - y = 10
63. What is the volume of the cylinder?
    (A) Base radius of the cylinder is 10 cm and height is 4 cm.   (B) The cylinder is right circular
64. How many children are there in the family?
    (A) The no. of girls is twice that of the boys   (B) The oldest child is a girl.
65. Mr. Rama Swamy sold a house. Find whether he got a loss or gain.
    (A) He sold the house for Rs. 10, 00,000/-
    (B) Cost price of the house was more than the selling price.

Direction for Question Nos. 66 – 69. In these types of problems some letters, which follows a particular order or sequence, are given. The objective is to find the pattern and find the missing letter.
66. B, D, H, J, N, P _____.
    (a) T   (b) U   (c) R   (d) S
67. ABX, CFV, EJT, GNR, _____.
    (a) POR   (b) IRP   (c) RPI   (d) PRI
68. 34 : 5 : : 68 : _____.
    (a) 18   (b) 10   (c) 8   (d) 6
69. 345 : 6 : : 369 : _____
    (a) 7   (b) 6   (c) 8   (d) 9

Direction for Question Nos. 70 - 72: Study the following table carefully and answer the questions given below.
Table: Number of boys of different standards participating in different games:

Class \\ Game	VIII	IX	X	XI	XII	Total
Chess	10	8	6	12	6	42
Carrom	16	12	4	16	4	52
Table Tennis	12	10	10	12	8	52
Football	16	16	10	16	10	63
Hockey	10	6	4	8	6	34
Total	64	52	34	64	34	248

Note: (I) In each class, the number of girls participating in each game is 25% of the boys. Each student participates in one party one game.

70. How many girls are participating in all the games put together from all the classes?
    (a) 56   (b) 60   (c) 58   (d) 62
71. If all the boys playing chess and Hockey are combined, then girls playing which of the following games need to be combined to yield a ratio of boys to girls of 4:1?
    (a) Foot ball only   (b) Carrom & Chess   (c) Hockey & Table Tennis   (d) None of these
72. What is the total number of students in the school?
    (a) 310   (b) 300   (c) 290   (d) 320

Direction for Question Nos. 73 – 74. Read the following information carefully and answer the questions given below. (1) a - b means 'a' is mother of b. (2) a x b means 'a' is father of b.
a + b means 'a' is daughter of b.
73. If P-Q x R + S then which of the following is not true?
    (a) Q is wife of S   (b) R is Q's daughter   (c) S is wife of Q
    (d) P is mother-in-law of S.
74. Which of the following would definitely indicate that K is daughter of L?
    (a) K x L – O   (b) K + L   (c) L + M   (d) O + K x L

75. Introducing a woman a man said, "She is the only daughter of my father's father. How is the man related to the woman?
    (a) Uncle   (b) Nephew   (c) Father   (d) Father-in-law

Direction for Question Nos. 76-77. Find the odd-man out.
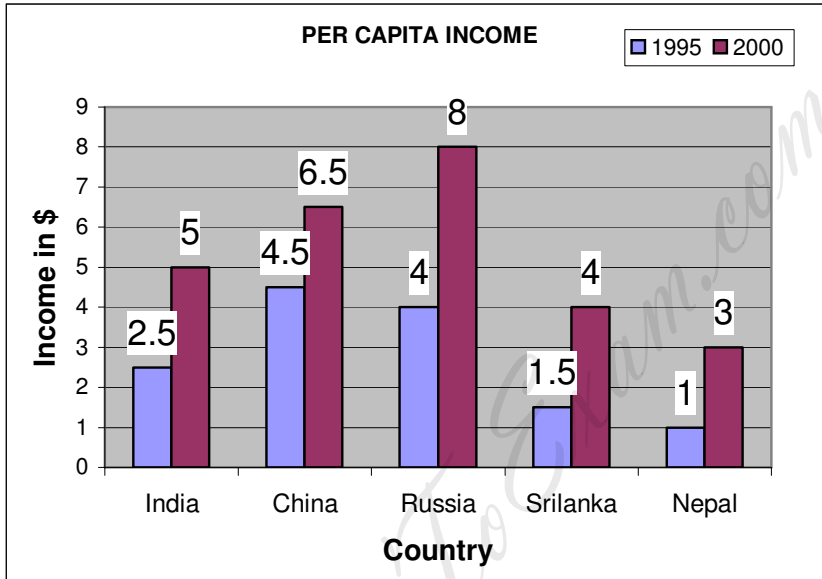76. (a) Shimla   (b) Manali   (c) Darjeeling   (d) Jaipur

