SATISH SCIENCE ACADEMY
DHANORI PUNE - 411015

SAINIK SCHOOL PAPER 1
ENTRANCE EXAM - SAINIK SCHOOL (CLASS 9)

Time Allowed: 3 hours   **Maximum Marks :** 400

General Instructions:
   i. This question paper booklet contains FIVE sections. Section "A" Mathematics contains 50 questions of 4 marks each. Section "B" English, Section "C" General Science, Section "D" Social Studies and Section "E" Intelligence contain 25 questions each, of 2 marks per question. In all, the paper consists of 150 questions for a total of 400 marks. Answer all questions.
   ii. The duration of the test is 3 hours. There is no negative marking for a wrong answer.

Section - A : Mathematics

1) 1x3y6 is a five digit number where x, y are digits and y exceeds x by 6. If this number is divisible by 18, then the value of $\frac{y}{x}$ **[4]**
   a) 7
   b) $\frac{1}{7}$
   c) 3
   d) $\frac{1}{3}$

2) The smallest value of **a** in the number 256a0 so that it is divisible by 5 is _____. **[4]**
   a) 1
   b) 3
   c) 2
   d) 0

3) If x + 0 = 0 + x = x, which is rational number, then 0 is called **[4]**

   a) Multiplicative inverse of x
   b) Additive inverse of x
   c) Reciprocal of x
   d) Identity for addition of rational numbers

4) The cost of $7\frac{2}{3}$ metres of rope is ₹$12\frac{3}{4}$. Find its cost per metre. **[4]**
   a) ₹$3\frac{18}{25}$
   b) ₹$1\frac{61}{92}$
   c) ₹$6\frac{16}{90}$
   d) ₹$2\frac{30}{47}$

5) Write the additive inverse of $\frac{4}{5}$. **[4]**
   a) $\frac{4}{5}$
   b) $-\frac{4}{5}$
   c) 0
   d) 1

6) The sum of the two numbers is 11 and their product is 30, then the numbers are **[4]**
   a) 9, 2
   b) 7, 4
   c) 6, 5
   d) 8, 3

7) If 7x : 63 = 1 : 9, then x is equal to **[4]**
   a) - 1
   b) 2
   c) 3
   d) 1

8) If one number is thrice the other and their sum is 20, then the numbers are **[4]**
   a) 5, 15
   b) 6, 18
   c) 4, 12
   d) 3, 9

9) Given a parallelogram ABCD. OB = ...
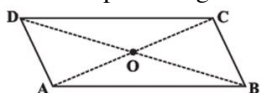
[4]
   a) OC
   b) OA and OC
   c) OA
   d) OD

10) The following figure HOPE is a parallelogram. Find the angle measure z.
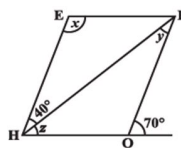
[4]
   a) 50°
   b) 110°
   c) 30°
   d) 60°

11) Find the number of sides of a regular polygon whose each exterior angle has a measure of 40º. **[4]**
   a) 6
   b) 7
   c) 8
   d) 9

12) What is the sum of the measures of the angles of a convex quadrilateral? **[4]**
   a) 90º
   b) 45º
   c) 180 °
   d) 360º

13) If $4^x = 2^y = 16^z = 256$, then find the value of $x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$. **[4]**
   a) 186
   b) 120
   c) 196
   d) 190

14) The value of $\frac{6^n \times 2^{2n} \times 3^{3n}}{30^n \times 3^{2n} \times 2^{3n}}$ is equal to **[4]**
   a) $.3^n$
   b) 3^{-n}
   c) $.3^{-n}$
   d) 1

15) Find the value of the expression b^0 for b = 13. **[4]**
   a) 169
   b) 196
   c) 1
   d) 13

16) The value of $(729 \times 15625)^{\frac{1}{3}}$ is **[4]**
   a) 524
   b) 252
   c) 522
   d) 225

17) The cube of a number is divided by the number itself. The result is 36. What is the number? **[4]**
   a) 216
   b) 6
   c) 4
   d) 36

18) The least perfect square which is divisible by 2, 4 and 6 is: **[4]**
   a) 16
   b) 64
   c) 18
   d) 36

19) Find the least square number which is exactly divisible by 3, 4, 5, 6 and 8. **[4]**
   a) 180
   b) 80
   c) 120
   d) 240

