 <b>MACRO</b> VISION ACADEMY BURHANPUR	<b>Entrance Paper (2024-25)</b>		<b>For Office Use Only</b>
	<b>Class:</b>	IX (SAMPLE PAPER-II)	
	<b>Time:</b>	02:30 Hrs.	
	<b>M.M:</b>	75	

### Personal Information

**Student's Name:-** \_\_\_\_\_ **Father's Name:-** \_\_\_\_\_

**City:-** \_\_\_\_\_ **Mobile No:-** \_\_\_\_\_ **Exam Date:-** / /2024

**Studying in Class:-** \_\_\_\_\_ **Appearing for class:-** \_\_\_\_\_ **Board:-** \_\_\_\_\_

#### GENERAL INSTRUCTIONS:

- All questions are compulsory.
- Section A contains 20 questions (from 1-20) of Mathematics.
- Section B contains 25 questions (from 21-45) of Science.
- Section C contains 10 questions (from 46-55) of Social Science.
- Section D contains 18 questions (from 56-73) of English.

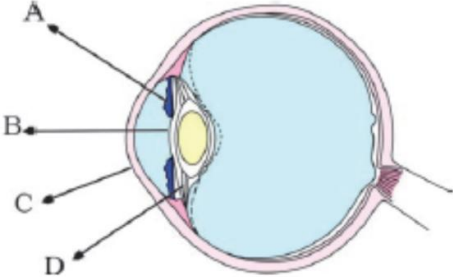


Mathematics (20)	Science (25)	So. Science (10)	English (20)	OBTAINED MARKS (75)

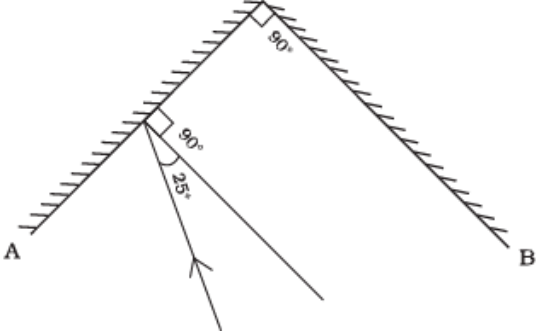
Section-A Mathematics		
Q.No.	Questions	Answers
<b>Answer the Following Questions.</b>		
1.	The value of $\left(\frac{5}{6}\right) - \left(\frac{8}{9}\right)$ is _____	$-\frac{1}{18}$
2.	If length of rectangle is 20 m and its width is 12 m, then perimeter of a rectangle is _____	64 m
3.	Three angles of a quadrilateral are equal and the measure of the fourth angle is $120^\circ$ . Then the measure of each of the equal angles are _____	$80^\circ$
4.	The value of $(15 - 8) \times 5 + 7 - 27 - 3$ is _____	12

5.	What number should be added to $-\frac{5}{8}$ to get $\frac{5}{9}$ .	$\frac{85}{72}$
6.	The cube root of $-343$ is _____	$-7$
7.	The cost of 12 balls is Rs 19.20, the cost of 15 balls is Rs. _____	Rs. 24
8.	Outside the cinema hall, Neeraj has a stall that sells a pack of popcorn for Rs. 200 excluding GST. The government charges 18% GST on selling of goods or services. The price at which Neeraj sells popcorn includes GST _____	Rs. 236
9.	The lateral surface area of a cuboid with length, breadth and height as $5x$ , $3x^2$ and $7x^4$ respectively is _____	$2(5x + 3x^2) \times 7x^4$ $= 14x^4(5x + 3x^2)$ $= 70x^5 + 42x^6$
10.	The area of a rhombus whose diagonals are of length 16 cm and 8.2 cm is _____	$65.6 \text{ cm}^2$
11.	The value of $(4^{-1} - 5^{-1}) \div 3^{-1}$ is _____	$\frac{3}{20}$
12.	Janvi types 480 words in 15 minutes. How many words will she type in 5 minutes?	160 words
13.	The quotient when $5x^2y$ is divided by $(-14xy)$ is _____	$-\frac{5}{14}x$
14.	The factors of $4y^2 + 12y + 5$ is _____	$(2y + 5)(2y + 1)$
15.	Area of rectangle is $40 \text{ cm}^2$ . If its length is 10 cm then its breadth will be _____	4 cm
16.	<p><b>Statement 1 (S<sub>1</sub>):</b> A parallelogram is a concave quadrilateral.</p> <p><b>Statement 2 (S<sub>2</sub>):</b> A quadrilateral in which the measure of each angle is less than <math>180^\circ</math>, is called convex quadrilateral.</p> <p>(a) Only S<sub>1</sub> is correct.</p> <p>(b) Only S<sub>2</sub> is correct.</p> <p>(c) Both S<sub>1</sub> and S<sub>2</sub> are correct.</p> <p>(d) Both S<sub>1</sub> and S<sub>2</sub> are incorrect.</p>	(b) Only S <sub>2</sub> is correct.


