



SATISH INTERNATIONAL SCHOOL
BHAIRAVNAGAR PUNE - 411015 8830597066

SAINIK SCHOOL PAPER 4
ENTRANCE EXAM - SAINIK SCHOOL (CLASS 9)

Time Allowed: 3 hours

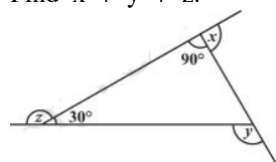
Maximum Marks : 400

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) Which of the following numbers is divisible by 99? [4]
 - a) 913462
 - b) 135792
 - c) 357240
 - d) 114345
- 2) If $3A + 8B = 150$, then the value of $A + B$ is [4]
 - a) 13
 - b) 17
 - c) 12
 - d) 15
- 3) The product of two numbers is $-\frac{28}{27}$. If one of the numbers is $(-\frac{4}{9})$, then the other number is _____. [4]
 - a) $\frac{2}{7}$
 - b) $\frac{1}{3}$
 - c) $\frac{5}{2}$
 - d) $\frac{7}{3}$
- 4) Find $\frac{7}{8} + (-\frac{5}{16}) + (-\frac{9}{16}) + \frac{5}{8}$ [4]
 - a) $\frac{5}{8}$
 - b) - 8
 - c) 8
 - d) - 5
- 5) $0.\overline{23} + 0.\overline{22} =$ [4]
 - a) $0.\overline{45}$
 - b) $0.\overline{43}$
 - c) 0.45
 - d) $0.\overline{45}$
- 6) Solve: $3(t - 3) = 5(2t + 1)$ [4]
 - a) 2
 - b) - 2
 - c) 3
 - d) - 3
- 7) If $x = \frac{1}{2}$, then the value of $x + \frac{1}{1 + \frac{1}{x}}$ is equal to [4]
 - a) $\frac{3}{4}$
 - b) $\frac{4}{3}$
 - c) $\frac{5}{4}$
 - d) $\frac{4}{5}$
- 8) 27 when added to twice a number x , and then increased by 13, gives us 60. The value of x is [4]
 - a) 15
 - b) 20
 - c) 5
 - d) 10



- [4]
- a) 360°
 - b) 210°
 - c) 90°
 - d) 180°

- 10) Find the value of the unknown y in given parallelogram.



- [4]
- a) 100°
 - b) 120°
 - c) 40°
 - d) 80°

- 11) In a Rhombus ABCD, if $AB = AC$, then $\angle BCD =$ _____. [4]
 - a) 120°
 - b) 60°
 - c) 108°
 - d) 72°
- 12) The paper is a model for a _____. [4]
 - a) Point
 - b) Circle
 - c) Border
 - d) Plane surface
- 13) $(-\frac{5}{7})^{-5}$ is equal to [4]
 - a) $(-\frac{7}{5})^5$
 - b) $(\frac{5}{7})^5$
 - c) $(\frac{5}{7})^{-5}$
 - d) $(\frac{7}{5})^5$
- 14) The value of $(\frac{1}{8})^2$ is [4]
 - a) $\frac{1}{6}$
 - b) $\frac{1}{16}$
 - c) $\frac{1}{64}$
 - d) $\frac{1}{8}$
- 15) The repeated factor in an exponential expression is called _____. [4]
 - a) Power
 - b) Base
 - c) Exponent
 - d) Constant
- 16) If the volume of a cubical box is 35.937 m^3 , what is the length of its one side? [4]
 - a) 6.3 m
 - b) 6.6 m
 - c) 3.3 m
 - d) 3.6 m
- 17) Find the cubes of x , $4x$ and $5x$. [4]
 - a) $4x^3, 9x^3, 16x^3$
 - b) $x^3, 64x^3, 125x^3$
 - c) $8x^2, 27x^2, 64x^2$
 - d) $4x^2, 9x^2, 16x^2$
- 18) Which of the following would end with digit 4?
 - i. 302^2
 - ii. 305^2
 - iii. 306^2
 - iv. 307^2