20) The sum of - 7pq and 2pq is: **[4]**
   a) 5 pq
   b) - 9 pq
   c) 9 pq
   d) - 5 pq

21) $- 3x^2y^2 + x^2y^2 - 2x^2y^2 =?$ **[4]**
 a) $4x^2y^2$ b) $- 4x^2y^2$
 c) $6x^2y^2$ d) $- 6x^2y^2$

22) 72% of 25 students are good in mathematics. How many are not good in mathematics? **[4]**
 a) 28%   b) 25%
 c) 18%   d) 30%

23) Find C.I. on Rs 25,000 for 2 years at 20% per annum compounded annually. **[4]**
 a) Rs 12,000   b) Rs 13,000
 c) Rs 11,000   d) Rs 10,000

24) A farmer bought a buffalo for ₹64000 and a cow for ₹27000. He sold the buffalo at a profit of 8% but made a loss of 18% on the cow. The net result of the transactions is _____. **[4]**
 a) 1.2 % loss   b) 0.34 % loss
 c) 0.29 % profit   d) 1.2 % profit

25) By selling a table for ₹350 instead of ₹400, loss percent increased by 5%. The cost price of the table is **[4]**
 a) ₹435   b) ₹417.50
 c) ₹1000   d) ₹1050

26) An agent receives a commission of ₹73 on sales of ₹1000. The commission he will get on sales of ₹100 is _____. **[4]**
 a) ₹7.30   b) ₹6
 c) ₹7   d) ₹6.30

27) If x and y are directly proportional and when x = 13, y = 39, which of the following is not a possible pair of corresponding values of x and y? **[4]**
 a) 30 and 10   b) 17 and 51
 c) 6 and 18   d) 1 and 3

28) 16 men or 24 women can do a piece of work in 20 days. The number of days needed to complete the job, if 20 men and 30 women are employed to do the same piece of work is **[4]**
 a) 5 days   b) $\frac{1}{8}$ days
 c) 8 days   d) 1 day

29) Number of factors of $(a + b)^2$ is **[4]**
 a) 2   b) 4
 c) 1   d) 3

30) $A^{12} - 1$ can be factorised as: **[4]**
 a) $(a - 1)(a^2 + a + 1)(a + 1)(a^2 + a + 1)$
 b) $(a - 1)(a^2 + a + 1) (a + 1)(a^2 - a + 1) [(a^2 + 1)(a^4 - a^2 + 1)]$
 c) $(a^2 + a + 1)(a^2 - a + 1)$
 d) $(a - 1)(a - 2)(a - 3)(a - 4)$

31) A man riding on a bicycle at a speed of 15 km/h crosses a bridge in 5 min. Find the length of the bridge. **[4]**
 a) $1\frac{1}{4}$ km   b) 1 km
 c) 2 km   d) $2\frac{1}{2}$ km

32) Two runners cover the same distance at the rate of 15 km and 16 km per hour respectively. The distance travelled when one takes 16 min longer than the other is **[4]**
 a) 60 km   b) 52 km
 c) 64 km   d) 58 km

33) A train is running at a uniform speed of 75 km/h. How much time does it take to cover a distance of 350 km? **[4]**
 a) 4 h 40 min   b) 4 h 30 min
 c) 5 h   d) 4 h

34) A train leaves Delhi at 4:10 P.M. and reaches Aligarh at 7:25 P.M. The average speed of the train is 40 km/hr. What is the distance from Delhi to Aligarh? **[4]**
 a) 140 km   b) 135 km
 c) 130 km   d) 120 km

35) Which of the following statements is not correct? **[4]**

 a) A right - angled triangle cannot be equilateral
 b) The sum of any two sides of a triangle is greater than the third side
 c) A triangle can have all its angles acute
 d) Difference of any two sides of a triangle is greater than the third side
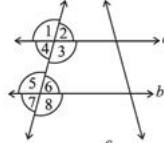
36) What is measure of angle x?

[4]
 a) 40º   b) 30º
 c) 60º   d) 25º
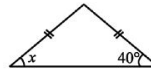
37) In△ PQR, PM is
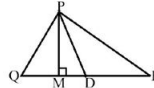
[4]
 a) Median   b) Altitude
 c) Side   d) Bisector

38) State the property that is used below: If a∥ b, then ∠ 1 = ∠ 5.

