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

## Personal Information

## Student's Name:-

$\qquad$ Father's Name:- $\qquad$
City:- $\qquad$ Mobile No:- $\qquad$ Exam Date:- / /2024

Studying in Class: $\qquad$ Appearing for class:- $\qquad$ Board:- $\qquad$

## GENERAL INSTRUCTIONS:

- All questions are compulsory.
- Section A contains 15 questions (from 1-15) of Mathematics.
- Section B contains 30 questions (from 16-45) of So. Science.
- Section C contains 20 questions (from 46-65) of English.
- Section D contains 10 questions (from 66-75) of VMAT.

| Mathematics <br> (15) | So. Science <br> (30) | English <br> (20) | VMAT <br> (10) | OBTAINED MARKS <br> (75) |
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| Section-A Mathematics |  |  |
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| Q.N | Questions | Answers |
| 1. | The roots of the quadratic equation $6 x^{2}-x-2=0$ are | $x=\frac{2}{3} \mathbf{O R}-\frac{1}{2}$ |
| 2. | If one zero of the quadratic polynomial $x^{2}+3 x+k$ is 2 , then the value of k is $\qquad$ | $k=-10$ |
| 3. | From the top of light house, 40 m above the water, the angle of depression of a small boat is $60^{\circ}$. How far the boat is from the base of the light house $\qquad$ | $\frac{40 \sqrt{3}}{3} m \text { OR } 23.06 \mathrm{~m}$ |
| 4. | A square is inscribed in circle , then the ratio of the area of the circle and the square is $\qquad$ | 11:7 |
| 5. | If $x, x+2,2 x+6$ are in A.P., then the value of $x$ is $\qquad$ | $x=-2$ |


| 6. | Evaluate: $\frac{3 \tan ^{2} 30^{\circ}+\tan ^{2} 60^{\circ}+\operatorname{cosec} 30^{\circ}-\tan 45^{\circ}}{\cot ^{2} 45^{\circ}}$ | 5 |
| :---: | :---: | :---: |
| 7. | Someone is asked to take a number from 1 to 100. The probability of a prime number is $\qquad$ - | $\frac{1}{4} \text { OR } 0.25$ |
| 8. | In figure, $\triangle A B C$ is circumscribing a circle, the length of $B C$ is $\qquad$ cm . | 10 |
| 9. | A rectangular sheet paper $40 \mathrm{~cm} \times 22 \mathrm{~cm}$ is rolled to form a hollow cylinder of height 40 cm . Then the radius of the cylinder is $\qquad$ | $\mathrm{r}=3.5 \mathrm{~cm} \text { OR } \frac{7}{2} \mathrm{~cm}$ |
| 10. | The distance between the point $\mathrm{P}(1,4)$ and $\mathrm{Q}(4,0)$ is | 5 Units |
| 11. | The HCF of K and 93 is 31 , where k is a natural number. <br> Which of these can be true for some values of K ? <br> (i) K is a multiple of 31 . <br> (ii) K is a multiple of 93 . <br> (iii) K may be even number. <br> (iv) K may be odd number. <br> (a) Only (ii) and (iii) <br> (b) Only (i), (iii) and (iv) <br> (c) Only (i) , (ii) and (iii) <br> (d) All (i) , (ii) , (iii) \& (iv) | (b) Only (i) , (iii) and (iv) |
| 12. | Assertion (A): If we have a cuboid whose length, breadth and height are $15 \mathrm{~cm}, 10 \mathrm{~cm}$ and 20 cm respectively, then its surface area would be $1300 \mathrm{~cm}^{2}$. <br> Reason (R): Surface area of cuboid $=2(\mathrm{lb}+\mathrm{bh}+\mathrm{lh})$ <br> (a) Both assertion and reason are correct and reason is correct explanation of the assertion. <br> (b) Both assertion and reason are correct, but the reason is not the correct explanation of the assertion. <br> (c) Assertion is correct, but reason is incorrect. <br> (d) Assertion is incorrect, but reason is correct. | (a) Both assertion and reason are correct and reason is correct explanation of the assertion. |