[4]

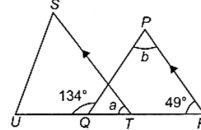
 - a) A
 - b) D
 - c) C
 - d) B
- 19) The smallest natural number which when added to the difference of squares of 17 and 13 gives a perfect square is: [4]
 - a) 24
 - b) 5
 - c) 11
 - d) 1
- 20) Multiply $(x - y)$ and $(3x + 5y)$. [4]
 - a) $2xy$
 - b) $3x^2 + 2xy - 5y^2$
 - c) $5x^2 + 2xy - 5y^2$
 - d) $3x^2 + 2xy - 7y^2$

- 21) Mohit wants to buy a rectangular field whose perimeter is $(4a^2 + 6ab + 2b^2)$ units. If its length is $(a + b)^2$ units, then find its breadth. [4]
 a) $(a^2 + ab)$ units b) $(b^2 - ab)$ units
 c) $(a^2 - ab)$ units d) $(b^2 + ab)$ units
- 22) If a car can go 90 km on 6 litres of petrol, then the car can go _____ km on 10 litres of petrol. [4]
 a) 150 b) 120
 c) 80 d) 100
- 23) A TV with marked price ₹16000 is available on 15% discount. The selling price of TV is [4]
 a) ₹15000 b) ₹11000
 c) ₹13600 d) ₹14760
- 24) A shopkeeper sells a pen set at 20% profit to another shopkeeper who sells it at a loss of 20%. If price of pen set was ₹112, what is net profit or loss on total transaction? [4]
 a) 4% profit b) 2% profit
 c) 4% loss d) 2% loss
- 25) At compound interest, if a certain sum of money doubles in n years then the amount will be four fold in [4]
 a) $2n$ years b) N^2 years
 c) $4n$ years d) $2n^2$ years
- 26) If the rent for grazing 40 cows for 20 days is ₹370, how many cows can graze for ₹111 for 30 days? [4]
 a) 8 b) 60
 c) 30 d) 25
- 27) A university has its own hostel for its students. It provides fooding and lodging to the students. Due to festive season some of the students are left for their home and 100 students stays in the hostel. There is a food provision for 20 days for these students. How long the food will last if 25 more students decide to stay back in the hostel? [4]
 a) 16 days b) 13 days
 c) 12 days d) 14 days
- 28) A can complete a work in 12 days. A and B both working together can complete the same work in 4 days. B alone can complete the work in [4]
 a) 2 days b) 6 days
 c) 8 days d) 10 days
- 29) Divide: $24xy^2z^3$ by $6yz^2$ [4]
 a) $4yz$ b) $4xy$
 c) $4xyz$ d) $4xz$
- 30) Factors of $16x^2 - 72xy + 81y^2 - 12x + 27y$ are [4]
 a) $(4x - 9y)(4x + 9y - 3)$
 b) $(4x + 9y)(4x + 9y - 3)$
 c) $(4x - 9y)(4x - 9y - 3)$
 d) $(4x + 9)(4x - 9y + 3)$
- 31) Two persons walk each other 7 : 30 am. If their speed are 4 km/h and 6 km/h and initially their distance is 25 km, then in what time they will meet to each other? [4]
 a) 9 : 30 am b) 10 : 30 am
 c) 10 : 00 am d) 8 : 30 am
- 32) A motorcyclist completes a certain journey in 5 hours. He covers one - third distance at 60 km/hr and the rest at 80 km/hr. The length of the journey is [4]
 a) 360 km b) 240 km
 c) 300 km d) 180 km
- 33) A man crosses a 600 m long bridge in 5 min speed of

man (in km/h) will be [4]