[4]

 a) Vertically opposite angles
 b) Pair of interior angles
 c) Alternate interior angles
 d) Corresponding angles

39) Which of the following options does not show△ ABC ≅ △ DEF by SAS property?
 i. AC = 6 cm, BC = 7 cm,∠ C = 65° and EF = 7 cm, DF = 6 cm, ∠ F = 65°
 ii. AB = 8.5 cm, AC = 17 cm,∠ A = 48° and DF = 17 cm, EF = 8.5 cm, ∠ D = 48°
 iii. AB = 4.7 cm, BC = 6 cm,∠ B = 80° and DE = 4.7 cm, ∠ E = 80°, EF = 6 cm
 iv. BC = 8 cm, AC = 16 cm,∠ C = 60° and ∠ F = 60°, DF = 16 cm, EF = 8 cm
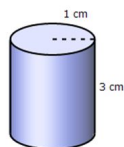**[4]**
 a) Option (a)   b) Option (b)
 c) Option (d)   d) Option (c)

40) Name of solid given below.
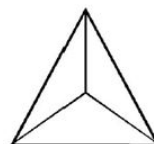
[4]
 a) Pyramid   b) Cone
 c) Cylinder   d) Cube

41) What is the volume of this cylinder? Use π ≈ 3.14 .

[4]
a) 9.42 cm^3 b) 20 cm^3
c) 3 cm^3 d) 12 cm^3

42) Circumference of a circle is always **[4]**

   a) More than three times of its diameter
   b) Three times of its radius
   c) Less than three times of its diameter
   d) Three times of its diameter

43) The radius of a wheel is 50 cm. The number of revolutions it will make in going 550 m is: (Take $\pi = \frac{22}{7}$)
   [4]
   a) 85 b) 225
   c) 350 d) 175

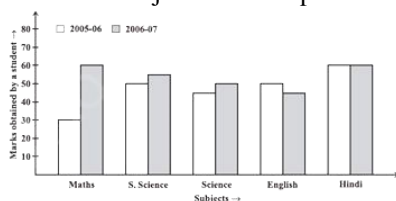44) If F = 4 and V = 3, then the value of E is (Use Euler's formula): **[4]**
   a) 5 b) 4
   c) 7 d) 1

45) What is the frequency of class interval 150 - 175?

Class intervals (daily income in Rs)	Frequency (number of workers)
100 - 125	45
125 - 150	25
150 - 175	55
175 - 200	125
200 - 225	140
225 - 250	55
250 - 275	35
275 - 300	50
300 - 325	20
TOTAL	550

[4]
a) 25 b) 130
c) 120 d) 55

46) In which subject has the performance deteriorated?

[4]
a) Science b) Hindi
c) Maths d) English

47) The following table shows the size of pieces of a cloth.

Size (in m)	2	3	4	5	6	7
Frequency	10	12	25	20	25	15

Find the mode of the data. **[4]**
a) 8 b) Both 4 and 6
c) 2 d) 5

48) Ram put some buttons on the table. There were 4 blue, 7 red, 3 black and 6 white buttons in all. All of a sudden, a cat jumped on the table and knocked out one button on the floor. What is the probability that the button on the floor is blue? **[4]**
a) $\frac{1}{5}$ b) $\frac{7}{20}$
c) $\frac{1}{4}$ d) $\frac{3}{5}$

49) A card is drawn at random from a pack of 52 cards. Find the probability that the card is drawn is a red king. **[4]**
a) $\frac{1}{26}$ b) $\frac{1}{52}$
c) $\frac{1}{2}$ d) $\frac{1}{13}$

50) A fair dice has faces numbered 0, 1, 7, 3, 5 and 9. If it is thrown, then the probability of getting an odd number is **[4]**
a) $\frac{2}{3}$ b) 1
c) $\frac{5}{6}$ d) $\frac{1}{6}$

Section - B : English

51) Select the word that conveys the similar meaning as the word given in capital letters:
LIMPID **[2]**
a) Dark b) Moist
c) Dear d) Transparent

52) The word **Baneful** means **[2]**
a) Benefit b) Profit
c) Loss d) Evil

53) In English the largest number of verbs starts with "S"? Find them out. (Hint: Sw_ng) **[2]**
a) Sting b) Swing
c) Steal d) Swim