17.	<p><b>Statement 1 (S<sub>1</sub>):</b> The solution of <math>5y - 10 = 3</math> is 3.</p> <p><b>Statement 2 (S<sub>2</sub>):</b> The degree of a linear equation is 1.</p> <p>(a) Only S<sub>1</sub> is correct.</p> <p>(b) Only S<sub>2</sub> is correct.</p> <p>(c) Both S<sub>1</sub> and S<sub>2</sub> are correct.</p> <p>(d) Both S<sub>1</sub> and S<sub>2</sub> are incorrect.</p>	(b) Only S <sub>2</sub> is correct.
<p><b>Case study (Q.18 – Q.20)</b></p> <p><b>Based on the given information, answer the following questions.</b></p> <p>Annual day was celebrated in a school. Activities like folk dance, singing, speeches, etc., were held on that day. Sponsors decided to divide prize money of Rs. 1,00,000 equally amongst the winners.</p>		
18.	If the number of the winners is 50, then the amount of prize each winner will get _____	Rs. 2000
19.	If the number of winners is 10 then amount of prize for each winner will be _____	Rs. 10000
20.	If the prize money changes from Rs. 1,00,000 to 2,00,000 and number of the winners are reduced to 40, then the amount of each winner will get _____	Rs. 5000
<p><b>Section-B</b></p> <p><b>Science</b></p>		
<p><b>Answer the following:</b></p>		
21.	Name the property due to which metals can be beaten into thin sheets.	Malleability
22.	Which gas is produced when coal is burnt in air?	Carbon dioxide (CO <sub>2</sub> )
23.	What is the unit for expressing the calorific value of a fuel?	Kj / Kg <b>OR</b> Kilojoules per kilogram
24.	What is the name of the reserved land used to protect biodiversity?	Biosphere reserve
25.	A force of 200 N is applied on an area of 5 m <sup>2</sup> . Compute pressure being applied on the area.	40 Pascal
<p><b>Fill in the blank.</b></p>		
26.	The process of cleaning sheared skin is called _____	Scouring
27.	_____ is called power house of the cell.	Mitochondria
28.	_____ device is used to protect buildings from lightning.	Lightning conductor

29.	_____ planet is least denser among all.	Saturn
30.	Chlorofluorocarbon damage the _____ layer of atmosphere.	Ozone
<p><b>Case study (Q.31 – Q.33)</b></p> <p><b>Based on the given information, answer the following questions.</b></p> <p>Sound plays an important role in our life. It is a form of energy which makes us hear . Vibrating objects produce sound. Vibration is the to and fro or back and forth movement of an object. Sound needs a medium to travel. Hence, it cannot travel in a vacuum.</p> <p>Human beings have a voice box or larynx which is present in their throat on the upper side of the windpipe. The larynx has two vocal cords which have a narrow slit between them so that air can pass through it. As the lungs throw the air out of the windpipe, it passes through the slit and hence allows the production of sound as the vocal cords start vibrating. Since sound travels in the form of waves, it is important to study about characteristics of waves. The three main properties of waves are Amplitude, frequency, and time period.</p> <p>The magnitude of disturbance in the medium on either side of the mean value is called as Amplitude(A). Larger the amplitude, louder the sound. The number of oscillations / vibrations per second is called frequency. which is expressed in Hertz (Hz). Time taken for one complete oscillation/vibration is the time period.</p>		
31.	Which part of the human throat is responsible for the voice produced by a human?	Larynx
32.	The rapid to and fro or up and down movement of an object from its mean position is called as:	Oscillatory motion
33.	The maximum displacement of a vibrating object from its mean position is called as:	Amplitude
34.	Name the property due to which metal shine.	Lustre
35.	Name the undesirable plants that grows among the crops.	Weeds
<b>Give one word for:</b>		
36.	Dipika heard sound of thunderbolt 3 second after she saw flash of lightning. How far is she from the place where lightning occurs? (speed of sound = 330 m/s)	990 m
37.	What is the direction of force of friction acting on a moving object?	Opposite to the direction of motion
38.	If a wave has a short wavelength, what type of	High frequency

