ADITYA COLLEGE OF COMPETITIVE EXAMS

Santhinagar, KAKINADA, Ph : 0884 2340236.

SSC MODEL

No. of Questions : 100 (1 - 100)

1. Where is 'Thumba Equatorial Rocket Launching Station' situated?

   1. Andhra Pradesh   2. Kerala   3. Odisha   4. Karnataka

2. Which one of the following elements occurs most abundantly in our universe?

   1. Hydrogen   2. Nitrogen   3. Helium   4. Oxygen

3. Fog is an example of_____

   1. Liquid dispersed in gas.   2. Gas dispersed in gas.

   3. Solid dispersed in gas   4. Solid dispersed in liquid

4. Which of the following pairs is incorrect?

   1. Roentgen: X-Ray   2. Newton: Law of Gravitation

   3. Faraday: Diffusion of gases   4. Pasteur: Bacteriology

5. The speed of a CPU is measured in what?

   1. Hertz (Hz)   2. Megahertz   3. Gigyabtyes   4. Byte

6. Which of the following hormones is a steroid?

   1. Estrogen   2. Glucagon   3. Insulin   4. Oxytocin

7. Hepatitis is a general term for a disease that is caused by

   1. Viruses   2. Bacteria   3. Parasites   4. All the above

8. Select the correct match of the disease and its affected part.

   1. Caries - Eyes   2. Ring worm - Brain and Spinal cord

   3. Meningitis - Teeth   4. Pneumonia - Lungs

9. In which organ of the human body are the lymphocyte cells formed?

   1. Liver   2. Bone Marrow   3. Pancreas   4. Spleen

10. The undigested food stored in the liver in the form of carbohydrate is called

    1. Pulp   2. Glucose   3. Glycogen   4. Carbohydrate

11. The directional movement of a plant part in response to the touch of an object is known by which of the following term?

    1. Phototropism   2. Geotropism   3. Thigmotropism   4. Hydrotropism

12. While catching a ball in the game of cricket, a player pulls down his hands to lower which of the following entity?

    1. Force   2. Momentum   3. Impulse   4. Catching Time

13. When new plants are obtained from the parts of old plants, without the help of any reproductive organs, it is known by which of the following term?

    1. Vegetative propagation   2. Spore formation   3. Fragmentation   4. Multiple Fission

14. Elements that are malleable and ductile, and are good conductors of electricity are called?

    1. Non-metals   2. Metals   3. Metalloids   4. Ions

15. In the galvanic cell, which of the following process take place?

    1. Transformation of the electrical energy into the chemical energy

    2. Transformation of the chemical energy into the electrical energy

    3. Transformation of light energy into the electrical energy

    4. Transformation of electrical energy into the light energy

16. When a bottle of scent is kept open in a conner of a room its odour is felt in all parts of the room. Which phenomenon works behind it?

    1. Evaporation   2. Vaporization   3. Diffusion   4. Sublimation

17. Consider the following statements regarding Mirage.

    I. It is an optical phenomenon that creates the illusion of water and results from the refraction of light through a non-uniform medium
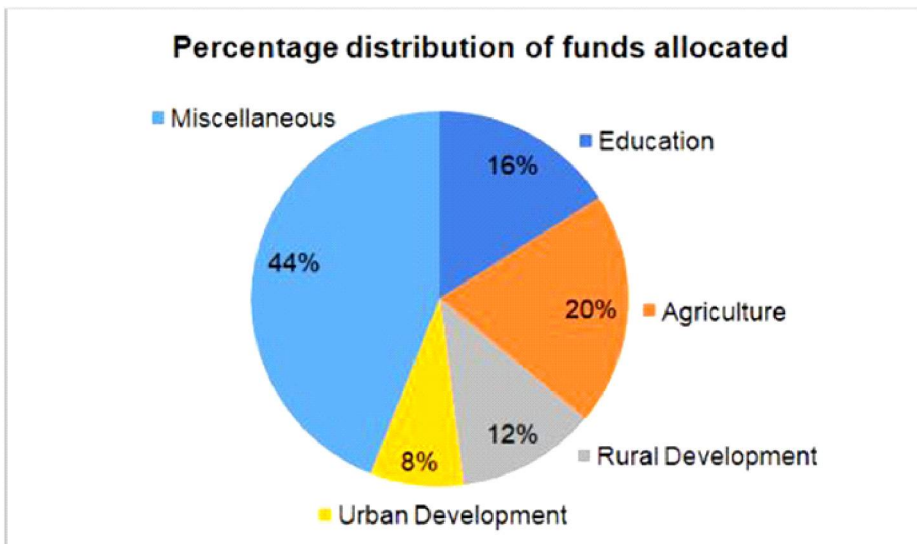
    II. It is happen due to the refraction of light.