54) In English the largest number of verbs starts with "S"? Find them out. (**Hint**: Sh_k _) **[2]**
a) Show b) Shrink
c) Shine d) Shake

55) Choose the appropriate tense:
He _____ our leader. **[2]**
a) Will b) Your
c) Is d) Are

Question No. 56 to 60 are based on the given text. Read the text carefully and answer the questions:
The fire has been worshipped in ancient cultures worldwide. In Greek Mythology, Prometheus is said to 'have stolen fire from heaven. He brought it down to earth for human use. Fire is the spirit of the Sun. It is the purest of all elements on earth. It clears darkness which is the region of the evil spirit. It is always moving upwards. It is compassionate when controlled, but it is merciless in destruction when out of control. Moreover, it is the most human of all elements - it is used in the service of human beings. An animal has no use of fire. It is used in cooking, in forging ploughs and swords, in kilns for building houses etc. It has made human cultural evolution on earth possible.

56) Who brought fire to earth? [2]
   a) The fire God   b) Prometheus
   c) Lord Vishnu   d) A great scientist

57) Name the purest of all elements on earth. [2]
   a) Air   b) Milk
   c) Water   d) Fire

58) Darkness represents to _____. [2]
   a) The region of the evil spirit
   b) The region of the good spirit
   c) The region of the heaven God
   d) The region of the fire God

59) When is fire useful for us? [2]
   a) When it produces much heat and light
   b) When huge flames rises
   c) When out of control
   d) When tinder control

60) Which one is not the use of fire? [2]
   a) Forging ploughs and swords
   b) Used in kiln for building houses
   c) Cooking food
   d) Making us to breathe

61) Oh, mom, you don't understand me. (capital letter) [2]
   a) Understand   b) Me
   c) Mom   d) Oh

62) The meaning of the phrase "To catch a tartar" is: [2]
   a) To meet with disaster
   b) To deal with a person who is more than one's match
   c) To trap wanted criminal with great difficulty
   d) To catch a dangerous person

63) He kept beating around the _____ and did not get to the point. [2]
   a) Wood   b) Bush
   c) Grass   d) Street

64) Arrange the letters to find the name day of the week:DENWESADY [2]
   a) Friday   b) Wednesday
   c) Sunday   d) Monday

65) **Choose the correct adjective for the given sentence:**
Taj Mahal is the _____ building in the world. [2]
   a) Most beautiful   b) Beautiful
   c) More beautiful   d) Mostly beautiful

66) The _____ clown was playing tricks. [2]
   a) Soft   b) Long
   c) Hard   d) Funny

67) Select the option which best expresses the same sentences in Passive/Active Voice.
When did you lose your book? [2]
   a) When has your book lost by you?
   b) When is your book lost by you?
   c) When were your book lost by you?
   d) When was your book lost by you?

68) Select the option which best expresses the same sentences in Passive/Active Voice.
My mother loves me. [2]
   a) I have loved by my mother.
   b) I was loved by my mother.
   c) I had loved by my mother.

   d) I am loved by my mother.

69) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
   i. Mr. Smith was accused for murder
   ii. But the court found him not guilty
   iii. And acquitted him.
   iv. No error
[2]
   a) Option (c)   b) Option (d)
   c) Option (a)   d) Option (b)

70) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
   i. All the houses having been washed away
   ii. By the floods,
   iii. The villagers sought shelter in the Panchayat office.
   iv. No error
[2]
   a) Option (c)   b) Option (b)
   c) Option (a)   d) Option (d)

71) Sunita went _____ the room. [2]
   a) For   b) From
   c) Into   d) In

72) Jyotsna writes _____ night. [2]
   a) In   b) To
   c) At   d) On

73) Weekends are the most _____ part of my daily routine. [2]
   a) Least   b) Interesting
   c) Freedom   d) Best

74) **Choose the correct pronoun:**
_____ are these boys? [2]
   a) Whose   b) Whom
   c) Which   d) Who

75) _____ much does this car cost? [2]
   a) Where   b) How
   c) Which   d) When

Section - C : General Science

76) Crop production and management is necessary because:
   i. All animals including human beings are dependent on plants for their food
   ii. As our population increases day by day, requirement of food also increases
   iii. Agriculture is the only source of livelihood for many people
Mark the correct option [2]
   a) I and III   b) I, II and III
   c) I and II   d) II and III