|  | Case study (Q13-Q15) <br> From Bengaluru bus stand, if Riddhima buys 2 tickets to Malleswaram and 3 tickets to Yeswanthpur, then total cost is Rs 46 , but if she buys 3 tickets to Malleswaram and 5 tickets to Yeswanthpur, then total cost is Rs 74. <br> Consider the fares from Bengaluru to Malleswaram and that to Yeswanthpur as Rs $x$ and Rs $y$ respectively and answer the following questions. |  |
| :---: | :---: | :---: |
| 13. | $1{ }^{\text {st }}$ situation can be represented algebraically as | $2 x+3 y=46$ |
| 14. | $2^{\text {nd }}$ situation can be represented algebraically as | $3 x+5 y=74$ |
| 15. | The system of linear equations represented by both situations has $\qquad$ solution(s). | Unique solution |
| Section-B <br> Social Science |  |  |
| 16. | $\qquad$ is a composite index of achievements of a nation in terms of three important variables, namelylongevity, knowledge and standard of living, that determine the quality of life. | HDI (Human Development Index) |
| 17. | What term is used to describe the 'average number of years a person is expected to live at birth'. | Life expectancy |
| 18. | $\qquad$ uses average income or per capita income as a criterion for classifying different countries. | World Bank |
| 19. | Which are the three sectors of economic activities? | Primary, Secondary and Tertiary |
| 20. | Write full form of MNREGA. | Mahatma Gandhi National Rural Employment Guarantee Act |
| 21. | Identify Tata Iron and Steel Company is example of which sector? Public sector or private sector. | Private sector |
| 22. | In which sector majority of workers from scheduled castes, tribes and backward communities are employed? | Unorganised sector |
| 23. | Which are modem forms of money? State any one. | Paper Notes, Coin |
| 24. | Which are the major sources of cheap credit in rural areas? | Co-operative Credit Societies |
| 25. | Who are the informal lenders? | Moneylenders, relatives, friends |
| 26. | Which authority does supervise the functioning of formal sources of loans? | RBI |
| 27. | Write full form of SHG. | Self Help Group. |
| 28. | Which bank was founded by Prof. Muhammad Yunus? | Gramin Bank of Bangaladesh |
| 29. | Which year did the government decide to remove barriers on foreign on trade and investment? | In 1991 |


| 30. | Miss "S" approached a bank nearby to avail loan for <br> her own business, as well as a Self-help group which is <br> operating in her village, the bank rejected her loan <br> application whereas the Self-help group accepted to <br> support her by providing the loan. <br> Which one of the following documents is required by <br> the bank, but not required by the self-help group to <br> approve Miss "S's" loan application for her business? <br> (a) Application for loans <br> (b) Arrangement Letter <br> (c) Documentation Collateral <br> (d) Demand promissory note and take delivery letter |  |
| :--- | :--- | :--- |
| 31. | Assertion (A): A Higher average income is not <br> indicative of the overall wellbeing of a country. <br> Reason (R): Average income does not cover human <br> development <br> education, health and public facilities. | (a) Both assertion and reason are <br> correct and reason is correct <br> (a) Both assertion and reason are correct and reason is <br> eorrect explanation of the assertion. <br> (b) Both assertion and reason are correct, but the <br> reason is not the correct explanation of the assertion. <br> (c) Assertion is correct, but reason is incorrect. |
| (d) Assertion is incorrect, but reason is correct. |  |  |


