



8011

**GOVERNMENT OF PUDUCHERRY
DIRECTORATE OF SCHOOL EDUCATION**

QUESTION BOOKLET

MARCH 2020-21

**PART – I
MENTAL ABILITY TEST**

Centre Code No.

--	--	--

Register No.

--	--	--	--

INSTRUCTIONS

1. Answer all the questions. All questions carry one mark each
2. Since all questions are compulsory, do not try to read through the whole question paper before beginning to answer.
3. Begin with the first question and keep on trying one question after another till you finish all the question.
4. If you do not know the answer to any question, do not spend much time on it but pass on to the next one. Time permitting, you can come back to the questions which you have left in the first instance and try them again.
5. Since the time allotted to this question paper is very limited, you should make the best use of it by not spending too much time on any one question.
6. Separate sheets have been provided for rough work in the Question Booklet itself.
7. The answers should be marked on a separate answer sheet provided in the Examination Hall.
8. The answer sheet has two parts corresponding to Part – I and Part –II of the Test.
9. Answer to each question is to be indicated by shading the number of the correct choice in the answer sheet with black ballpoint pen from amongst the ones given for the corresponding question in the test booklet.

PART I
MENTAL ABILITY TEST – MARCH 2020-21

8011

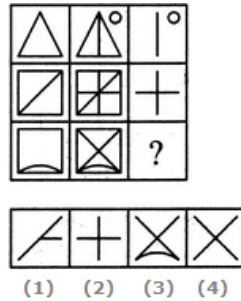
Duration: 90 minutes

Max Marks: 90

Questions (1 to 10)

In each of the following questions, find out which of the answer figures (1), (2), (3) and (4) completes the figure matrix? Select a suitable figure from the four alternatives that would complete the figure matrix.

1.



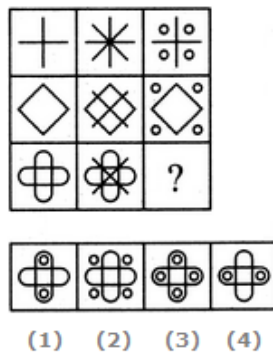
1) 1

2) 2

3) 3

4) 4

2.



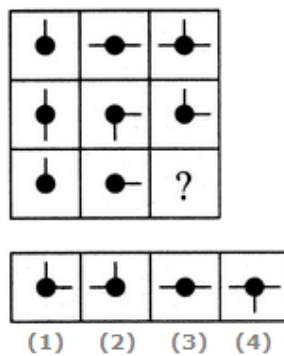
1) 1

2) 2

3) 3

4) 4

3.



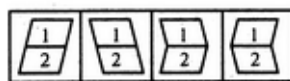
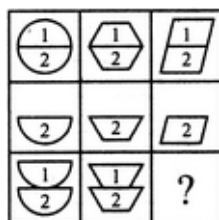
1) 1

2) 2

3) 3

4) 4

4.



(1) (2) (3) (4)

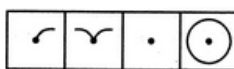
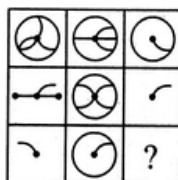
1) 1

2) 2

3) 3

4) 4

5.



(1) (2) (3) (4)

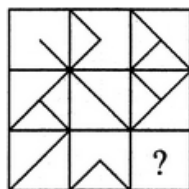
1) 1

2) 2

3) 3

4) 4

6.



(1) (2) (3) (4)

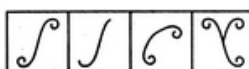
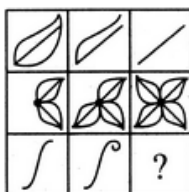
1) 1

2) 2

3) 3

4) 4

7.



(1) (2) (3) (4)

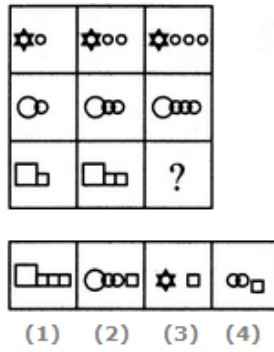
1) 1

2) 2

3) 3

4) 4

8.



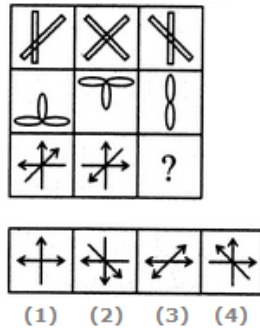
1) 1

2) 2

3) 3

4) 4

9.



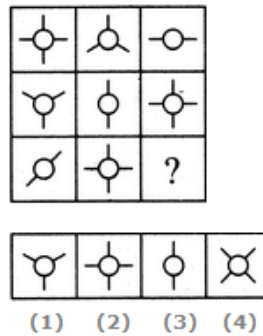
1) 1

2) 2

3) 3

4) 4

10.