77) We can prevent cases of malaria by: [2]
   a) Avoiding living in the vicinity of malaria patients
   b) Avoiding water from collecting anywhere
   c) All the above
   d) Allowing water to collect in surroundings

78) Read the following statements:
   i. Natural gas can be used for manufacturing carbon black.
   ii. Carbon black is used in rubber industry as strengthening agent.
[2]
   a) Both are correct

b) Both are wrong

c) Statement ii) is correct but i) is wrong

d) Statement i) is correct but ii) is wrong

79) Which of the following represents the best quality coal? **[2]**

  a) Lignite   b) Peat

  c) Bituminous   d) Anthracite

80) An ideal fuel is cheap, readily available, easily combustible, and easy to transport. It has high calorific value. It does not produce gases or residues that pollute the environment. Based on the above statements which of the following is closest to being an ideal fuel? **[2]**

  a) Coal

  b) Compressed Natural Gas (CNG)

  c) Petrol

  d) Kerosene

81) The main components of Bio - gas are - **[2]**

  a) Carbon Monoxide and CO_2

  b) Hydrogen

  c) Butane and Isobutane

  d) Methane

82) Read the following statements:

  i. Humans can mimic natural ecosystems easily to support their needs.

  ii. Human;s exploitation is not responsible for habitat destruction in ecosystem.

[2]

  a) Both are wrong

  b) Statement ii) is correct but i) is wrong

  c) Statement i) is correct but ii) is wrong

  d) Both are correct

83) Fragmentation is mode of asexual reproduction in _____. **[2]**

  a) Gymnosperms   b) Fungi

  c) Angiosperms   d) Algae

84) Ovary wall develops to form **[2]**

  a) Pollen   b) Fruit wall

  c) Seed   d) Pistil

85) After fertilization the human embryo grows inside the **[2]**

  a) Zygote   b) Fallopian tubes

  c) Ovary   d) Uterus

86) A fire can be made by rubbing two objects together such as rubbing two pieces of rock having rough surfaces. Which of the following statements explain why a fire can be made by rubbing two objects together?

  i. Friction slows down moving objects.

  ii. Fire gives out heat and light energy.

  iii. Friction produces heat.

  iv. Fire has no mass.

[2]

  a) (iii) only

  b) (i), (ii) and (iii) only

  c) (ii) only

  d) (ii) and (iv) only

87) A boy rolls a rubber ball on a wooden surface. The ball travels a short distance before coming to rest. To make the same ball travel longer distance before coming to rest, he may **[2]**

  a) Sprinkle talcum powder on the wooden surface.

b) Cover the ball with a piece of cloth.

c) Sprinkle sand on the wooden surface.

d) Spread a carpet on the wooden surface.

88) A simple pendulum makes 15 oscillations in 30 seconds. What is the time period and frequency of its oscillation? **[2]**

  a) 2 s, 0.5 Hz   b) 2 s, 4 Hz

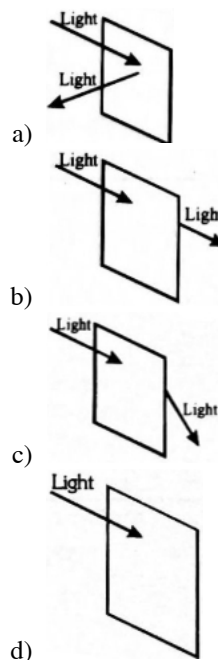 c) 2 s, 2 Hz   d) 2 s, 1 Hz

89) Which of the following lightening device uses comparatively less energy? **[2]**

  a) Compact fluorescent lamp

  b) Tube light

  c) Bulb

  d) Filament rod

90) Flash point term is related to **[2]**

  a) Study of lightening pattern

  b) Study of cyclone

  c) Study of climate

  d) Study of earthquake

91) Which of these correctly shows how light acts when it hits a mirror? **[2]**

a)

b)

c)

d)

92) Which mirror is used as a back mirror in motor vehicles? **[2]**

  a) Plain   b) Concave

  c) Convex   d) Circular

93) Which of the following statements is/are true?

  i. A constellation has only 5 - 10 stars.

  ii. Aryabhatta was the first Indian satellite.

  iii. Artificial satellites are used for weather forecasting and remote sensing only.

  iv. Venus is the brightest planet in the night sky.