    Which is/are correct statement (s) is/are correct?

    1. Only I   2. Only II   3. Both I & II   4. None of the above

ADITYA COLLEGE OF COMPETITIVE EXAMS
Santhinagar, KAKINADA, Ph : 0884 2340236.

1

18. "Itai-Itai" disease is caused by which metal?

    1. Nickel   2. Cadmium   3. Lead   4. Silicon

19. Electromagnetism in materials is due to which of the following factor?

    1. Electrons at rest   2. Circular motion of electrons

    3. Protons at rest   4. All neutrons at rest

20. If the velocity time graph of a particle is represented by $y = mt + c$ then the particle is moving with _____

    1. Constant Speed   2. Constant Velocity   3. Constant Acceleration   4. Varying Acceleration

21. In the human body, the blood enters the aorta of the circulatory system from the____.

    1. Left atrium   2. Left Ventricle   3. Right atrium   4. Right ventricle

22. The term 'Isoneph' indicates the lines of equal____.

    1. Cloudiness   2. Salinity   3. Rainfall   4. Pressure

23. Aqua regia is a 1 : 3 mixture by volume of

    1. Nitric acid and Hydrochloric acid   2. Hydrochloric acid and Nitric acid

    3. Nitric acid and Sulphuric acid   4. Sulphuric acid and Nitric acid

24. Aspirin is chemically known by which of the following?

    1. Methyl salicylate   2. Hydroxysalicylate   3. Acetylsalicyclic acid   4. Alkylsalicylic acid

25. Vinegar made by fermentation from cane sugar contains which type of acid?

    1. Palmitic acid   2. Lactic acid   3. Citric acid   4. Acetic acid

26. Cement is formed by strongly heating a mixture of

    1. Limestone and Graphite   2. Limestone and Clay

    3. Chalk and Graphite.   4. Clay and Graphite

27. Which gas usually causes explosions in coal mines?

    1. Hydrogen   2. Carbon monoxide   3. Air   4. Methane

28. Most of the carbon dioxide in the blood is carried in the form of which of the following?

    1. Carbonic acid   2. Bicarbonates

    3. Carbaminohemoglobin   4. Dissolved Carbon dioxide

29. Network components are connected to the same cable in which among the following topology?

    1. Star   2. Ring   3. Bus   4. Mesh

30. What do you mean by a digital signature?

    1. A bit string giving identity of a correspondent and corresponding information

    2. A unique identification of a sender   3. An encrypted signature of sender

    4. An authentication of an electronic record by tying it uniquely to a key which a sender only possesses

31. Who authored the famous book "The Indian Struggle"?

    1. LalaLajpat Rai   2. Jawahar Lai Nehru

    3. Subhash Chandra Bose   4. Dr. Rajendra Prasad

32. What is the name of India's 100th operational airport inaugurated recently by the Prime Minister?

    1. Lengpui Airport   2. Silchar Airport   3. Pakyong Airport   4. LokpriyaGopinathBordolai Airport

33. In which battle Sher Shah Suri defeated Humayun?

    1. Battle of Panipat   2. Battle of Kannauj   3. Battle of Chausa   4. Battle of Khanwa

34. Who is the "Comptroller and Auditor General of India (CAG)" at present?

    1. Shashikant Sharma   2. Vijay Kelkar   3. VikasSwarup   4. Rajiv Mehrishi

35. Supreme Court of India is authorized to issue "Writs" under which article of Indian constitution?

    1. Article 30   2. Article 31   3. Article 32   4. Article 34

36. Which of the following is highest peak in south India?

    1. Nilgiri   2. Dodabetta   3. Kalsubai   4. Anamudi

37. Which of the following term is not mentioned in the Preamble of Indian Constitution?

    1. Socialist   2. Secular   3. Franchise   4. Justice

38. Which article of the Indian Constitution mandates for free and compulsory education for children upto the age of 14 years?