1) 1

2) 2

3) 3

4) 4

Questions (11 to 20)

Directions: In each series, Look at this series, What number should come next?
In other words, do the numbers increase or decrease, and by how much

11. 2, 1, $\frac{1}{2}$, $\frac{1}{4}$, ?1) $\frac{1}{3}$ 2) $\frac{1}{8}$ 3) $\frac{2}{8}$ 4) $\frac{1}{16}$

12. 7, 10, 8, 11, 9, 12, ?

1) 7

2) 10

3) 12

4) 13

13. 36, 34, 30, 28, 24, ?
 1) 20 2) 22 3) 23 4) 26
14. 22, 21, 23, 22, 24, 23, ?
 1) 22 2) 24 3) 25 4) 26
15. 53, 53, 40, 40, 27, 27, ?
 1) 12 2) 14 3) 27 4) 53
16. 80, 10, 70, 15, 60, ?
 1) 20 2) 25 3) 30 4) 50
17. 2, 6, 18, 54, ?
 1) 108 2) 148 3) 162 4) 216
18. 5.2, 4.8, 4.4, 4, ?
 1) 3 2) 3.3 3) 3.5 4) 3.6
19. 8, 6, 9, 23, 87, ?
 1) 128 2) 226 3) 324 4) 429
20. 21, 9, 21, 11, 21, 13, 21, ?
 1) 14 2) 15 3) 21 4) 23

Questions (21-30)

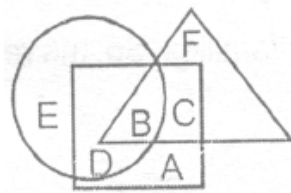
Directions: In the following questions, three out of the four alternatives are same in a certain way and so form a group. Find the odd one that does not belong to the group.

21. (1) Gold (2) Silver (3) Bronze (4) Iron
 1) 1 2) 2 3) 3 4) 4
22. (1) Yen (2) Lira (3) Dollar (4) Ounce
 1) 1 2) 2 3) 3 4) 4
23. (1) Huge (2) Tiny (3) Heavy (4) Small
 1) 1 2) 2 3) 3 4) 4
24. (1) Teeth (2) Tongue (3) Palate (4) Chin
 1) 1 2) 2 3) 3 4) 4
25. (1) Silk (2) Cotton (3) Nylon (4) Wool
 1) 1 2) 2 3) 3 4) 4
26. (1) Triangle (2) Tangent (3) Square (4) Rhombus
 1) 1 2) 2 3) 3 4) 4
27. (1) Drama (2) Story (3) Poem (4) Novel
 1) 1 2) 2 3) 3 4) 4

28. (1) Lion-Deer (2) Cat-Mouse (3) Hawk-Pigeon (4) Pig-Piglet
 1) 1 2) 2 3) 3 4) 4
29. (1) Work-Leisure (2) Day-Night (3) Expedite-Procrastinate (4) Frequently-Always
 1) 1 2) 2 3) 3 4) 4
30. (1) April (2) May (3) July (4) September
 1) 1 2) 2 3) 3 4) 4

Questions (Q.31 to 35)

Directions: In the following diagram three classes of population are represented by three figures. The triangle represents the school teachers, the square represents the married persons and the circle represents the persons living in joint families.

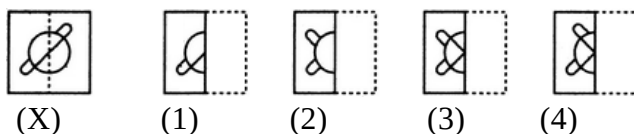


31. Married persons living in joint families but not working as school teachers are represented by
 1) C 2) F 3) D 4) A
32. Persons who live in joint families, who are unmarried and who do not work as school teachers are represented by
 1) C 2) B 3) E 4) D
33. Married teachers living in joint families are represented by
 1) C 2) B 3) D 4) A
34. School teachers who are married but do not live in joint families are represented by
 1) C 2) F 3) A 4) D
35. School teachers who are neither married nor do live in joint families are represented by
 1) F 2) C 3) B 4) A

Questions (36 - 40)

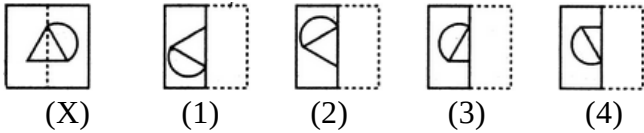
Directions: In each of the following problems, a square transparent sheet (X) with a pattern is given. Figure out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.

36.



- 1) 1 2) 2 3) 3 4) 4

37.