[2]

  a) II and III only   b) II only

  c) II and IV only   d) IV only

94) Which of the following non - metals reacts and catches fire on exposure to air? **[2]**

  a) Hydrogen   b) Phosphorus

  c) Nitrogen   d) Sulphur

95) Ozone layer in troposphere protect us from **[2]**

  a) Infrared radiation

b) Visible radiation
c) Acid rain
d) Ultra violet radiation

96) Match the following:

I) Thermoplastic	A) Polyester + cotton
Ii) Rayon	B) not easy to recycle
Iii) Acrylic	C) artificial silk
Iv) Thermosetting plastic	D) cheaper than wool
V) Polycotton	E) can be recycled

[2]

a) I.b,ii.d,iii.e, iv.c, v.a
b) I.d,ii.a,iii.b, iv.e, v.c
c) I.e,ii.c,iii.d, iv.b, v.a
d) I.c,ii.e,iii.d, iv.a, v.b

97) Read the following statements:
   i. Plastics are environment friendly.
   ii. Plastics are good conductors of heat and electricity.
[2]

a) Statement i) is correct but ii) is wrong.
b) Both are wrong.
c) Both are correct
d) Statement ii) is correct but i) is wrong.

98) Read the following statements:
   i. RBCs are the longest cell in the body.
   ii. RBCs are red due to the presence of haemoglobin.
[2]

a) Both are correct
b) Both are wrong
c) Statement ii) is correct but i) is wrong
d) Statement i) is correct but ii) is wrong

99) In Fig. a boy is shown pushing the box from right to left. The force of friction will act on the box

[2]

a) From right to left($\leftarrow$)
b) From left to right($\rightarrow$)
c) Vertically upwards($\uparrow$)
d) Vertically downwards($\downarrow$)

100) Read the following statements:
   i. Seed drill sows seeds non uniformly.
   ii. Seed drill covers seeds with soil after sowing.
[2]

a) Statement i) is correct and ii) is wrong
b) Both are correct
c) Both are wrong
d) Statement (ii) is correct and (i) is wrong.

Section - D : Social Studies

101) Qibla means: [2]
   a) A direction that should be faced when a Muslim prays
   b) Prayers
   c) Leaders of Muslims
   d) Sermon by ulema

102) Who was the revenue minister in the court of Emperor Akbar? [2]
   a) Abul Fazal   b) Mir Zafar
   c) Todar Mal   d) Tansen

103) Identify this political reformer, who was one of the important founders of the Indian National Congress, also considered to be a great ornithologist. He also played a part in bringing Indians from the various regions together.

[2]
   a) W C Banerjee   b) Dadabhai Naoroji
   c) Romesh Chandra Dutt d) A O Hume

104) On April 1919, the auspicious day of a festival, Dr. Saifuddin Kitchlew and Dr. SatyaPal were arrested in Amritsar, Punjab. Name the festival. [2]
   a) Baisakhi   b) Holla Mohalla
   c) Gurpurab   d) Bandi Chor Divasi

105) Who led the revolt in Kanpur? [2]
   a) Mangal Pandey   b) Nana Saheb
   c) Bahadur Shah Zafar d) Begum Hazrat Mahal

106) The first Indian woman to become President of the Indian National Congress was _____. [2]

   a) Sarojini Naidu
   b) Begum Rokeya Shakhawat Hossain
   c) Kasturba Gandhi
   d) Kamla nehru

107) Match the following:

State	Place
(a) Tamil Nadu	(i) Bharatanatyam
(b) Andhra Pradesh	(ii) Kuchipudi
(c) Kerala	(iii) Kathakali

[2]

   a) (a) - (ii), (b) - (iii), (c) - (i)
   b) (a) - (i), (b) - (ii), (c) - (iii)
   c) (a) - (ii), (b) - (i), (c) - (iii)
   d) (a) - (i), (b) - (iii), (c) - (ii)

108) Peasants and artisans were referred to as _____. [2]
   a) Vaishyas   b) Untouchables
   c) Kshatriyas   d) Shudras

109) Pick out the option that best describes the term human resource development?
   i. Increasing the population of human beings.
   ii. Increasing the natural resources so that there is a proportionate increase in human resources as well.
   iii. Improving the quality of people's skills so that they are able to create more resources.
   iv. Increase in technological development so as to increase the lifestyle of human beings.