    1. Article 19A   2. Article 20B   3. Article 21A   4. Article 22C

39. Famous "Kalinga War" took place in which year?

    1. 258 BC   2. 262 BC   3. 232 BC   4. 261 BC

40. Nameri National Park" is located in which state of India?

    1. Arunachal Pradesh   2. Assam   3. Tripura   4. Himachal Pradesh

41. 'Gini Coefficient' is used to measure which quantity?

    1. Migration Rate   2. Income Inequality   3. Employment Rate   4. Poverty

42. The "Gayatri Mantra" has been taken from which of the following "Veda"?

    1. Upanishad   2. Atharvaveda   3. Rigveda   4. Yajurveda

43. Government has announced to set up India's first dolphin research centre in which state?

    1. Uttarakhand   2. Uttar Pradesh   3. Bihar   4. Jharkhand

44. India's Non -GovernmentalOrganisation (NGO) 'Yuwa' recently won 'Laureus Sports for Good Honour' becoming the third Indian entry to receive this honour. This NGO works in which state of India?

    1. Sikkim   2. Jharkhand   3. Odisha   4. Chhattisgarh

45. Which Organisation has released a report named "Regulatory Indicators for Sustainable Energy 2018"?

    1. Asian Development Bank   2. World Bank

    3. New Development Bank   4. International Monetary Fund

46. A container contains mixture of water and milk in which concentration of water is 35%. The amount of water added to container is what percentage with respect to amount of mixture present in container initially such that final concentration of water becomes 48%?

    1. 25%   2. 30%   3. 20%   4. 40%

47. Efficiency of Varun is 125% of the efficiency of Tarun. Tarun starts the work and completes 32.5% of work alone 13 days, and rest with the help of Varun. In how many days, will the whole work be completed?

    1. 22 days   2. 28 days   3. 25 days   4. 18 days

48. A number x is divided in the ratio of 5 : 6 : 3, respectively. 22% of the smallest number out of the 3 numbers which are formed from x is 396. Find the value of 'x'

    1. 7700   2. 9800   3. 7000   4. 8400

49. If Pintu travels with 20% more speed than his original speed, then he reached his office 6 minutes earlier. If his office is 36 km far, then find the time taken by him if he travels with a speed which is 20% less than his original speed.

    1. 50 minutes   2. 45 minutes   3. 40 minutes   4. 54 minutes

50. A train of length 225 m can cross a tree in 18 seconds. Find the time taken by the same train to cross a platform of length of 375 m.

    1. 40 seconds   2. 45 seconds   3. 32 seconds   4. 48 seconds

51. Ratio of speed of stream to speed of boat in still water is 2:7, respectively. If a boat travels 144 km downstream and 140 km upstream in 11 hours, then find the speed of boat in still water.

    1. 28 km/h   2. 35 km/h   3. 21 km/h   4. 42 km/h

52. There are two concentric circles i.e. C_1 and C_2. If radius of circle C_1 is 6 cm less than that of circle C_2, and difference between areas of the circles is 684 cm^2, find the radius of circle C_2. [Take $\Pi = 3$]

    1. 20 cm   2. 24 cm   3. 22 cm   4. 18 cm

53. Sum of perimeters of a square and a rectangle is 212 cm. Ratio of length of rectangle to side of square is 4:3, respectively. If breadth of rectangle is 26 cm, then find the area of the square.