|  | (a) Both assertion and reason are correct and reason is correct explanation of the assertion. <br> (b) Both assertion and reason are correct, but the reason is not the correct explanation of the assertion. <br> (c) Assertion is correct, but reason is incorrect. <br> (d) Assertion is incorrect, but reason is correct. |
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|  | Case study (Q. 34 - Q.36) <br> Based on the given information, answer the following questions. <br> Manufacturing industries not only help in modernising agriculture, which forms the backbone of our economy, they also reduce the heavy dependence of people on agricultural income by providing them jobs in secondary and tertiary sectors. Industrial development is a precondition for eradication of unemployment and poverty from our country. This was the main philosophy behind public sector industries and joint sector ventures in India. It was also aimed at bringing down regional disparities by establishing industries in tribal and backward areas. Export of manufactured goods expands trade and commerce, and brings in much needed foreign exchange. Countries that transform their raw materials into a wide variety of finished goods of higher value are prosperous. India's prosperity lies in increasing and diversifying its manufacturing industries as quickly as possible. Agriculture and industry are not exclusive of each other. They move hand in hand. For instance, the agroindustries in India have given a major boost to agriculture by raising its productivity. |
| 34. | Manufacturing industries fall in which sector? ${ }^{\text {a }}$ Secondary sector |
| 35. | What are the advantages of manufacturing induarties? Expands trade and commerce, <br> and brings in much needed <br> foreign exchange. |
| 36. | In order to attract foreign manufacturing firms, a Infrastructure facilities country needs to develop - |
|  | Case study (Q. 37 - Q.39) <br> Based on the given information, answer the following questions. <br> Organised sector covers those enterprises or places of work where the terms of employment are regular and therefore, people have assured work. They are registered by the government and have to follow its rules and regulations which are given in various laws such as the Factories Act, Minimum Wages Act, Payment of Gratuity Act, Shops and Establishments Act etc. It is called organised because it has some formal processes and procedures. Some of these people may not be employed by anyone but may work on their own but they too have to register themselves with the government and follow the rules and regulations. <br> Workers in the organised sector enjoy security of employment. They are expected to work only a fixed number of hours. If they work more, they have to be paid overtime by the employer. They also get several other benefits from the employers. What are these benefits? They get paid leave, payment during holidays, provident fund, gratuity etc. They are |


|  | supposed to get medical benefits and, under the laws, the factory manager has to ensure facilities like drinking water and a safe working environment. When they retire, these workers get pensions as well. |  |
| :---: | :---: | :---: |
| 37. | In which sector we can get assured job? | In Organised Sector |
| 38. | What are the benefits of working in organised sector? | Paid Leaves, paid holidays, etc |
| 39. | Name the laws made by government to protect organised sector employee? | The Factories Act, Minimum Wages Act, Payment of Gratuity Act, Shops and Establishments Act etc. |
| 40. | Who said, "There is enough for everybody's need and not for any body's greed"? | Mahatma Gandhi. |
| 41. | Which fibre is known as golden fibre? | Jute |
| 42. | In which state Trinamool Congress has formed government? | West Bengal |
| 43. | Which is the most popular form of government in the contemporary world? | Democracy |
| 44. | The political head of a Municipal Corporation is called the $\qquad$ | Mayor |
| 45. | You are a citizen of a country that has a democratic form of government. You want to ensure that the system of power-sharing in your country is effective and that no one branch of government has absolute power. Which of the following measures would best meet this goal? <br> (a) All power is concentrated in the hands of the central government, which has the final say in all matters. <br> (b) Power is divided between the central government and the states or provinces, with each level having its own sphere of influence. <br> (c) Power is separated among the legislative, executive, and judicial branches, with each branch having its own responsibilities and powers. <br> (d) Power is shared among different levels of government, such as the national, regional, and local governments, with each level having some degree of autonomy. | (c) Power is separated among the legislative, executive, and judicial branches, with each branch having its own responsibilities and powers. |

## Section-C <br> English

## Read the passage given below:

1. In these tough times, when buying ordinary food can burn a hole in our pockets, here comes the news that can really help us save some money the next time we go shopping. According to a study from Stanford University, the first of its kind in the world, there is no evidence to suggest that there are more nutritional benefits of expensive organic foods than those grown using conventional methods.

The researchers add that there is no difference in protein and fat content between organic and conventional milk and that the vitamin count is similar in both types. The only benefit is that organic foods are not contaminated with pesticides, but before you munch on that bowl of organic okra with roti made from organic wheat, they are also not $100 \%$ pesticide free.
2. In India, organic food has been growing by $20-22 \%$ and the export market is valued at Rs 1 billion. Obviously, the study is not good news for that sector and for people who are big on organic food.
In India, eating organic food is more of a style statement than a health concern because it is expensive. But the people who can, indulge not only in organic vegetables, but also in organic eggs laid by the "happy hens", which are allowed to roam free, while the "unhappy hens" are kept in chicken coops.
Then some companies have installed music channels in their barns and the milk from those barns is sold at a higher price as it has more nutritional value because the animals are happy thanks to the melodious music $24 / 7$ of the week. We haven't yet heard of any farmers using music to improve the quality of their crops, but you never know: plants have been known to respond to music.
3. Why so picky about food? These days, the plethora of television shows and articles we watch and read about food provide bread and butter for specialists. But instead of figuring out food, its sources, and what it took to grow it, isn't it much better to enjoy what's on your plate?