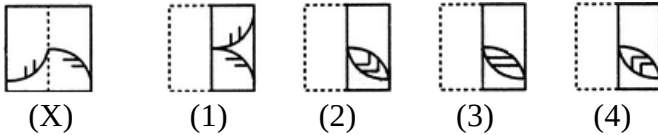
1) 1

2) 2

3) 3

4) 4

38.



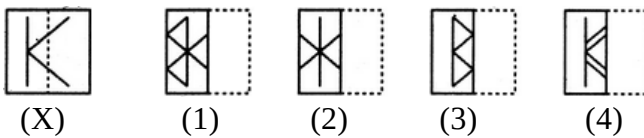
1) 1

2) 2

3) 3

4) 4

39.



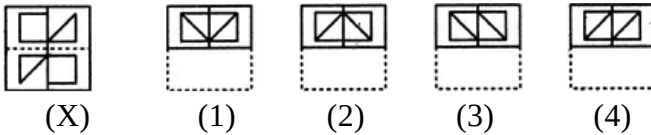
1) 1

2) 2

3) 3

4) 4

40.



1) 1

2) 2

3) 3

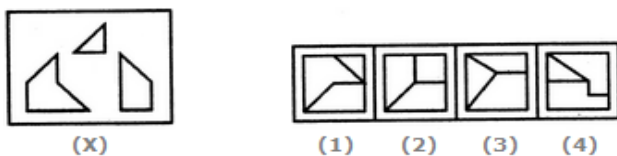
4) 4

Questions (41 - 45)

Directions to Solve: In each of the following questions you are given a combination of alphabets and/or numbers followed by four alternatives (1), (2), (3) and (4). Choose the alternative which is closely resembles the mirror image of the given combination.

In the following questions find out which of the figures (1), (2), (3) and (4) can be formed from the pieces given in figure (X).

41.



1) 1

2) 2

3) 3

4) 4

42.



(X)

1) 1



(1)

(2)

(3)

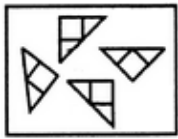
(4)

2) 2

3) 3

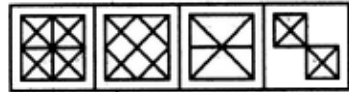
4) 4

43.



(X)

1) 1



(1)

(2)

(3)

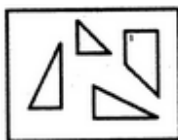
(4)

2) 2

3) 3

4) 4

44.



(X)

1) 1



(1)

(2)

(3)

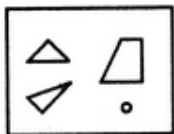
(4)

2) 2

3) 3

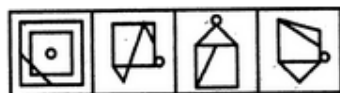
4) 4

45.



(X)

1) 1



(1)

(2)

(3)

(4)

2) 2

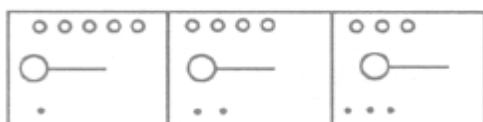
3) 3

4) 4

Questions (46 - 48)

Direction: In the following questions the item in the diagrams either increase or decrease in number. Choose the alternative which completes the series from the given alternatives.

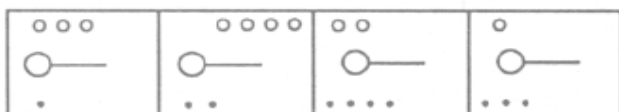
46.



(1)

(2)

(3)



(1)

(2)

(3)

(4)

1) 1

2) 2

3) 3

4) 4

47.



(1)

(2)

(3)



(1)

(2)

(3)

(4)

1) 1

2) 2

3) 3

4) 4

48.



(1)

(2)

(3)



(1)

(2)

(3)

(4)

1) 1

2) 2

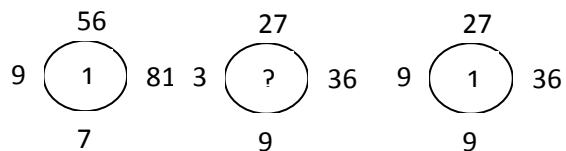
3) 3

4) 4

Questions (49 –52):

Directions: In each question there are circles. Certain numbers are given inside/outside the circles according to a particular rule. In each question one of the circle has a (?) mark in side it. Choose the correct answer to fill in the space marked (?) from the given alternatives.

49.



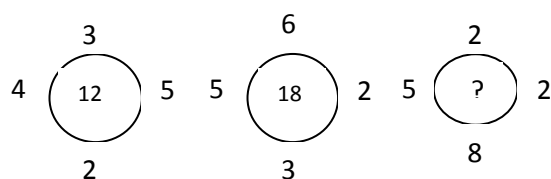
1) 9

2) 10

3) 11

4) 12

50.