    1. 441 cm^2 2. 729 cm^2 3. 484 cm^2 4. 576 cm^2

54. At what rate of compound interest will the sum of Rs. 7500 become Rs. 10092 after 2 years?

    1. 20%   2. 16%   3. 12%   4. 24%

55. Average of number of books sold by Prakash, Vikash, and Lalan is 212, while average of number of books sold by Prakash and Lalan 246. Find the number of books sold by Vikash.

    1. 156   2. 132   3. 162   4. 144

56. Rohan scores 6 more runs in each match than previous match. If runs scored by him in 3rd match are 32, then find the total runs scored by him in the first 12 matches.

    1. 636   2. 642   3. 620   4. 654

57. Punit sold his cycle at Rs. 1628 to Manmeet. Manmeet spent Rs. 122 for repairing the cycle. At what amount will Manmeet sell the cycle to earn a profit of 26%?

    1. Rs. 2216   2. Rs. 2205   3. Rs. 2180   4. Rs. 2195

58. After 12 years, age of Kapil will become 5 years more than twice the age of Preeti. If present age of Preeti is 12 years, then find the present age of Kapil.

    1. 45 years   2. 38 years   3. 41 years   4. 49 years

59.   What is the value of 40% of 55% of 60% of 8000 ?

   1. 1075   2. 1224   3. 1120   4. 1056

60.   A number when divided by 123 leaves remainder 86. If the same number is divided by 41, then find the remainder.

   1. 1   2. 2   3. 3   4. 4

61.   The pie chart represents the percentage distribution of funds allocated to different sectors by the state government out of the total funds allocated to all sectors together.

Percentage distribution of funds allocated

If fund allocated in Education sector is Rs. 2560 crore, then find the fund allocated in Urban Development.

   1. Rs. 1120 crore   2. Rs. 1350 crore   3. Rs. 1240 crore   4. Rs. 1280 crore
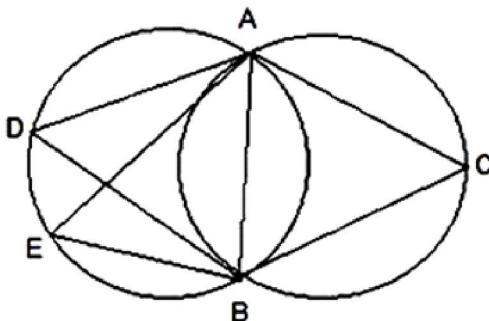
Directions (62 - 63) : Answer the questions based on the information given below.

The table below represents the number of people who live in rural area and number of people who live in urban area in 3 different states.

Total population of a state = Number of people who live in rural area + Number of people who live in urban area.

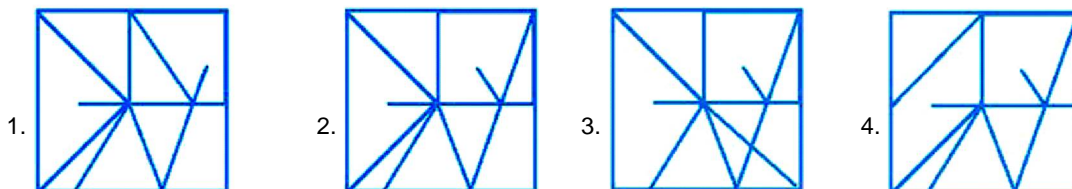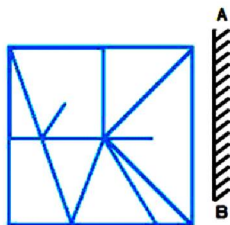| State	Number of people who live in urban area	Number of people who live in rural area
Jharkhand	2400	3200
Bihar	3000	5000
Uttar Pradesh	3200	6800

62.   What percentage of the total population of Bihar lives in urban area?

   1. 40%   2. 37.5%   3. 42.5%   4. 35%

63.   What is the ratio of total population of Jharkhand to the total population of Uttar Pradesh?

   1. 7 : 20   2. 14 : 25   3. 9 : 16   4. 2 : 5

64.   AB is the common chord of the given two circles. ABC is an equilateral triangle. If angle DAC = 115^0 and angle DBC = 110^0, then find the angle AEB.

