All India Sainik School Entrance Examination: 2020
Paper 1
Mathematics, General Knowledge
Class – VI
Sectional Test

Time: 35 Minutes   **Max Marks: 70**

Section – A (Mathematics)

1. A machine on an average manufactures 2825 screws a day. How many screws did it produce in the month of January 2006?

(a) 87575   (b) 75895

(c) 65825   (d) 65000

2. Simplify: $45\frac{3}{5} \div 1\frac{2}{3} + 3\frac{1}{3} - 10$

(a) $11\frac{1}{5}$ (b) $9\frac{1}{5}$

(c) $7\frac{1}{5}$ (d) $3\frac{1}{5}$

3. The edges of a triangular board are 6cm, 8 cm and 10 cm. The cost of painting it at the rate of 9 paise per cm² is

(a) Rs.2.00   (b) Rs.2.16

(c) Rs.2.48   (d) Rs.3.00

4. Each side of a square flower bed is 2 m 80 cm long. It is extended by digging a strip 30 cm wide all around it. Find the area of the enlarged flower bed and also the increase in the area of the flower bed.

(a) 8.43 m²   (b) 6.32 m²

(c) 4.82 m²   (d) 3.72 m²

5. Find out the smallest number when divided by 18, 12 and 24 leaves a remainder of 16, 10 and 22 respectively?

(a) 160   (b) 142

(c) 125   (d) 107

6. A tree is broken at a height of 5 m from the ground and its top touches the ground at a distance of 12 m from the base of the tree. Find the original height of the tree.

(a) 25 m   (b) 13 m

(c) 12 m   (d) 18 m

7. The perimeter of a rectangle is 50 cm the length is 5 cm more than its breadth. Find the length and breadth of the rectangle.

(a) 10 cm , 15 cm   (b) 17 cm , 15 cm

(c) 21 cm , 15 cm   (d) 26 cm , 15 cm

8. 10 persons can finish a piece of work in 15 days. In how many days the same work can be done by 25 persons?

(a) $\frac{55}{2}$ days   (b) $\frac{65}{2}$ days

(c) $\frac{75}{2}$ days   (d) $\frac{95}{2}$ days

9. Find the least common multiple (LCM) of the given numbers: 18 and 24.

(a) 72   (b) 25

(c) 36   (d) None

10. At a school, 372 students ride the bus to school. If this is 60% of the school enrollment, then how many students are enrolled at the school?

(a) 830   (b) 620

(c) 417   (d) 240

11. A train from Station A to Station B covers a distance of 616 km at a uniform speed of 112 km/hr. It Halls at Station B for 1 hour before starting back. How much time will it take to complete the journey and reach back to station A (i.e. from A to B and back)?

(a) 11 hours

(b) 12 hours 45 minutes

(c) 12 hours

(d) 5 hours 30 minutes

12. By selling a table for Rs.3168.Rashid loses 12%.Find its cost price. What percent he gain or lose by selling the table for 3870.

(a) 4.7%   (b) 8.7%

(c) 7.5%   (d) 9.5%

13. In a room there are 12 bulbs of the same wattage, each having a separate switch. The number of ways to light the room with different amounts of illumination is

(a) $12^2 - 1$ (b) 2^2

(c) $2^2 - 1$ (d) None of these

14. The product of two decimal numbers is 42.987. If one of them is 3.45 then the other number is?

(a) 11.45   (b) 12.46

(c) 21.37   (d) 15.39

15. Rahul buys an almirah for rupees 2000 and spends rupees 400 as its transportation charges. If he sells the almirah for rupees 3000, determine his profit percent

(a) 25%

(b) 55%

(c) 66% profit

(d) Cannot be calculated

16. The temperature dropped 18 degree Celsius in the last 24 days. If the rate of temperature drop remains the same, how many degrees will be temperature drop in the next 18 days?

(a) 10 degrees   (b) 5 degrees

(c) 13.5 degrees   (d) 15 degrees

17. From a basket of mangoes when counted in twos there was one extra, counted in threes there were two extra, counted in fours there were three extra, counted in fives there were four extra, counted in sixes there were five extra. But counted in sevens there were no extra. At least how many mangoes were there in the basket?

(a) 119   (b) 110

(c) 111   (d) 126

18. In a two digit number, the units digit is twice the ten's digit. If 27 is added to the number, the digits interchange their places. Find the number.

(a) 27   (b) 24

(c) 47   (d) 36

19. The ratio of income of two persons A and B are in the ratio 3 : 4 and the ratio of their expenditure is 5 : 7. If their savings are Rs.15000 annually find their annual incomes. What value will be promoted if expenditure is under control?

(a) Rs. 1,20,000   (b) Rs. 80,000

(c) Rs. 65,000   (d) Rs. 72,000

20. The length and breadth of a rectangular field are in the ratio 5 : 3 . The area of the field is 2160 sq. m . If a fence is to be made at the rate of Rs. 350 per metre, how much will it cost?

(a) Rs. 85,700   (b) Rs. 96,800

(c) Rs. 73,400   (d) Rs. 67,200

21. A certain sum was divided among A, B and C in the ratio 7 : 5 : 4. If B got Rs 500 more than C. Find the total sum divided.