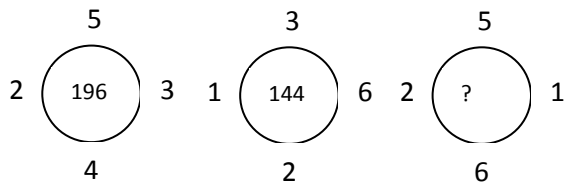
1) 12

2) 14

3) 16

4) 20

51.



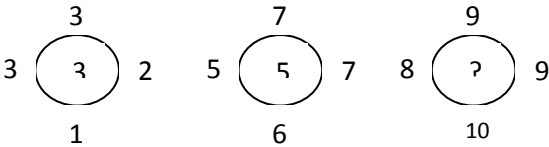
1) 270

2) 196

3) 256

4) 320

52.



1) 3

2) 4

3) 5

4) 6

Questions (53 – 55)**Direction:** Find out the correct alternative of the question based on the Dice figures.

53.



The number opposite side the face having the no. 5 will be

1) 1

2) 2

3) 3

4) 4

54.



The number opposite the face having the no. 2 will be

1) 1

2) 4

3) 3

4) 5

55.



The number opposite the face having the no. 2 will be

1) 1

2) 4

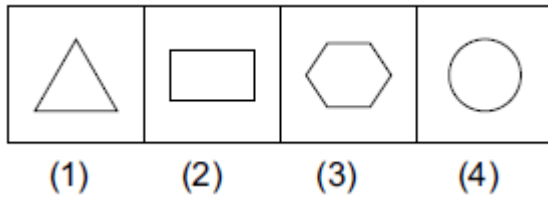
3) 3

4) 5

Questions (56-60):**Direction:** In these problems, there is a group of four figures marked serially 1 to 4. Out of these four figures three are similar in some way and one is different. Find the one which is different.

56.

8011



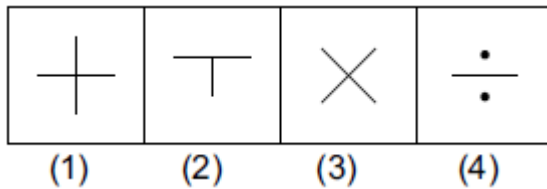
1) 1

2) 2

3) 3

4) 4

57.



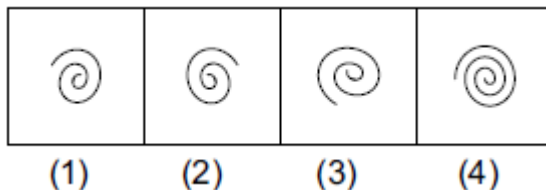
1) 1

2) 2

3) 3

4) 4

58.



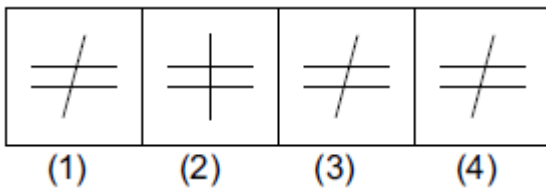
1) 1

2) 2

3) 3

4) 4

59.



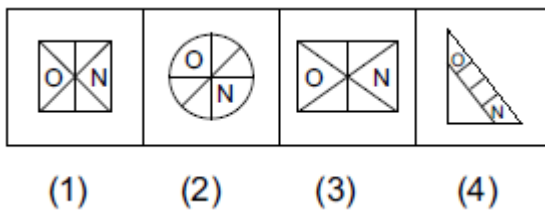
1) 1

2) 2

3) 3

4) 4

60.



1) 1

2) 2

3) 3

4) 4

(Questions 61 to 70)

Directions: The given questions are based on letter series. In each question some letters are missing. The missing letters are given in the proper sequence in the choices given under each Question. Find the correct sequential alternative in respect of each questions.

61) a - b d d - ca acb - d b c -

1) b d c a

2) c b d a

3) b c a b

4) c a b d

- 62) **a - b b - c c c - a - b**
 1) b a a d 2) a a b d 3) a b d a 4) c b d a
- 63) **x y - - x y y - x y - x**
 1) x y y y 2) x y x x 3) y x x y 4) x y y x
- 64) **- - r s m - o - p q - s**
 1) p q n p r 2) q p m n r 3) p q n m s 4) q p n s m
- 65) **N S M - O Q P - Q O R - S N**
 1) R Q M 2) R P M 3) P Q O 4) P R O
- 66) **p - r q - s r - p - - q**
 1) s p s r q 2) s p q s r 3) q r p s r 4) q r p q r
- 67) **ab - babc - ab - b - bcb - b**
 1) a b c c a 2) c c b a b 3) c b c a a 4) c b b a c
- 68) **e e - g - e - f g g - e f - g**
 1) f g e g e 2) f g e e g 3) g e e g f 4) g e e f g
- 69) **a b - c b c c - - a a b - b b c**
 1) b a c a 2) a a b a 3) c a c b 4) b b c b
- 70) **Z L X J V H T F - -**
 1) R, E 2) S, E 3) R, D 4) S, D

(Questions: 71 to 75)

Directions: In the questions given there is a question mark (?) in a blank space. Under each question one of the four alternatives given satisfies the relationship between the two terms to the left or to the right of the sign : : given in the question. Find the correct answer for each question.