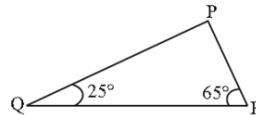
- a) 7.2 b) 9.6
 c) 8.4 d) 3.6
- 34) A train 540 meters long is running with a speed of 54 kmph. The time taken by it to cross a tunnel 180 meters long is? [4]
 a) 52 sec b) 48 sec
 c) 44 sec d) 40 sec
- 35) Which of the following statements is incorrect?
 i. Two triangles having same area are congruent.
 ii. If two sides and one angle of a triangle are equal to the corresponding two sides and the angle of another triangle, then the two triangles are congruent.
 iii. If the hypotenuse of one right - angled triangle is equal to the hypotenuse of another right - angled triangle, then the triangles are congruent.
 iv. All of these
 [4]
 a) Option (a) b) Option (b)
 c) Option (d) d) Option (c)

- 36) In the figure (not drawn to scale), RTQU is a straight line. Find the value of $b - a$.



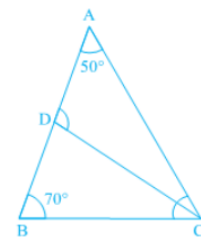
[4]

- a) 49° b) 36°
 c) 34° d) 48°
- 37) Angles Q and R of a $\triangle PQR$ are 25° and 65° . Write which of the following is true:



[4]

- a) $PQ^2 + QR^2 = RP^2$ b) None of these
 c) $RP^2 + QR^2 = PQ^2$ d) $PQ^2 + RP^2 = QR^2$
- 38) In $\triangle ABC$, $\angle A = 50^\circ$, $\angle B = 70^\circ$ and bisector of $\angle C$ meets AB in D Figure Measure of $\angle ADC$ is.



[4]

- a) 70° b) 30°
 c) 50° d) 100°
- 39) In a triangle, one angle is of 90° . Then
 i. The other two angles are of 45° each
 ii. In remaining two angles, one angle is 90° and other is 45°
 iii. Remaining two angles are complementary
 In the given option(s) which is true? [4]
 a) (iii) only b) (i) only
 c) (i) and (ii) d) (ii) only
- 40) In a figure $\triangle MNO$ is a right - angled triangle. Its legs are 6 cm and 8 cm long. Length of perpendicular NP on the side MO is

Most of us use the products of science railways, aeroplanes, electricity, wireless and thousands of others—without thinking how did they come into existence. We take them for granted, as if we were entitled to them as a matter of right. And we are very proud of the fact that we live in an advanced age and and ate ourselves so very advanced. Now, there is no doubt that our age is a very different one from previous ages and I think it is perfectly correct to say that it is far more advanced. But that is a different thing from saying that we as individuals or groups are more advanced. It would be the height of absurdity to say that because an engine driver can run an engine and Plato or Socrates could not, the engine driver is more advanced than, or is superior to, Plato or Socrates. But it would be perfectly correct to say that the engine itself is a more advanced method of locomotion than Plato's chariot was.

- 56) Which one of the following statements is correct?
- An engine driver cannot be compared to Plato or Socrates
 - Plato or Socrates is in no way inferior to the engine driver
 - Plato or Socrates surpassed the engine driver in every respect
 - An engine driver is cleverer than Plato or Socrates
- [2]
- a) Option (iii) b) Option (i)
c) Option (ii) d) Option (iv)
- 57) According to the passage, the word **doubt** means [2]
- a) Unsureness b) Distinct
c) Precise d) Surity
- 58) Many of us make use of machines
- With full knowledge of their genesis
 - Without knowing how were they invented
 - With very little knowledge of their mechanism
 - Without any knowledge of their historical significance
- [2]
- a) Option (iv) b) Option (ii)
c) Option (iii) d) Option (i)
- 59) In this passage, the writer mentions Plato and Socrates to emphasise that
- They had a great respect for learning
 - They were men of great scholarship
 - People as individuals in the modern age are not more advanced than their predecessors
 - The engine is a better mode of locomotion than Plato's chariot
- [2]
- a) Option (ii) b) Option (iv)
c) Option (iii) d) Option (i)
- 60) Which is not the product of Science? [2]
- a) Aeroplanes b) Wireless
c) Electricity d) Wood
- 61) This is Priyas grammar book. (punctuation) [2]
- a) Comma b) Quotation mark
c) Colon d) Apostrophe
- 62) To play second fiddle: [2]
- To reduce importance of one's senior.
 - To be in a subordinate position and support the role and view of another person.
 - To do back seat driving.

d) To be happy, cheerful and healthy.