	frequency does it have?	
39.	Name the process help in alcohol production.	Fermentation
40.	What do we call the storage sacs of the cell?	Golgi bodies
<b>Solve the following questions.</b>		
41.	When a compass is placed near an electric circuit, its needle gets deflected. The deflection of needle is because of _____ force.	Magnetic force
42.	In the figure of the human eye, the letter C is represented _____.	Cornea
		
43.	A water tank has four taps fixed at points A, B, C, D as shown in Fig. Name The taps where water will flow out at the same pressure.	B & C
		
44.	Observe the following diagram given as	Animal cell
	 <p>Does it represent a plant cell or an animal cell?</p>	

45.	<p>Two mirrors A and B are placed at right angles to each other as shown in Fig.</p>  <p>A ray of light incident on mirror A at an angle of <math>25^\circ</math> falls on mirror B after reflection. The angle of reflection for the ray reflected from mirror B would be?</p>	75
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**Section-C**  
**Social Science**

<b>Give one word for:</b>		
46.	Which foreign power already had established contacts with the Western part of India by the time British ships sailed and crossed Indian Ocean?	Portuguese
47.	A terrible famine had struck Bengal in _____.	1770
48.	Name the man who was seen roaming the forests and villages of Chottanagpur in Jharkhand in 1895:	Birsa
49.	EVM was used throughout the country for the first time in:	2004
50.	<p>Identify the person in the image.</p>  <p>(a) Lord Hastings                      (b) Nawab Shujaudaulah (c) Robert Clive                        (d) Lord Cornwallis</p>	(c) Robert Clive
51.	Minerals found near earth's surface are taken out by the process of _____	Quarrying

52.	<p><b>Statement 1 (S<sub>1</sub>):</b> The process of photosynthesis is crucial for the survival of life on Earth.</p> <p><b>Statement 2 (S<sub>2</sub>):</b> Photosynthesis is the primary process through which green plants convert sunlight into energy, producing oxygen as a by product.</p> <p>(a) Only S<sub>1</sub> is correct.</p> <p>(b) Only S<sub>2</sub> is correct.</p> <p>(c) Both S<sub>1</sub> and S<sub>2</sub> are correct.</p> <p>(d) Both S<sub>1</sub> and S<sub>2</sub> are incorrect.</p>	(c) Both S <sub>1</sub> and S <sub>2</sub> are correct.
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**Case study (Q.53 – Q.55)**

**Based on the given information, answer the following questions.**

Mona and Raju were helping Amma to clean their house. “Look at all these things... clothes, utensils, food grains, combs, this bottle of honey, books.....Each of these has a use,” said Mona. “That is why they are important,” said Amma. “These are resources.....”. “What is a resource?” was Raju’s question to Amma. “Anything that can be used to satisfy a need is a resource”, replied Amma. “Look around you and observe, you will be able to identify many types of resources. The water you drink when you are thirsty, the electricity you use in your house, the rickshaw you use to get home from school, the textbook you use to study are all resources. Your father has prepared a tasty snack for you. The fresh vegetables he has used are also a resource”. Water, electricity, rickshaw, vegetable and textbook have something in common. They have all been used by you, so they have utility. Utility or usability is what makes an object or substance a resource. “How does something become a resource?” Raju now wanted to know. Amma told the children that things become resources only when they have a value. “Its use or utility gives it a value. All resources have some value.” said Amma. Value means worth. Some resources have economic value, some do not. For example, metals may have an economic value, a beautiful land scape may not. But both are important and satisfy human needs.