- 71) **BEJ : DIP :: KNR : ?**
 1) M Q W 2) N Q V 3) M R X 4) L P U
- 72) **DGM : QTZ :: BIL : ?**
 1) Y R O 2) O Y V 3) O V Y 4) O R Y
- 73) **2CD : 5FG :: ? : 11LM**
 1) 7IJ 2) 8JK 3) 7HI 4) 8IJ
- 74) **YBVE : ? :: UFRI : SHPK**
 1) C X H R 2) X C R H 3) D W G T 4) W D T G

75) **B H N T : A G M S :: E K Q W : ?**

1) E J P V

2) D P V J

3) D J P V

4) F J P V

(Questions 76 to 80)

Directions: In the questions given a word is written according to some code. In each question a word is given and how this can be written in the same code is indicated by four choices. Select the correct answer.

76) If **LION** can be written as **Q M R P**, then **DEER** should be written as :

1) I I H T

2) H I I T

3) T H H I

4) I T T H

77) If **SCIENCE** can be written as **T A J C O A F** then **PHYSICS** should be written as :

1) U F Z Q T A J

2) O F Z Q A T

3) Q F Z Q J A T

4) O F Z Q A J

78) If **SCIENCE** can be written as **19 3 9 5 14 3 5**, then **HISTORY** can be written as:

1) 7 8 15 16 12 19 24

2) 8 9 19 20 15 18 25

3) 6 7 17 18 14 20 23

4) 5 6 14 15 19 21 26

79) If **DELHI** is coded as **CCIDD**, Then **BOMBAY** can be coded as.

1) A J M T V T

2) A M J X V S

3) M J X V S U

4) W X Y Z A X

80) If **PLAYER** can be written as **ROEDKY** then **HOCKEY** should be written as :

1) K P R G F D

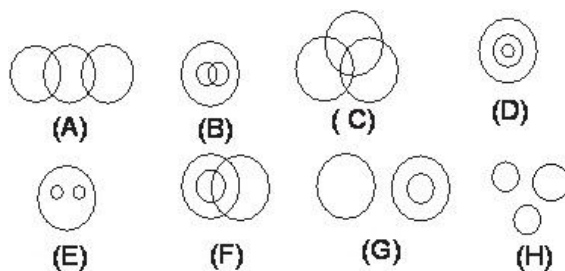
2) J R G P K F

3) I P J K F G

4) K J F G P F

(Questions: 81 to 90)

Directions: The Question given are based on the diagrams given below. Each circle represents one item irrespective of the size. Match the figure with items in the questions on the basis of their relationship. Identify the correct answer.



81) **Arthropods, Insects, Bedbug**

1) A

2) C

3) D

4) E

82) **Vegetables, Beans, Apple**

1) E

2) F

3) G

4) H

83) **Teachers, Fathers, Mothers**

1) C

2) D

3) E

4) F

- 84) **Players, Cricket, Tennis**
1) A 2) B 3) C 4) E
- 85) **Actors, Dancers, Singers**
1) A 2) B 3) C 4) E
- 86) **Yellow, Roses, Dresses**
1) A 2) B 3) E 4) F
- 87) **Planets, Earth, Stars**
1) B 2) C 3) E 4) G
- 88) **Crocodile, Lion, Eagle**
1) E 2) F 3) G 4) H
- 89) **Doctors, Surgeons, women**
1) A 2) C 3) E 4) F
- 90) **Women, Mothers, Musicians**
1) E 2) F 3) G 4) H

Rough Work only

**8021**

**GOVERNMENT OF PUDUCHERRY
DIRECTORATE OF SCHOOL EDUCATION**

QUESTION BOOKLET

MARCH 2020-21

**PART – II
SCHOLASTIC APTITUDE TEST**

Centre Code No.

--	--	--

Register No.

--	--	--	--

INSTRUCTIONS

1. Answer all the questions. All questions carry one mark each
2. Since all questions are compulsory, do not try to read through the whole question paper before beginning to answer.
3. Begin with the first question and keep on trying one question after another till you finish all the question.
4. If you do not know the answer to any question, do not spend much time on it but pass on to the next one. Time permitting, you can come back to the questions which you have left in the first instance and try them again.
5. Since the time allotted to this question paper is very limited, you should make the best use of it by not spending too much time on any one question.
6. Separate sheets have been provided for rough work in the Question Booklet itself.
7. The answers should be marked on a separate answer sheet provided in the Examination Hall.
8. The answer sheet has two parts corresponding to Part – I and Part –II of the Test.
9. Answer to each question is to be indicated by shading the number of the correct choice in the answer sheet with black ballpoint pen from amongst the ones given for the corresponding question in the test booklet.