   1. 70^0 2. 80^0 3. 75^0 4. 60^0

65. A pipe can fill a tank in x hours and another can empty it in y hours. They can together fill it in (y > x)

1. $\dfrac{xy}{y-x}$ hours
2. x - y hours
3. y - x hours
4. $\dfrac{xy}{x-y}$ hours

66. Two poles of height 7 metre and 12 metre stand on a plane ground. If the distance between their feet is 12 metre, the distance between their top will be

1. 15 metre
2. 13 metre
3. 19 metre
4. 17 metre

67. AB is a line in which co-ordinates of point A and point B are (-8, 5) and (6,1) respectively. Find the co-ordinates of mid-point of line AB.

1. (-2, 2)
2. (2, 5)
3. (-1, 3)
4. (1, -3)

68. If x = ($\sqrt{3}$ + 2), find the value of [{(x⁴ - 1)/(x² - 1)} - 4$\sqrt{3}$].

1. 8
2. 9
3. 6
4. 2

69. If (a + b + c) = 0, then find the value of 1/bc + 1/ca + 1/ab.

1. 1
2. -1
3. 2
4. 0

70. The tower was standing on top of a building of height 40 m. Raj was standing on the ground and was looking at the top and bottom of the tower at an angle of elevation of 60⁰ and 45⁰, respectively. Find the height of tower.

1. 20 ($\sqrt{3}$ -1)
2. 40 $\sqrt{3}$
3. 40 ($\sqrt{3}$ - 1)
4. 40 ($\sqrt{3}$ + 1)

71. Two inlet pipes A and B can fill the tank alone in 18 minutes and 24 minutes, respectively. An outlet pipe C can empty the tank in 36 minutes. If all the pipes are opened together and after 6 minutes outlet pipe is closed, then find the time taken to fill the entire tank.

1. 10 minutes
2. 13 minutes
3. 14 minutes
4. 12 minutes

72. If the area of a circle is A, radius of the circle is r and circumference of it is C, then

1. $\dfrac{A}{r} = C$
2. rC=2A
3. $\dfrac{C}{A} = \dfrac{r}{2}$
4. $AC = \dfrac{r^2}{4}$

73. A shopkeeper sold an article of cost price Rs. 2720 at a profit of 10% after giving two successive discounts of 12% and 15%. Find the marked price of the article.

1. Rs. 4000
2. Rs. 4400
3. Rs. 4200
4. Rs. 3800

74. If cos 60⁰ + cosec B = 5/2, then find the value of tan 2B + sin 2B. (O⁰ < B < 90⁰)

1. 3$\sqrt{3}$ /2
2. $\sqrt{3}$
3. $\sqrt{3}$ /4
4. 2/$\sqrt{3}$

75. If (1/cot x + 1/cos x) = 9, then find the value of (1/cos x - 1/cot x).

1. 1/9
2. $\sqrt{3}$
3. 9
4. 1/3 $\sqrt{3}$

76. Which among the following words can be formed using the letters of the given word?

HYPOTHETICAL

1. ELEPHANT
2. LITERATE
3. TEACHER
4. POLITE

77. There are 7 persons N, M, P, Q, R, S and X who are of different age groups. No two persons are same in age. T is elder than Q but not the eldest. S, who is younger than Q, is the 2nd youngest person. N, who is the 3rd eldest person, is younger than T. Neither P nor R is elder than Q. How many person are elder than M?

1. 4
2. 1
3. 3
4. 0

78. Three of the following four options are alike in a certain way based on the Alphabetical series. Which one among the following doesn't belong to the group?

1. EK
2. GM
3. OT
4. RX

ADITYA COLLEGE OF COMPETITIVE EXAMS
Santhinagar, KAKINADA, Ph : 0884 2340236.

5

79. If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?

80. In a given coded language, how is the letter "G" coded?

   Statement I : In a certain coded language, "MKGRS" is coded as "= $ @ ∧ %" and "PKRTS" is coded as "$ + = ∧ ="

   Statement II : In a certain coded language, "MGSLP" is coded as "! = + % @" and "LNPCD" is coded as "+ ? >< !"