53.	What is resource?	Resource is something that can be used to satisfy our need.
54.	What makes an object or substance a resource?	Utility or usability is what makes an object or substance a resource.
55.	Which resources have economic value?	Metals


**Section-D**

**English**

	<b>Read the passage given below and choose the correct option:</b>	
	The year 1997 marked the birth centenary of Enid Blyton, the author whose books are still hot favourites with all of us. Enid Blyton was born in London on 11 August 1897. As a child, her mother wanted her to become a famous concert pianist, but young Enid had	

	<p>other ideas. By the age of 8, she was found in her room scribbling away her stories and poems. In her childhood, Enid was not allowed any pets, but she made up for this as an adult.</p> <p>Enid's first job was as a nursery school teacher. She soon discovered a sure way of keeping her class quiet by telling them a story! So she started writing them. After her first book, 'Child Whispers', was published in 1922, Enid went on writing a story nearly every fortnight. By the time she died in 1963 aged 71, she had written more than 700 books.</p>	
<p><b>Based on your understanding of the passage, choose the appropriate option:</b></p>		
56.	<p>Where was Enid Blyton born?  (a) London (b) New York (c) Paris (d) Rome</p>	(a) London
57.	<p>How did Enid Blyton keep her class quiet when she was a teacher?  (a) By giving them sweets (b) By showing them a movie  (c) By telling them a story (d) By playing a game</p>	(c) By telling them a story
58.	<p>How often did Enid Blyton write a new story after her first book was published?  (a) Every day (b) Every week  (c) Every fortnight (d) Every month</p>	(c) Every fortnight
59.	<p>How many books did Enid Blyton write in total?  (a) More than 500 (b) More than 600  (c) More than 700 (d) More than 800</p>	(c) More than 700
60.	<p>What was Enid Blyton's first book?  (a) Child Whispers (b) The Famous Five  (c) The Secret Seven (d) Malory Towers</p>	(a) Child Whispers
<p><b>Fill in the following blanks given below choosing the most appropriate options from the ones that follow.</b></p> <p>The modern student (61) ..... the importance (62) ..... physical exercise. He spends one to two hours in open air (63) ..... he takes part in different sports. However, care should (64) ..... not to overstrain (65) ..... body.</p>		
61.	<p>(a) understood (b) understand  (c) have understand (d) understands</p>	(d) understands
62.	<p>(a) of (b) by (c) from (d) with</p>	(a) of
63.	<p>(a) how (b) which (c) where (d) why</p>	(c) where
64.	<p>(a) be taken (b) took (c) takes (d) has taken</p>	(a) be taken
65.	<p>(a) a (b) an (c) the (d) some</p>	(c) the
66.	<p>Unscramble the following word and write the correct one:  rams:_____</p>	Arms/Mars
67.	<p>Direction: In the following questions , sentences have been divided into six parts. The first is given and the remaining five parts named as P, Q, R, S, T are jumbled. Rearrange the parts P, Q, R, S and T to form meaningful beginning and end of the sentence respectively.  You all are _____.  P. sixth annual general  Q. meeting of your company  R. welcome to this  S. where we shall also discuss  T. future plans for growth  (a) TRPSQ (b) PRTQS (c) RPQST (d) SPQTR</p>	(c) RPQST



68.	What shall come in place of the blank in the given analogy? Painter: Painting:: Architect:_____ (a) Embroidery (b) Statue (c) Building (d) Sculptor (e) Stone	(c) Building
69.	What shall come in place of the blank in the given analogy? Engineering: Engineer:: MBBS: _____ (a) Doctor (b) Lawyer (c) Teacher (d) Actor (e) Dancer	(a) Doctor
70.	Based on the given analogies, find the odd one out. (a) National Anthem: Jana Gana Mana (b) National Tree: Indian Neem (c) National Calendar: Saka Calendar (d) National Bird: Peacock (e) National Animal: Royal Bengal Tiger	(b) National Tree: Indian Neem
71.	Select the most appropriate meaning of the given phrase/idiom. <b>Tit for tat</b> : _____ (a) To reward people for the good done (b) To do harm as done to you (c) To make someone angry (d) To take advantage of someone	(b) To do harm as done to you
72.	Select the most appropriate meaning of the given phrase/idiom. <b>Green thumb</b> : _____ (a) To have talent in gardening (b) To have talent in painting (c) To be envious (d) To be angry	(a) To have talent in gardening
73.	<p><b>Write a descriptive paragraph with the help of given picture. Give it a suitable title. (80-100 words) (3 Marks)</b></p>  <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	

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**Rough Work**