- 63) Every cloud has a silver _____. [2]
- a) Colour b) Lining
c) Hue d) Touch
- 64) Forgot/I/to take/lunch box/school/to/my (correct order) [2]
- I forgot my school to take to lunch box.
 - I forgot to take my lunch box to school.
 - I forgot my lunch box to take to school.
 - I forgot to take my school to lunch box.
- 65) Choose the appropriate adjective:
I ate _____ apple. [2]
- a) That b) The
c) One d) Some
- 66) I don't like that photo. It looks really _____. [2]
- a) Beautiful b) Tired
c) Ugly d) Sad
- 67) He writes poetry. (passive voice) [2]
- Poetry was written by him.
 - Poetry had been written by him.
 - By him poetry is written.
 - Poetry is written by him.
- 68) I see a clear sky. (passive voice) [2]
- A clear sky can be seen by me.
 - A clear sky will be seen by me.
 - A clear sky is seen by me.
 - A clear sky was seen by me.
- 69) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
- I will watch film
 - If I finish the work
 - In time.
 - No error
- [2]
- a) Option (d) b) Option (a)
c) Option (c) d) Option (b)
- 70) Which part of the given sentence is erroneous? In case, there is no error, choose option (d).
- I shall leave school
 - As soon as
 - I shall find a job.
 - No error
- [2]
- a) Option (c) b) Option (d)
c) Option (b) d) Option (a)
- 71) Rahul is good _____ Biology. [2]
- a) In b) At
c) For d) On
- 72) This is a comfortable house to live _____. [2]
- a) At b) In
c) By d) On
- 73) Iron is _____ than wool. [2]
- a) Heavy b) Heavier
c) Heavying d) Heaviest
- 74) Choose the answer that tells whether the capitalized noun is used as a subject, direct object, or predicate:
Sherlock Holmes is a famous fictional DETECTIVE. [2]
- Predicate noun
 - Subject
 - Object
 - Direct object

- a) Phosphorus b) Sulphur
c) Magnesium d) Silicon

- 95) The given table shows the amount of DDT accumulated in the bodies of few aquatic animals.

Animals	DDT (ppm)
X	.02 ppm
Y	20 ppm
Z	18 ppm
W	2 ppm

[2]

- a) Z → W → X → Y
b) Y → X → Z → W
c) W → X → Y → Z
d) X → W → Z → Y

- 96) Which of the following represents the correct match for items in Column A with those in Column B:

Column A	Column B
(a) Nylon	(i) Thermoplastic
(b) PVC	(ii) Thermosetting plastic
(c) Bakelite	(iii) Fibre

[2]

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

- 97) Read the following statements:
i. Fibres are made from fabrics.
ii. Fabrics are made from fibres.

[2]

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

- 98) Read the following statements:
i. All cells are microscopic.
ii. Cells are structural and functional units of life.

[2]

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

- 99) A brick is kept in three different ways on a table as shown in Fig. The pressure exerted by the brick on the table will be



[2]

- a) Equal in all cases

- b) Maximum in position A
c) Maximum in position C
d) Maximum in position B

- 100) Read the following statements:

- i. Traditional methods of irrigation use manpower or animal power.
ii. Modern methods of irrigation are based on economic use of water.