(a) Rs. 9,820   (b) Rs. 8,000

(c) Rs. 2,720   (d) Rs. 8,600

22. The average age of 30 students is 9 years. If the teacher included the average becomes 10 years. What is the age of the teacher?

(a) 50 years   (b) 60 years

(c) 40 years   (d) 30 years

23. What is the largest number that will divide 399, 440 and 550 leaving remainders 8, 15 and 23 respectively?

(a) 6   (b) 8

(c) 4   (d) 9

24. Ravi purchased a chair a Rs. 500 and sold it at Rs. 560. What was his gain per cent?

(a) 6%   (b) 8%

(c) 10%   (d) 12%

25. A man walks at the speed of 5 km/h and runs at the speed of 10 km/h. How much

time will be man require to cover the distance of 28 km, if he covers half (first 14 km) his journey walking and half his journey running?

(a) 8.4 hours   (b) 6 hours

(c) 5 hours   (d) 4.2 hours

26. Shubham painted 2/3 of the wall space in his room. His sister Madhavi helped and painted 1/3 of the wall space. How much did they paint together?

(a) 3   (b) 4

(c) 2   (d) 1

27. What is the missing number in the sequence 12, 25, 49, 99, 197, 395, …..?

(a) 789   (b) 1579

(c) 722   (d) 812

28. If 8 men can do a piece of work in 15 days, then in how many days could 20 men do the same work?

(a) 6 days   (b) 5 days

(c) 4 days   (d) 3 days

29. At a game of billiards, A can give B 15 points in 60 and A can give C to 20 points in 60. How many points can B give C in a game of 90?

(a) 22 points   (b) 20 points

(c) 12 points   (d) 10 points

30. Represents 26 kg 5 gram using concept of decimals –

(a) 26.05 kg   (b) 26.005 kg

(c) 26.5 kg   (d) 26.0005 kg

31. Arun took a loan of Rs. 1400 with simple interest for as many years as the rate of interest. If he paid Rs.686 as interest at the end of the loan period, what was the rate of interest?

(a) 8%   (b) 6%

(c) 4%   (d) 7%

32. The volume of a cube is 729 cm^3. What is the side length of the cube?

(a) 9 m   (b) 6 m

(c) 8 m   (d) 5 m

33. Evaluate –

- 3 x 7 + 4.6 ÷ 3.7 + 45 ÷ 5 x 4 + 49

(a) 65.24   (b) 65.20

(c) 55.24   (d) 55.20

34. A train 150 m long passes a telegraphs post in 12 seconds. Find in what time, it will pass a bridge 250 m long?

(a) 32 Sec   (b) 36 Sec

(c) 25 Sec   (d) 24 Sec

35. Ravi takes 6 days to complete a job. Shyam takes 12 days to complete the same job. If Ram and Shyam work together how many days they will take to complete the job ?

(a) 7 days   (b) 6 days

(c) 4 days   (d) 3 days

36. The LCM of two numbers is 4 times their HCF. The sum of LCM and HCF is 125. If one of the number is 100, then the other number is:

(a) 5   (b) 25

(c) 100   (d) 125

37. 4 clocks rings at the time interval of 6s,8s, 12 s and 18s respectively if they ring together at 12 a.m. then how many times will they Run together within the time span of 6 minutes

(a) 104   (b) 105

(c) 107   (d) 108

38. What is the least multiple of 23 which when divided by 18, 21 and 24 leaves remainders 7, 10 and 13 respectively?

(a) 1240   (b) 3013

(c) 2364   (d) 7628

39. A milk vendor has 2 cans of milk. The first contains 25% water and the rest milk. The

second contains 50% water. How much milk should he mix from each of the containers so as to get 12 litres of milk such that the ratio of water to milk is 3 : 5?

(a) 5 & 7 litres
(b) 6 & 8 litres
(c) 6 & 6 litres
(d) 6 & 5 litres

40. The marked price of an article is Rs 80 and it is sold at Rs 76, then the discount rate is

(a) 5%
(b) 95%
(c) 10 %
(d) 11%

41. The average weight of 8 men is increased by 1.5 kg when one of the men who weight 65 kg is replaced by a new man. The weight of the new man is

(a) 76 kg
(b) 76.5 kg
(c) 76.7 kg
(d) 77 kg

42. A man cycles with a speed of 10 kmph and reaches his office at 1 p.m. However, when he cycles with a speed of 15 kmph, he reaches his office at 11 a.m. At what speed should he cycle so that he reaches his office at 12 noon?

(a) 12.5 km/h
(b) 12 km/h
(c) 13 km/h
(d) 13.5 km/h

43. If area of rectangular garden of 50 m long is 300 sq.m, Find the width of the garden?

(a) 5 m
(b) 6 m
(c) 7 m
(d) 8 m

44. If the square of a number is added to the square of 28 the result is 1808. What is the number?

(a) 66
(b) 50
(c) 32
(d) 16

45. Mother wants to divide Rs.36 between her daughters Shreya and Bhoomika in the ratio of their ages. If the age of Shreya is 15 years and age of Bhoomika is 12 years, find how much Shreya and Bhoomika will get

(a) 48, 16
(b) 56, 16
(c) 20, 16
(d) 12, 16

46. The temperature dropped 15 degree Celsius in the last 30 days. If the rate of temperature drop remains the same, how many degrees will the temperature drop in the next ten days?