SCIENCE

1. When you switch off the TV in your house after watching for some time, you can notice that hairs in your hands are getting attracted towards the screen. This is due to -----.
 1) Magnetic force 2) Electrostatic force 3) Gravitational force 4) Electric force
2. The electric appliances of our house are all connected in a ----- circuit.
 1) Parallel 2) Series 3) Parallel or Series 4) Parallel and Series
3. Match the following

(i) Gold	(a) Na
(ii) Silver	(b) Hg
(iii) Sodium	(c) Ag
(iv) Mercury	(d) Au

1) i-c ii-a iii-b iv-d	2) i-b ii-c iii-a iv-d
3) i-d ii-c iii-a iv-b	4) i-d ii-c iii-b iv-a
4. Which chemical is used for sterilization of drinking water?
 1) Calcium carbonate 2) Calcium Oxide 3) Calcium Oxychloride 4) Calcium Hydroxide
5. In water hydrogen and oxygen are combined in the ratio of ----- by mass
 1) 8:1 2) 1:8 3) 2:1 4) 1:2
6. The metal with highest melting point is _____.
 1) Copper 2) Gold 3) Platinum 4) Tungsten
7. The type of magnet used in the Loudspeaker of a Radio is
 1) Natural magnet 2) Electro magnet 3) Artificial magnet 4) Bar magnet
8. Electric bell converts electrical energy into _____.
 1) Mechanical energy 2) light energy 3) heat energy 4) chemical energy
9. When mercury, water and kerosene are poured in a container which one will be at the bottom layer?
 1) Water 2) Kerosene 3) Mercury 4) Air
10. The SI unit of Force is
 1) Newton 2) Pascal 3) Kelvin 4) kilogram
11. The heat of the Sun reaches Earth by
 1) Convection 2) conduction 3) radiation 4) evaporation
12. When a ball is thrown up vertically, its velocity
 1) Increases 2) decreases 3) remains unchanged 4) zero
13. Excavators (JCB) work on the principle of
 1) Pascal's law 2) Newton's law 3) Boyle's law 4) Charles' law
14. The electric fuse works on the principle of _____ effect of current.
 1) magnetic 2) heating 3) chemical 4) mechanical

15. The most abundant element in human body is
 1) Phosphorous 2) Hydrogen 3) Oxygen 4) Calcium
16. 1 nm is equal to _____.
 1) 10^{-10} m 2) 10^{-9} m 3) 10^{-12} m 4) 10^9 m
17. Which is known as the 'King of chemicals'?
 1) Sodium chloride 2) Sodium hydroxide 3) Sulphuric acid 4) Lactic acid
18. The acid present in Grapes is
 1) Oxalic acid 2) Lactic acid 3) Citric acid 4) Tartaric acid
19. The symbol of mercury is
 1) Hg 2) Mo 3) Au 4) Ag
20. The Intermolecular force is maximum in
 1) Plasma 2) Liquid 3) Solid 4) Gas
21. Raju while drinking orange juice had a doubt whether it contains acid or base. So, he tested with a litmus paper which turned from blue to red. So, it contains
 1) Acid 2) Base 3) Salt 4) Neutral
22. Kala prepared idly batter. After a few hours, she found bubbles on it. This is due to the action of _____.
 1) Bacteria 2) yeast 3) algae 4) protozoa
23. The plant which has thick flat green stem and does the function of photosynthesis is
 1) Sunflower 2) Opuntia 3) Water Lilly 4) Neem
24. Which one of the following shows vegetative propagation by the formation of buds in the margin of leaves?
 1) 1) Rose 2) Ginger 3) Yeast 4) Bryophyllum
25. An unicellular fungus which undergoes anaerobic respiration to produce alcohol in the making of wine and beer is _____.
 1) Chlorella 2) Agaricus 3) Mucor 4) Yeast
26. Which one of the following gets irritated when foreign particles such as dust or pollens into it?
 1) Spiracle 2) Gills 3) Nasal cavity 4) Vacuole
27. Paddy → mouse → snake → eagle
 In the above food chain the flow of energy _____.
 1) increases 2) decreases 3) remains same 4) increases and then decreases
28. The end product of anaerobic respiration in plants are
 1) Ethyl alcohol + Carbon-di-oxide + energy 2) Starch + Carbon-di-oxide + Oxygen
 3) Water + Carbon-di-oxide+ energy 4) Glucose + water + energy
29. Which one of the following process will release more energy?
 1) Aerobic respiration 2) Fermentation 3) Diffusion 4) Squatneous
30. Earthworm respires through
 1) Lungs 2) skin 3) gills 4) spiracles
31. World Environment day is celebrated on
 1) June 5 2) July 5 3) October 5 4) November 5