[2]

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

Section - D : Social Studies

- 101) Who helped Babur against Lodhis? [2]
a) Rana Sanga b) Bairam Khan
c) Mirza Khan d) Shah Shiya

- 102) Which Phrase from the following defined the relationship between the king and his subjects? [2]

- a) Circle of Loyalty
b) Circle of Confidence
c) Circle of Administration
d) Circle of Justice

- 103) From the image given, name this great lawyer who was also known as Deshabandhu. He was also a leader of the Swaraj Party in Bengal against British rule.



[2]

- a) Bipin Chandra Pal b) Chittaranjan Das
c) Motilal Nehru d) Dadabhai Naoroji

- 104) Which one from the following options refers to the term Firangis? [2]

- a) Residents of India b) Foreigners
c) Landlords d) Money lenders

- 105) Name the important personality who renounced his knight-hood expressing pain and anger of the country over the Jalianwallah massacre. [2]

- a) Motilal Nehru b) Mahatma Gandhi
c) Sarojini Naidu d) Rabindranath Tagore

- 106) This year was a landmark in the Indian freedom struggle in many ways. It was this year the British Government passed the Rowlatt Act. Which year is it? [2]

- a) 1925 b) 1929
c) 1930 d) 1919

- 107) Match the following:

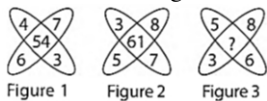
- 122) The judicial system provides a mechanism for resolving disputes between citizens, between citizens and the government, between two state governments and between the centre and state governments are referred to as: [2]
 a) Making law b) Enforcing law
 c) Dispute resolution d) Judicial review
- 123) The arrest memo should be counter - signed by the: [2]
 a) Defence lawyer
 b) Person arrested
 c) Judge
 d) Relatives of the person arrested
- 124) The arrangement between the merchant and the weavers is an example of which system? [2]
 a) Putting - out b) Putting - in
 c) Putting - on d) Putting - up
- 125) What refers to buying and selling in large quantities? [2]
 a) Mall b) Weekly market
 c) Retail d) Wholesale

Section - E : Intelligence

- 126) If ZORPIA is to AZIOPR, then TROUPE is to _____. [2]
 a) EUROPE b) REPORT
 c) ETPRUO d) PETROL
- 127) In the given question, select the missing number from the given series.
 9, 10, 13, 22, 49, ? [2]
 a) 130 b) 115
 c) 126 d) 117
- 128) Find the missing number, if a certain rule is followed either row - wise or column - wise.

5	6	8
6	9	10
121	?	324

- [2]
 a) 216 b) 384
 c) 225 d) 289
- 129) Find the missing number, if the same rule is followed in all the three figures.



- [2]
 a) 54 b) 70
 c) 64 d) 52
- 130) Find the missing (?) in the series
 13, 14, 18, 27, ?, 68, 104, ... [2]
 a) 36 b) 54
 c) 41 d) 43

- 131) Choose the word which is different from the rest.
 Coal, Petroleum, Natural gas, Biogas [2]
 a) Biogas b) Natural gas
 c) Coal d) Petroleum

- 132) Select the one which is different from other three responses. [2]
 a) PIRE b) VALT
 c) AIUE d) TORE

- 133) Choose the word which is different from the rest.
 Skull, Appendix, Pelvis, Fibula [2]

- a) Pelvis b) Skull
 c) Fibula d) Appendix

- 134) What time will it be after six hours and twenty minutes have passed?



- [2]
 a) 6:10 b) 6:00
 c) 5:10 d) 5:00

- 135) From his house, Lokesh went 15 km to the North. Then he turned west and covered 10 km. Then he turned south and covered 5 km. Finally turning to the east, he covered 10 km. In which direction is he from his house? [2]
 a) East b) North
 c) West d) South

- 136) Riya walks 15 m towards West. She turned left and walks 20 m. She then turned left and walked 15 m. After this she turned to her right and walks 12 m. How far and in which direction is she now from the starting point? [2]
 a) 47 m, East b) 42 m, South
 c) 42 m, North d) 32 m, South