[2]
a) Only D
b) Only A
c) Only B
d) Only C

110) Cotopaxi mountain is in **[2]**
a) South America
b) Asia
c) Africa
d) North America

111) The major factors of soil formation are the nature of parent rock and _____. **[2]**
a) Deforestation
b) Soil erosion
c) Climatic factors
d) Overgrazing

112) Which of these is a non - metallic mineral? **[2]**
a) Bauxite
b) Manganese ore
c) Iron ore
d) Limestone

113) Which one of the following is not a mountain? **[2]**
a) Prairies
b) Rockies
c) Apennine
d) Andes

114) Match the following:

Temperate grassland	Continent
(a) Savannah	(i) Brazil
(b) Campos	(ii) East Africa
(c) Llanos	(iii) Venezuela

[2]

a) (a) - (ii), (b) - (i), (c) - (iii)
b) (a) - (ii), (b) - (iii), (c) - (i)
c) (a) - (i), (b) - (iii), (c) - (ii)
d) (a) - (i), (b) - (ii), (c) - (iii)

115) In 1999, the world population reached: **[2]**
a) 6 billion
b) 1 billion
c) 8 billion
d) 3 billion

116) Name the largest producer of steel in the world. **[2]**
a) USA
b) India
c) Germany
d) China

117) The device shown below is used in communication is called

[2]
a) Pen drive
b) Copier
c) Printer
d) Scanner

118) Aeroplane is a means of _____. **[2]**
a) Air transport
b) Land transport
c) Water transport
d) Rail transport

119) Separation of religion from the state means: **[2]**
a) Democracy
b) Secularism
c) Socialism
d) Racism

120) Which of the following is not a institution of Government **[2]**
a) Supreme court
b) Indian Railway
c) Reliance
d) Bharat Petroleum

121) Government refers to **[2]**

a) Government departments and various ministers who head them
b) Government departments and all minister
c) Government departments and various ministers who are in opposition

d) Government and private departments and various ministers who head them

122) The High Court of Delhi came up in: **[2]**
a) 1965
b) 1964
c) 1962
d) 1966

123) The power & independence of the Indian Judiciary allow to act as the guardian of the: **[2]**
a) Fundamental duties
b) Directive principles of state policy
c) Moral duty
d) Fundamental Rights

124) Who buys the bales of cotton to convert them into yarn? **[2]**
a) Weaving mill
b) Spinning mill
c) Cleaning mill
d) Ginning mill

125) What do you mean by Malls? **[2]**
a) Wholesaler
b) Multi - storied buildings
c) Temporary shop
d) Retailers

Section - E : Intelligence

126) Identify the correct number which can take place the missing number.
$4^{10} : 5^{11} : : 5^{11} : ?$ **[2]**
a) 6^{12}
b) 6^{10}
c) 7^{11}
d) 7^{10}

127) A term of this series is wrong. Identify the wrong term.
1, 3, 7, 15, 27, 63, 127 **[2]**
a) 15
b) 63
c) 27
d) 7

128) If every alternate letter/number is dropped (dropping start from E), then which letter/number will be the second to the left of the tenth letter/number from the left end?
E & G B D M 4 N K H 2 A C Z S V 3 F 1 J L O Q 5 P R **[2]**
a) B
b) V
c) A
d) Q

129) Find the missing number, if same rule is followed in all three figures.
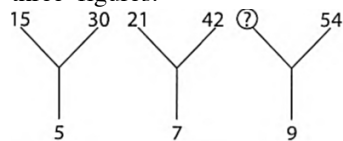
[2]
a) 22
b) 16
c) 27
d) 28

130) Look carefully for the pattern, and then choose which pair of numbers comes next.
7, 9, 66, 12, 14, 66, 17, ?, ? **[2]**
a) 20, 66
b) 19, 22
c) 66, 19
d) 19, 66

131) Find the odd one out: Grapes, Pineapple, Cashew, Apple **[2]**
a) Cashew
b) Grapes
c) Pineapple
d) Apple

132) Choose the number which is different from the rest: 21, 69, 81, 83 **[2]**
a) 21
b) 81
c) 83
d) 69

133) Choose the word which is different from the rest.
Tuberculosis, Small pox, Cholera, Typhoid [2]
   a) Typhoid
   b) Tuberculosis
   c) Small pox
   d) Cholera