   1. If the data given in statement I alone is sufficient to answer the question.

   2. If the data given in either statement I or statement II alone is sufficient to answer the question.

   3. If the data given in both statement I and statement II are sufficient to answer the question.

   4. If the data given in both statement I and statement II are not sufficient to answer the question.

81. In the following question, select the missing letter from the series:

p	S	K
L	J	F
?	L	H

   1. G   2. J   3. M   4. E

82. If CHAMBER is written as MAHCEBR, then which among the following can be written as SALIENT?

   1. ILASENT   2. ILANSET   3. ILSANET   4. ILASNET

83. Rashmi walks from point K to point L in a straight line. Standing at point L, she turns 225^0 clock wise direction and walks straight to reach point M. Standing at point M, she again turns 135^0 anti clock wise direction and walks straight. She founds that she is walking towards South direction. What is the direction of point L from Point K?

   1. North west   2. East   3. South west   4. South east

84. If in a certain language, "HEADLINE" is coded as "@ # ! % $ = + #" and "BIGGEST" is coded as "? = && # β α ". How is "DESIGNATE" coded in that code?

   1. %# β = β !+ α #   2. %# β =+&! α #   3. %# β =&+! α #   4. %#= β &+! α #

85. In the given question, three statements are given each followed by two conclusions I and II. You have to consider the statements to be true, even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements:

   Statements : All kitchens are rooms. No room is house. Some houses are offices.

   Conclusions :

   I. Some kitchens are houses.   **II.** Some rooms may be offices.

   1. Only conclusion I follows   2. Neither conclusion I nor conclusion II follow

   3. Only conclusion II follows   4. Both conclusion I and conclusion II follow

86. A Series is given with one term missing. Choose the correct alternatives from the given ones that will complete the series:

   VURP, NMJH, ?, GFCA

   1. XYUS   2. YXUS   3. XYSV   4. XYSU

87. Which among the given operators should replace the (in the same order) in the given expression below:

   4 & 14 & 2 & 3 & 5 & 3 & 11

   1. =, ÷ , -, -, x, -   2. =, ÷ , x, =, x, -   3. =, =, -, ÷ , x, -   4. =, ÷ , -, =, x, -

88. Which among the following set of letters can be placed in the gaps in the given alphabet series to follow a particular pattern?

de_fgh_i_deef_hh_j_eef_h_ij

1. ehjgidhg
2. ehjigdgh
3. ehjgigdh
4. ehjgidgh

89. A series is given with one two term missing. Choose the correct alternative from the give ones that will complete the series?

10.5 22 45 91 ?

1. 182
2. 183
3. 184
4. 185

90. In a certain coded language, 'COLLIDE' is written as '2188043' and 'FIGHT' is written as '60579'. How is 'HIGHLIGHT' written in that code language?

1. 705870579
2. 705780579
3. 705785079
4. 707580579

91. Select the related number from the given alternatives:

6 : 20 : : 8 : ?

1. 27
2. 25
3. 29
4. 28

92. Point F is 18m west of point G, which is 5m north of point E. Point B is 5m south of point C, which is 9m west of point D. Point A is 14m east of point B. What is the distance between point F and point C, if point E is 5m east of point D?

1. $\sqrt{42}$ m
2. 7m
3. $\sqrt{41}$ m
4. $6\sqrt{3}$ m

93. 5 persons P, Q, R, S and T sit in a straight row facing east but not necessarily in the same order. How many persons sit between R and T?

Statement I : R sits 2nd to the right of P. Two persons sit between P and T. Q sits 3rd to the right of S.

Statement II : S sits immediate left of R. Only one person sits between R and Q. P sits 3rd to the left of T.