On the basis of your understanding of the passage, attempt the following questions.

| 46. | According to a Stanford University study, organic food <br> in relation to conventional food is__. <br> (a) less nutritious (b) more nutritious <br> (c) very conventional (d) as nutritious | (d) as |
| :--- | :--- | :--- |


| 48. | We can save some hard cash by $\qquad$ (b) not buying organic food <br> (a) buying organic food <br> (b) not buying organic food <br> (c) going to the shop <br> (d) not buying food with pesticides |
| :---: | :---: |
| 49. | Music channels are installed in the cowsheds because (b) milk is sold at a higher price the $\qquad$ <br> (a) cows give more milk <br> (b) milk is sold at a higher price <br> (c) milk becomes purer <br> (d) workers become happy |
| 50. | In the second paragraph, the author's attitude to the (c) is laughing at them people who eat food sourced from 'happy' animals is that he $\qquad$ <br> (a) is happy with them <br> (b) is unhappy with them <br> (c) is laughing at them <br> (d) wants crops to be grown similarly |
| Read the passage given below: |  |
|  | 1. E-learning is the process of acquiring knowledge through electronic technologies and resources. A rise in the number of internet users has increased the market demand for sophisticated online learning courses. According to the Office for National Statistics, nearly all adults in the age group of 10 to 44 years in the UK were recent internet users (99\%) in 2019. The availability of enhanced network connectivity coupled with the convenience offered by on-demand courses, will drive the market size. <br> 2. According to the World Economic Forum, around 1.2 billion children are out of classrooms with schools shut down globally due to COV1D-19 pandemic. Electronic Learning Management Systems such as Google Classroom is helping classes to connect distantly, communicate efficiently and stay organized. Large-scale national efforts to leverage technology to the market players in support of distance education, remote, and online learning during the covid-19 pandemic is emerging and evolving rapidly. <br> 3. The virtual classroom technology in the e-learning market is expected to grow at a CAGR (Compound Annual Growth Rate) of $11 \%$ during the forecast time span. A virtual classroom is a digital environment that enables live interaction between a tutor and a learner. Video conferencing and online whiteboard for real-time collaboration are the most common tools used in a digital teaching space. Synchronous and collaborative virtual classes allow active participation of students, creating an environment similar to a physical classroom. <br> 4. The technique is gaining traction with an increasing number of corporate and academic sectors deploying it for enhanced training sessions. Multilateral organizations and world bodies, such as WHO and G20, are also deploying e-learning modes to teach healthcare professionals. |



| 55. | Select the appropriate option to fill in the blank: $\qquad$ are gaining attention in the academic sectors. <br> (a) Paperback <br> (b) Virtual classrooms <br> (c) E-books <br> (d) Offline classes | (b) Virtual classrooms |
| :---: | :---: | :---: |
|  | Fill in the blanks in the paragraph given below with the help of options that follow. (From Q. No. 56-60) <br> The modern student $\qquad$ (56) $\qquad$ the importance $\qquad$ (57) $\qquad$ physical exercise. He spends one to two hours in the open air $\qquad$ (58) $\qquad$ he takes part in different sports. However, care should $\qquad$ (59) $\qquad$ not to over strain $\qquad$ (60) body. |  |
| 56. | (a) understood <br> (b) understand <br> (c) have understand <br> (d) understands | (d) understands |
| 57. | $\begin{array}{llll}\text { (a) of } & \text { (b) by } & \text { (c) from } & \text { (d) with }\end{array}$ | (a) of |
| 58. | $\begin{array}{llll}\text { (a) how } & \text { (b) which } & \text { (c) where } & \text { (d) why }\end{array}$ | (c) where |
| 59. | $\begin{array}{llll}\text { (a) be taken } & \text { (b) took } & \text { (c) takes } & \text { (d) has taken }\end{array}$ | (a) be taken |
| 60. | $\begin{array}{llll}\text { (a) a } & \text { (b) an } & \text { (c) the } & \text { (d) some }\end{array}$ | (c) the |
| 61. | Directions to Solve: <br> In each of the following questions find out the alternative which will replace the question mark. <br> Peacock : India :: Bear : ? <br> (a) Australia <br> (b) America <br> (c) Russia <br> (d) England | (c) Russia |
| 62. | Directions to Solve: <br> In each of the following questions find out the alternative which will replace the question mark. Wheat, Barley, Rice, ? <br> (a) Food <br> (b) Agriculture <br> (c) Farm <br> (d) Gram | (d) Gram |
| 63. | What is the jumbled word of "RDUM"? | DRUM |
| 64. | Select the most appropriate meaning of the given phrase/idiom. <br> 'Leave no stone unturned.' <br> (a) Try everything possible <br> (b) Leave the path halfway <br> (c) Not make enough efforts <br> (d) Turn everything upside down | (a) Try everything possible |
| 65. | Directions: In the following questions, some parts of the sentence have been jumbled up. You are required to rearrange these parts which are labelled $P, Q, R$ and $S$ to produce the correct sentence. Choose the option with proper sequence. | (d) R S P Q |