32. The master gland which controls all other endocrine glands is _____.
 1) Thyroid 2) Pituitary 3) Adrenal 4) Thymus
33. Euglena, a protozoan forms a border line between plants and animals. This is because of its _____ nature.
 1) Saprophytic 2) Parasitic 3) Symbiotic 4) Myxotrophic
34. Gastric juice contains
 1) Pepsin, Lipase, rennin 2) Trypsin, lipase, rennin
 3) Trypsin, pepsin, rennin 4) Pepsin, trypsin, lipase
35. Which of the following plays a dual role in the production of hormone and enzyme?
 1) Liver 2) Salivary gland 3) Ovary 4) Pancreas

SOCIAL SCIENCE

36. The most famous king of Vijayanagar Empire was
 1) Harikara 2) Bukkar 3) Krishna Deva Rayar 4) Balakrishnan
37. The largest oil shore field of India is in
 1) Mumbai 2) Assam 3) Kerala 4) Tamilnadu
38. Babar the ruler of Kabul was invited by _____ to india
 1) Bhaglal lodi 2) Ibrahim lodi 3) Daulat khan 4) Bairam khan
39. The first Turkish ruler to introduce Arabic coin age was
 1) Iltumish 2) Amir Kusru 3) Amir Hasan 4) Albaruni
40. The poet known as 'the Parrot of India' was
 1) Albaruni 2) Kaiqubad 3) Amir Khusru 4) Iltumish
41. In the first battle of Tarain Mohamad of Ghori was defeated by
 1) Sabukdigin 2) Ghiyasuddin 3) Prithiviraj 4) Balban
42. Mohamed-bin-kasim was sent to conquer
 1) Sind 2) Delhi 3) Malava 4) Agra
43. Andal composed
 1) Devaram 2) Thirupavai 3) Ramayanam 4) Thiruvaasagam
44. Narasimavarman I assumed the title
 1) Vathabi kondan 2) Jayankondan 3) Kadaramkondan 4) Kangaikondan
45. The Rashtrakuta power became invincible during the time of
 1) Danti durga 2) Govinda 3) Dhuruva 4) Balan.
46. The capital of the Paramara was
 1) Delhi 2) Malwa 3) Dhara 4) Ajmer
47. The Vijayanagar Empire was founded in the year
 1) 1337 A.D. 2) 1336 A.D. 3) 1338 A.D. 4) 1339 A.D.
48. Pygmies belongs to
 1) Africa 2) Australia 3) America 4) Japan

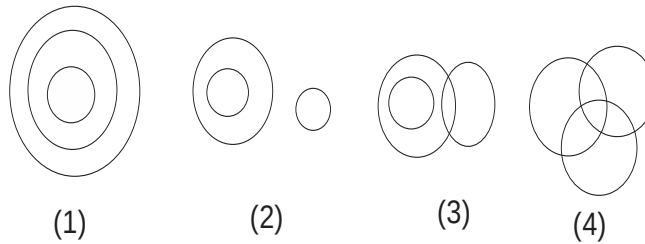
49. "Wealth of Nations" was written by
 1) Paul Samuelson 2) Adam Smith 3) Rickrodow 4) Lionel Robinson
50. The reward paid to the capital is
 1) Rent 2) wages 3) Profit 4) Interest
51. Economics is a _____ Science
 1) Social 2) Political 3) Moral 4) Maths
52. The portion of Income not spent is
 1) Distribution 2) Savings 3) Consumption 4) Exchange
53. Vasco-da-gama was a
 1) Portuguese sailor 2) Indian sailor 3) French sailor 4) Spanish sailor
54. The English East India company was started in
 1) 1600 AD 2) 1640 AD 3) 1650 AD 4) 1610 AD
55. Humayan means _____
 1) Fortunate 2) un fortunate 3) laughter 4) crier
56. Guru Nanak was the founder of
 1) Sikhism 2) Veera syvam 3) Vainavam 4) Buddhism
57. Bakkthi Iyakam spread during the _____ period
 1) Medieval 2) Ancient 3) Modern 4) Present
58. The Indian Constitution has _____ parts
 1) 22 2) 23 3) 24 4) 25
59. The Right to Education Act was passed on
 1) 15 Aug 1947 2) 1 Apr 2010 3) 26 Jan 1950 4) 20 Mar 2010
60. The Headquarters of UNO
 1) Washington 2) The Hague 3) Newyork 4) Paris
61. Tsu means
 1) Sea 2) Harbour 3) Waves 4) Storm
62. Thar Desert is located in
 1) Rajasathan 2) Tamilnadu 3) Gujarat 4) Bihar
63. Uppermost layer of the Earth is
 1) Crust 2) Epicenter 3) Core 4) Sial
64. Mt. Kilimanjaro is located in
 1) Africa 2) Asia 3) North America 4) South America
65. World's largest beach
 1) Europe 2) America 3) India 4) china