- 137) In a certain code language, if 'MUMBAI' is written as 'NWPFFO', then in the same language, 'CARPET' will be written as _____. [2]
 a) DDUTJZ b) DCUTJZ
 c) DCUTJY d) DCTTJY

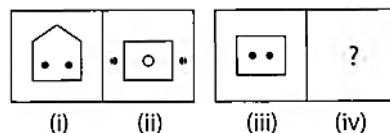
- 138) Code the word BEAUTIFUL

Letter	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Code =	×	%	&	*	\$	#	@	!	{	}	<	/	;	,	}	.	>		

- [2]
 a) =&+># { b) =&_@#}
 c) %&(#@!+ d) =&× :?# {

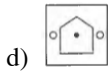
- 139) If 10 means 20, 20 means 30, 30 means 40 and 40 means 50, then which is multiple of 6? [2]
 a) 30 b) 40
 c) 10 d) 20

- 140) There is a certain relationship between figures (i) and (ii). Establish the same relationship between figures (iii) and (iv) by selecting a suitable figure from the options which will replace the (?) in fig. (iv).



[2]

- a)
 b)
 c)



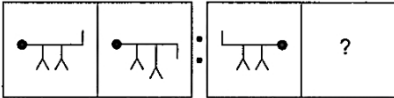
141) There is a certain relationship between the pair of figures on the either side of ::. Identify the relation between the given pair and find the missing figure.



[2]

- a)
- b)
- c)
- d)

142) Select the figure that shows the similar relationship.



[2]

- a)
- b)
- c)
- d)

143) Choose the odd one out.

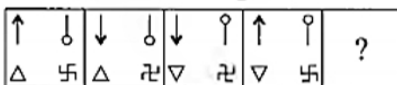


[2]

- a) Figure (C)
- b) Figure (A)
- c) Figure (D)
- d) Figure (B)

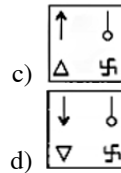
144) Which of the following options will continue the same series as established by the Problem Figures?

Problem Figures

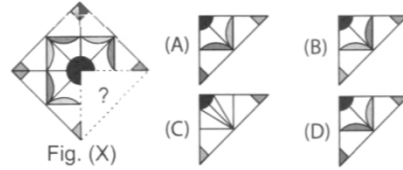


[2]

- a)
- b)



145) Which of the following figures will complete the pattern in Fig. (X)?



[2]

- a) Figure (B)
- b) Figure (A)
- c) Figure (C)
- d) Figure (D)

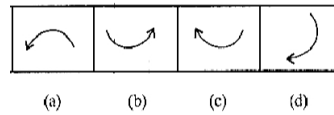
146) Identify the figure that completes the pattern.



[2]

- a) 1
- b) 2
- c) 3
- d) 4

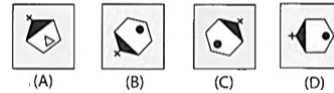
147) Select the figure which is different from others.



[2]

- a) Figure (b)
- b) Figure (c)
- c) Figure (d)
- d) Figure (a)

148) Choose the odd one out.



[2]

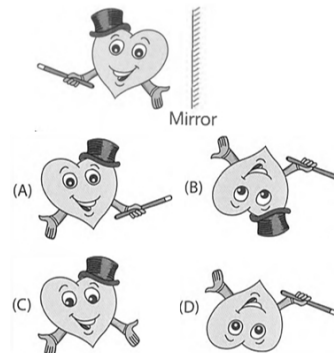
- a) Figure (C)
- b) Figure (D)
- c) Figure (A)
- d) Figure (B)

149) Select the correct mirror image, if mirror is placed to the right of the given word/number.

2 4 7 5 9 6 [2]

- a)
- b)
- c)
- d)

150) Select the correct mirror image of the given figure.



[2]

- a) Figure (A)
- b) Figure (B)
- c) Figure (C)
- d) Figure (D)