(a) 3 degree
(b) 4 degree
(c) 5 degree
(d) 6 degree

47. Find the simple interest on Rs. 5,000 at the rate of 7 ½ % for a period of 3 years –

(a) Rs. 5,000
(b) Rs. 6,125
(c) Rs. 2,000
(d) Rs. 1,125

48. The angles of a triangle are in the ratio of 1: 2 : 3. Find the values of the angles –

(a) 30, 60, 90
(b) 15, 45, 120
(c) 60, 60, 60
(d) 45, 45, 90

49. One number exceeds another number by 36. The sum of numbers is 48 then the numbers are –

(a) 40, 08
(b) 36, 12
(c) 42, 06
(d) 32, 16

50. At which one of the following times is the angle between the hands of a clock exactly one straight angle?

(a) 12 am
(b) 12 pm
(c) 9:15 am
(d) 6 am

Section – B (General Knowledge)

51. Which among the following personalities got the India's highest civilian awards?

(a) Madan Mohan Malaviya
(b) Manmohan Singh
(c) Deendayal Upadhyaya
(d) L. K Advani

52. In which language vande matram was written?

(a) Marathi
(b) Bengali
(c) Hindi
(d) Sanskrit

53. Who is the current President of India?

(a) Shri Narendra Modi

(b) Shri Venkaiah Naidu

(c) Shri Arun Jaitley

(d) Shri Ram Nath Kovind

54. The first Indian to win a gold medal at the Olympics is?

(a) Abhinav Bindra

(b) Sushil Kumar

(c) Leander Paes

(f) Vijender Kumar

55. Which planet in the solar system is farthest from the sun?

(a) Neptune

(b) Saturn

(c) Jupiter

(d) Uranus

56. Vatican City, the smallest country in the world is situated in which continent?

(a) Asia

(b) South America

(c) North America

(d) Europe

57. Which of the following is not an eligibility criterion to become a member of Lok Sabha?

(a) Age 25 years or over

(b) Mentally sound

(c) Candidate should not hold office of profit.

(d) Must be from Arts field.

58. Ice Hockey is the National Game of Which country?

(a) Nagaland

(b) Canada

(c) Iceland

(d) England

59. Which of the following company does not sell mobiles?

(a) Apple

(b) BSNL

(c) HP

(d) Sony

60. A vehicle capable of travelling over land and water is called –

(a) Hovarcraft

(b) Rovercraft

(c) Mowercraft

(d) Car

61. The space programme of Government of India is looked after –

(a) ISBT

(b) NTRO

(c) NABARD

(d) ISRO

62. The Motto of the Indian Navy is –

(a) Sarvatra Sarv O ttama Suraksh a

(b) Sham No Varuna

(c) Valour and Wisdon

(d) Nabha Sprsa Diptam

63. Which is the largest gland in human body?

(a) Salivary gland

(b) Lungs

(c) Liver

(d) Stomach

64. Who was the first winner of Dada Saheb Phalke Award?

(a) Prithvi Raj Kapoor

(b) Dilip Kumar

(c) Devika Rani

(d) Dev Anand

65. What part of earth's surface is covered by oceans?

(a) 50 per cent

(b) 60 per cent

(c) 70 per cent

(d) 80 per cent

66. Charminar is situated in which place?

(a) Jaipur

(b) Hyderabad

(c) Hampi

(d) Amritsar

67. The Indian Constitution has been divided into
(a) 16 chapters
(b) 12 chapter
(c) 22 chapters
(d) 22 chapters

68. 1 byte is equal to -
(a) 8 Bits
(b) 1 Megabyte (MB)
(c) 1 Gigabyte (GB)
(d) 1 Byte

69. Which of the following cities is not located on the banks of Ganga?
(a) Kanpur
(b) Patna
(c) Agra
(d) Varanasi

70. Which of the following is required as a component of blood hemoglobin?
(a) Iron
(b) Magnesium
(c) Calcium
(d) Copper

71. Ashok Pandit is known for his outstanding performance in which field?
(a) Wrestling
(b) Kabaddi
(c) Shooting
(d) Swimming

72. In which year were the first modern Olympics Games Held?
(a) 1900
(b) 1896
(c) 1904
(d) 1892

73. Those who study things that were made and used in the past these people are called ….
(a) Biologist
(b) Archaeologists
(c) Geologist
(d) Doctor

74. Who designed the present National Flag of India?
(a) Sachindra Prasad Bose
(b) Sukumar Mitra
(c) Pingali Venkaiya
(d) Sarojini Naidu

75. The 'Char Minar' is in
(a) Ahmedabad
(b) Hyderabad
(c) Delhi
(d) Sikri