1. If the data given in statement I alone is sufficient to answer the question.

2. If the data given in both statement I and statement II are sufficient to answer the question.

3. If the data given in either statement I or statement II alone is sufficient to answer the question.

4. If the data given in statement II alone is sufficient to answer the question.
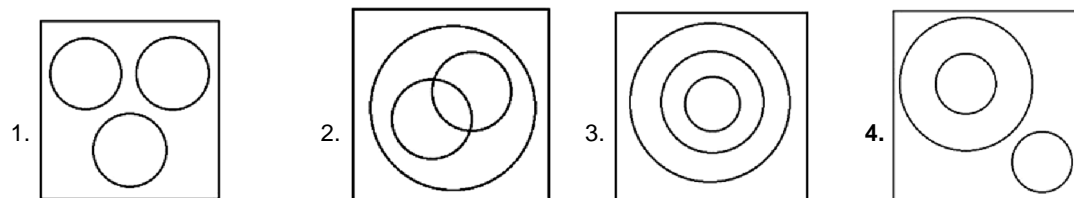
94. Select the related letters from the given alternatives:

JPHR : LSMY :: ? : FEVR

1. DCQK
2. BDQK
3. DBQK
4. DBKQ

95. Identify the diagram that best represents the relationship among the given classes:

Sugarcane, Sugar, Rice

96. Find out the odd word/letter/number pair from the given alternatives.

1. Mizoram
2. Nagaland
3. Assam
4. Maharashtra

97. Pointing to a man, Kaushal said, "He is the brother of my maternal grandfather's only daughter". How is the brother of man related to Kaushal's mother?

1. Husband
2. Brother in law
3. Brother
4. Cousin
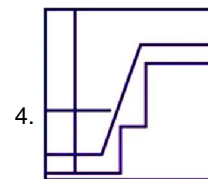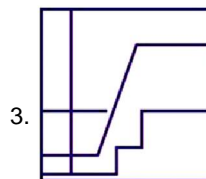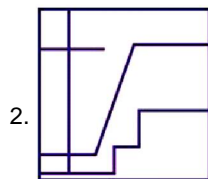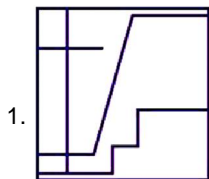
98. Find the odd one from the following:

1. 27, 729
2. 14, 225
3. 16, 289
4. 23, 576

ADITYA COLLEGE OF COMPETITIVE EXAMS
Santhinagar, KAKINADA, Ph : 0884 2340236.
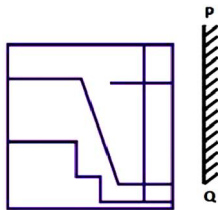
7

99. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-1 are numbered from 1 to 4 and that of Matrix-II are numbered from 5-8. A letter from these matrices can be represented first by its row and next by its column, for example, 'A' can be represented as '33', and 'B' can be represented by '24', '85'. Similarly, you have to identify the set for the word 'HEALTH'.

	1	2	3	4
1	M	D	H	Q
2	W	J	N	B
3	R	G	A	T
4	O	S	F	E

	5	6	7	8
5	W	R	N	H
6	L	A	C	N
7	U	D	K	S
8	B	I	V	X

1. 13, 44, 66, 65, 43, 58

2. 58, 44, 33, 56, 34,13

3. 58, 44, 33, 65, 34, 13

4. 13, 44, 66, 43, 65, 58

100. If a mirror is placed on the line PQ, then which of the answer figures is the right image of the given figure?

ADITYA COLLEGE OF COMPETITIVE EXAMS
Santhinagar, KAKINADA, Ph : 0884 2376662

SSC TEST   28 / 2021   **KEY SHEET**

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 - 20	2	1	1	3	1	1	1	4	2	3	3	2	1	2	2	3	3	2	2	3
21 - 40	2	1	1	3	4	2	4	4	3	4	3	3	3	4	3	4	3	3	4	2
41 - 60	2	3	3	2	2	1	3	4	2	4	1	3	4	2	4	1	2	3	4	4
61 - 80	4	2	2	3	1	2	3	1	4	3	4	2	1	1	1	4	4	3	2	4
81 - 100	1	4	2	3	3	2	4	4	2	2	4	3	3	3	4	4	3	1	3	2

Note : Key corrections, if any, will be informed in the key of the next test. (or) it may be displayed on the notice board