66. Agriculture land
 1) Plateaus 2) Plains 3) Mountain 4) Forest
67. Which is not a plantation crop?
 1) Paddy 2) Tea 3) Coffee 4) Vegetable
68. The Holy book of Hindus is
 1) Bhagavat Gita 2) Kuran 3) Bible 4) Thirukural
69. Social Structure of India is based on
 1) Religion 2) Language 3) Caste 4) Colour
70. Our National Anthem was composed by
 1) Bharathiar 2) Rabindranath Tagore 3) Bharathidasan 4) Thiruvalluvar

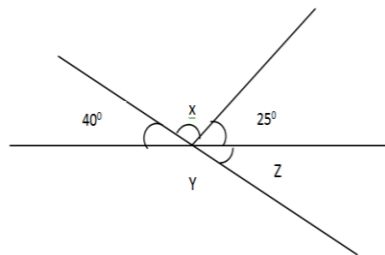
MATHEMATICS

71. Six equilateral triangle each with side 3 cm are adjoined in such a way that one vertex of each comes together the resulting figure is _____
 1) Equilateral triangle 2) Pentagon 3) Regular hexagon 4) Heptagon
72. $\sqrt[3]{0.00216}$ is _____
 1) 0.6 2) 0.06 3) 0.006 4) 0.16
73. $[(-1) \times (-1) \times (-1) \times \dots \dots \dots 25 \text{ times}] + [1 \times 1 \times 1 \times \dots \dots \dots 30 \text{ times}]$ is _____
 1) -1 2) 0 3) 1 4) 2
74. If $2^x=16$ then 2^{x+3} is _____
 1) 19 2) 32 3) 48 4) 128
75. What is 50% of a number whose 200 % is 20?
 1) 5 2) 10 3) 15 4) 20
76. Mean of first six prime number is _____
 1) 4.83 2) 6.83 3) 5.83 4) 7.83
77. What percent of 1 day is 36minutes _____
 1) 25% 2) 2.5% 3) 3.6% 4) 0.25%
78. The ratio of men to women in an office is 3:2. If there are 21 men, then the number of women is _____.
 1) 14 2) 21 3) 28 4) 35
79. The next number of the sequence is 25, 30, 27, 32, 29, 34, 31, _____.
 1) 33 2) 36 3) 39 4) 42

80. A long wire of length 40 cm is bent in the form of rectangle with one side 8 cm then area of the rectangle is _____
 1) 40cm^2 2) 24cm^2 3) 20cm^2 4) 96cm^2
81. An angle and its supplement are in the ratio 1:5 then the greater angle is _____
 1) 75° 2) 90° 3) 150° 4) 180°
82. The cost of one ton orange is ₹20000. Find the cost of 30 kg
 1) ₹60000 2) ₹6000 3) ₹600 4) ₹600000
83. Find the product of $(-3x^3y^4)(-10x^2y^2z)(5x^5yz^3)$
 1) $-150x^{10}y^6z^4$ 2) $150x^{10}y^6z^4$ 3) $150x^{10}y^7z^4$ 4) $-150x^{10}y^4z^7$
84. The value of $\frac{2^{2001} + 2^{1999}}{2^{2000} - 2^{1998}} =$
 1) 2 2) $2^{1000} + 1$ 3) $\frac{10}{3}$ 4) 10
85. $8^{4/3} \times 2^{-1} =$
 1) 4 2) 16 3) 8 4) 32
86. Which one of the following diagrams best illustrates the three classes rhombus, quadrilateral and polygons?



87. Find the values of the angles x, y, z in the following.



- 1) $115^\circ, 140^\circ, 40^\circ$ 2) $40^\circ, 115^\circ, 140^\circ$ 3) $140^\circ, 115^\circ, 40^\circ$ 4) $25^\circ, 40^\circ, 140^\circ$
88. The area of two circles are in the ratio 25: 36 then the ratio of their circumference is _____
 1) 6:5 2) 3:4 3) 4:3 4) 5:6

89. $(-1)^{100} + (-1)^{99} + 1 = \underline{\hspace{2cm}}$

1) -1

2) 0

3) 1

4) 100

90. 12.5% of 192 = 50% of ?

1) 48

2) 96

3) 24

4) 192

FOR ROUGH WORK ONLY