134) The calendar for the year 1988 is the same as _____ upcoming year. [2]
   a) 2012
   b) 2010
   c) 2014
   d) 2016

135) Aarush walks 1 km towards East and then he turns to North and walks 4 km. Again he turns to East and walks 3 km. After this he turns to South and walks 7 km. Now, how far is he from his starting point? [2]
   a) 3 km
   b) 5 km
   c) 7 km
   d) 4 km

136) Aakash walks 30 m North. Then he turns right and walks 60 m. Again, he turns right and walks 45 m. How far and in which direction is he now from his initial position? [2]
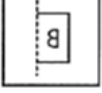
   a) $40\sqrt{3}$ m, South - West
   b) $15\sqrt{17}$ m, South - East
   c) $15\sqrt{17}$ m, South - West
   d) 30 m, West

137) If the code of INDIAN is 243254 and the code of HOLAND is 670543, then what will be the code of the word AINOH? [2]
   a) 52467
   b) 54627
   c) 52476
   d) 54276

138) If POND is coded as RSTL, how is HEAR written in that code? [2]
   a) JCLZ
   b) JIGZ
   c) GHIZ
   d) GHIJ

139) If 'college' is called 'school', 'school' is called 'court' and 'court' is called 'cinema hall', 'cinema hall' is called 'office' then where will you go to watch a movie? [2]
   a) Cinema hall
   b) Office
   c) School
   d) Court

140) There is a definite relationship between figures (i) and (iii). Establish a similar relationship between figures (ii) and (iv) by selecting a suitable figure from the options that would replace (?) in figure (iv).
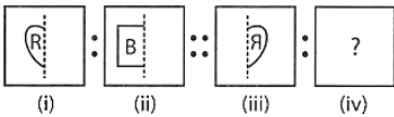
[2]

a)

b)

c)

d)

141) There is a certain relationship between figures (i) and (ii). Establish a similar relationship between figures (iii) and

(iv) by selecting a suitable figure from the given options which will replace the (?) in figure (iv).
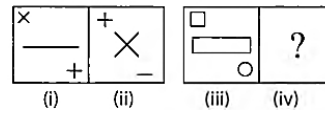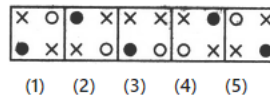

[2]

a)

b)

c)

d)

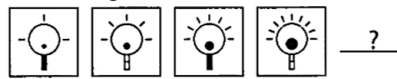142) Select the figure that shows a similar relationship.
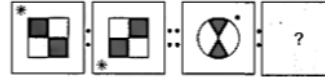
[2]

a)

b)

c)

d)

143) Choose the figure which is different from the rest.

(1) (2) (3) (4) (5)

[2]
   a) 1
   b) 3
   c) 2
   d) 4

144) Which figure will come next to continue the series?

[2]

a)

b)

c)

d)

145) Identify the figure that completes the pattern.

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

[2]
   a) 1
   b) 2
   c) 4
   d) 3
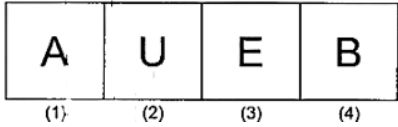
146) Choose the missing figure in the series given below:

[2]

a)

b)

c)

d)
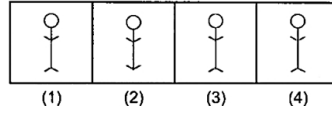
147) Select the figure which is different from others.

[2]
a) Figure (4)   b) Figure (2)
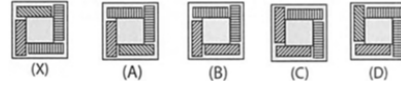c) Figure (1)   d) Figure (3)

148) Select the figure which is different from others.

[2]
a) Figure (2)   b) Figure (3)
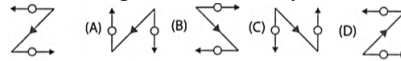c) Figure (1)   d) Figure (4)

149) Choose the correct water image of the given figure (X):

[2]
a) Figure (A)   b) Figure (B)
c) Figure (D)   d) Figure (C)

150) Find the mirror image of the figure given below when a mirror is placed vertically to the right.

[2]
a) Figure (B)   b) Figure (C)
c) Figure (D)   d) Figure (A)