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77.   (a) 14   (b) 15   (c) 11   (d) 18

78.   If CHAIR is called as TABLE, TABLE is called as SCOOTER, SCOOTER is called as FOOD and
       FOOD is called as WATCH, then what do we eat?
       (a) WATCH   (b) CHAIR   (c) FOOD   (d) TABLE

Direction for Question Nos. 79-80. Answer the following questions using the interchange of sign given in the
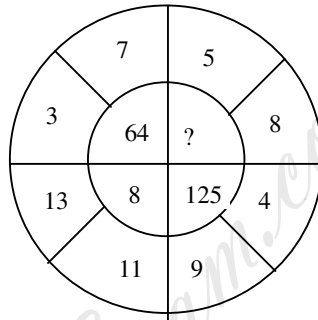problems.
79.   If - means +, +means -, x means÷, ÷ means x, then what is the value of 24 x 8 ÷ 6 - 3 + 3 ÷ 6?
       (a) 9   (b) 0   (c) 8   (d) 7
80.   If A means +, B means÷, C means -, D means x, then what is the value of 8 A 112 B 36 C 24 D 10?
       (a) 1   (b) 0   (c) 3   (d) 2

Directions for questions (81 to 85):- These questions are based on the following graph.
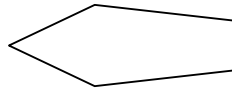

81.   What is the percentage increase of INDIA'S per capita income from 1995 to 2000?
        (a) 98 %   (b) 100 %   (c) 92 %   (d) 96 %
82.   Which country has recorded the maximum percentage increase in per capita income from 1995 to
       2000?
       (a) India   (b) China   (c) Russia   (d) Nepal
83.   What is the increase in the per capita income of Sri Lanka in Rs. (1$ is equivalent to Rs. 42)
       (a) Rs.90   (b) Rs.100   (c) Rs.105   (d) Rs.110
84.   What is the average per capita income in 2000 for all Asian Countries?
       (a) 3   (b) 2.5   (c) 2   (d) insufficient data
85.   By what percentage is Nepal's per capita in 2000 more than India's per capita in 1995?
       (a) 14 %   (b) 14.28 %   (c) 16 %   (d) 15 %

86.   How many colours are there in the colour-wheel?
       (a) 5   (b) 10   (c) 24   (d) 12
87.   Which of the following is the solid geometrical form?
       (a) Circle   (b) Triangle   (c) Rectangle   (d) Cube
88.   Which of the following has geometric feature?
       (a) Shell   (b) Flower   (c) Leaf   (d) Feather
89.   Tick the odd one out
       (a) Silk   (b) matka   (c) noil   (d) jute
90.   Bhagalpur is famous for
       (a) Silk   (b) Brocade   (c) Pashmina   (d) Kantha
91.   Calico museum is located at

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| | (a) Ahmedabad | (b) Mumbai | (c) Vadodara | (d) Gandhinagar |

92. Gadwal is the name of a
(a) Fiber   (b) Cloth   (c) Style of saree   (d) Embroidery
93. Tick the odd one out
(a) Hue   (b) Form   (c) Shape   (d) Colour
94. Which one of the following does not belong to the group?
(a) Aquamarine   (b) Turquoise   (c) Purple   (d) Ink blue
95. Tick the odd one out
(a) Aki Narula   b) Anshu Arora Sen   (c) Sabyasachi   d) Anamika Khurana
96. Bandhej is traditionally done in
(a) West Bengal   (b) Rajasthan   (c) Maharashtra   (d) Tamil Nadu
97. Which one is not a male garment?
(a) Angrakha   (b) Dhoti   (c) Churidar   (d) Dupatta
98. LIFW is organised by
(a) FDCI   (b) EPCH   (c) CII   (d) NIFT
99. Find the missing character
(a) 27   (b) 216
(c) 25   (d) 250

100. Find the odd one out.

(a)   (b)   (c)   (d)

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