|  | The man $\qquad$ <br> P: when he was <br> Q : in the office last evening <br> R: Could not finish <br> S: all his work <br> The correct sequence should be: <br> (a) P Q R S <br> (b) Q R S P <br> (c) R Q P S <br> (d) R S P Q |  |
| :---: | :---: | :---: |
|  | Section-D <br> VMAT |  |
| 66. | Introducing a woman, Shashank said, "She is the mother of the only daughter of my son." How is that woman related to Shashank? <br> (a) Daughter <br> (b) Sister-in-law <br> (c) Wife <br> (d) Daughter-in-law | (d) Daughter-in-law |
| 67. | Find the relation - Gravity : Attraction : : Magnatism : ? <br> (a) Earth <br> (b) Gold <br> (c) Attract <br> (d) Weight | (c) Attract |
| 68. | Which option figure will embed the $\operatorname{Fig}(\mathrm{X})$. <br> (X) <br> (1) <br> (2) <br> (3) <br> (4) <br> (a) (1) <br> (b) (2) <br> (c) (3) <br> (d) (4) | (d) (4) |
| 69. | In a certain code language, GRAPE is written as 27354 and FOUR is written as 1687 . How is GROUP written in that code? <br> (a) 27384 <br> (b) 27684 <br> (c) 27685 <br> (d) 27658 | (c) 27685 |
| 70. | Three persons $\mathrm{A}, \mathrm{B}$ and C are standing in a queue. There are five persons between A and B and eight persons between $B$ and $C$. If there be three persons ahead of C and 21 persons behind A , what could be the minimum number of persons in the queue? <br> (a) 41 <br> (b) 40 <br> (c) 28 <br> (d) 27 | (c) 28 |
| 71. | Find the odd pair among following: <br> (a) Ice cube : Cold <br> (b) Iron : Hard <br> (c) Marble : Smooth <br> (d) Purse : Money | (d) Purse: Money |


| 72. | Find the mirror image of the fig (X). <br> (a) <br> (b) <br> (c) <br> (d) | (b) |
| :---: | :---: | :---: |
| 73. | Find the wrong term in the following series. $160,118,83,65,34,20$ <br> (a) 83 <br> (b) 118 <br> (c) 34 <br> (d) 65 | (d) 65 |
| 74. | Which option will fill the blank spaces? _OPQ, N_PQ, NO_Q, NOP_ <br> (a) ONQP <br> (b) NOQP <br> (c) NOPQ <br> (d) PQNO | (c) NOPQ |
| 75. | If '+'stands for multiplication, ' - 'stands for division, ' $\times$ ' stands for subtraction and ${ }^{\prime} \div$ ' stands for addition then $\frac{(36 \times 4)-8 \times 4}{4+8 \times 2+16 \div 1}=?$ <br> (a) 0 <br> (b) 8 <br> (c) 12 <br> (d) 16 | (a) 0 |

## Rough Work

