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

Personal Information

Student's Name:-_____ Father's Name:-_____

City:-_____ Mobile No:-_____ Exam Date:-   /   /2024

Studying in Class:- _____ Appearing for class:-_____ Board:- _____

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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 (15)	So. Science (30)	English (20)	VMAT (10)	OBTAINED MARKS (75)

Section-A Mathematics		
Q.N	**Questions**	**Answers**
1.	Two cubes each of volume 64 cm³ are joined end to end. Find the surface area and volume of the resulting cuboid.	
2.	Solve: $x + 2y + 1 = 0$ $2x - 3y - 12 = 0$	
3.	1000 tickets of a lottery were sold and there are 5 prizes on these tickets. If Saket has purchased one lottery ticket, what is the probability of winning a prize?	
4.	Find the HCF and LCM of 144, 180 and 192.	
5.	Find the mean of the following distribution: <table><tr><td>x:</td><td>4</td><td>6</td><td>9</td><td>10</td></tr><tr><td>f:</td><td>5</td><td>10</td><td>10</td><td>7</td></tr></table>	

6.	The circumference of two circles are in the ratio 2:3. Find the ratio of their areas.	
7.	Find a quadratic polynomial, the sum and product of whose zeroes are $\sqrt{2}$ and $-\dfrac{3}{2}$ respectively. Also, find its zeroes.	
8.	Two triangles are similar, if their corresponding sides are _____	
9.	The three vertices of a parallelogram are (3, 4), (3, 8) and (9, 8). Find the fourth vertex.	
10.	Determine the nature of the roots of the following quadratic equation: $2x^2 - 3x + 5 = 0$	
11.	On a morning walk, three persons step off together and their steps measure 40 cm, 42 cm and 45 cm respectively. What is the minimum distance each should walk so that each can cover the same distance and complete steps?	
12.	**Assertion (A):** Two circles touch externally. If their radii are 11cm and 3cm, the distance between their centres is 14cm. **Reason (R):** When two circles touch externally , the distance between their centres is equal to difference of their radius (a) Both assertion and reason are correct and reason is correct explanation of the assertion. (b) Both assertion and reason are correct, but the reason is not the correct explanation of the assertion. (c) Assertion is correct, but reason is incorrect. (d) Assertion is incorrect, but reason is correct.	

Case study (Q13 – Q15)

A girl 1.5 m tall spots a parrot sitting on the top of a building of height 58 m from the ground. The angle of elevation of the parrot from the eyes of girl at any instant is 60^0.

The parrot flies away horizontally in such a way that it remained at a constant height from the ground. After 8 sec. the angle of elevation of the parrot from the same point is 30°.

	Based on the above information, answer the following questions. $\left(Take\ \sqrt{3} = 1.73 \right)$	
13.	Find the distance between the girl and the building.	
14.	Find the distance of first position of the parrot from the eyes of the girl.	
15.	How much distance parrot covers?	

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Section-B

Social Science

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16.	Since countries have different _____, comparing total income will not tell us what an average person is likely to earn.	
17.	Countries with per capita income of US\$ 12616 per annum and above in 2012 are called _____.	
18.	NREGA (National Rural Employment Guarantee Act of 2005) has guaranteed _____ days of employment in a year in many districts of India.	
19.	The economy is classified into public and private sectors on the basis of :	
20.	What is the main motive of the public sector enterprises?	
21.	Life insurance is an activity of the _____ sector.	
22.	Where will you find the disguised unemployment most?	
23.	What is the full form of NSSO?	
24.	In how many districts in India, the Law of Right to Work has been implemented?	
25.	What is the main economic activity of people in India?	
26.	Which sector emerged as the largest producing sector in India in the year 2003?	
27.	GDP is the total value of:	
28.	Which of the following could lead to a debt trap? (a) The high-interest rate for borrowing can mean that the amount to be repaid is greater than the income of the borrower. (b) Higher cost of borrowing means a larger part of the earnings of the borrowers is used to repay the loan.	

	(c) The high-interest rate for borrowing can mean that the amount to be repaid is lesser than the income of the borrower. (d) Both (a) and (b)	
29.	Which is one of the major reasons that prevent the poor from getting bank loans? Choose the best suitable option: (a) Absence of collateral (b) Lack of availability of banks in rural areas (c) Lack of approach towards formal organisations. (d) All of the above	
30.	Consider the following about multi-purpose project. (i) Bhakra-Nangal project is used for hydel power and irrigation. (ii) Projects regulate the natural flow of rivers. (iii) Concentration of excessive sedimentation takes place in reservoirs. (a) i and ii (b) ii and iii (c) i and iii (d) All of these	
31.	Who is the Finance Minister of India?	
32.	**Assertion (A):** Banks keep only a small proportion of their deposits as cash with themselves. **Reason (R):** Banks in India these days hold about 15 per cent of their deposits as cash. (a) Both assertion and reason are correct and reason is correct explanation of the assertion. (b) Both assertion and reason are correct, but the reason is not the correct explanation of the assertion. (c) Assertion is correct, but reason is incorrect. (d) Assertion is incorrect, but reason is correct.	
33.	**Assertion (A):** Collateral is an asset that the borrower owns and use this as a guarantee to a lender until the	

loan is repaid. **Reason (R):** Collateral is given as the lender can sell the collateral to recover the loan amount if the borrower fails to repay the loan. (a) Both assertion and reason are correct and reason is correct explanation of the assertion. (b) Both assertion and reason are correct, but the reason is not the correct explanation of the assertion. (c) Assertion is correct, but reason is incorrect. (d) Assertion is incorrect, but reason is correct.	

Case study (Q.34 – Q.36)

Based on the given information, answer the following questions.

A third tier of federalism was added in the form of Panchayats and Municipalities. As in any federation, these different tiers enjoy separate jurisdiction. The Constitution clearly provided a threefold distribution of legislative powers between the Union Government and the State Governments. Thus, it contains three lists: Union List includes subjects of national importance such as defence of the country, foreign affairs, banking, communications and currency. They are included in this list because we need a uniform policy on these matters throughout the country. The Union Government alone can make laws relating to the subjects mentioned in the Union List. State List contains subjects of State and local importance such as police, trade, commerce, agriculture and irrigation. The State Governments forest, trade unions, marriage, adoption and succession. Both the Union as well as the State Governments can make laws on the subjects mentioned in this list. If their laws conflict with each other, the law made by the Union Government will prevail. According to our constitution, the Union Government has the power to legislate on these 'residuary' subjects.

34.	What is the third tier of government known as?	
35.	Name the subject which are included in the Union list.	
36.	Subjects like computer software comes in the _____.	

Case study (Q.37 – Q.39)

Based on the given information, answer the following questions.

In recent years, people have tried out some newer ways of providing loans to the poor. The idea is to organise rural poor, in particular women, into small Self Help Groups (SHGs) and pool (collect) their savings. A typical SHG has 15-20 members, usually belonging to one

neighbourhood, who meet and save regularly. Saving per member varies from25 to 100 or more depending on the ability of the people to save. Members can take small loans from the group itself to meet their needs. The group charges interest on these loans but this is still less than what the moneylender charges. After a year or two, if the group is regular in savings, it becomes eligible for availing loan from the bank. Loan is sanctioned in the name; of the group and is meant to create self-employment opportunities for the members. For instance, small loans are provided to the members for releasing mortgaged land, for meeting working capital needs (e.g. buying seeds, fertilisers, raw materials like bamboo and cloth), for housing materials, for acquiring assets like sewing machine, handlooms, cattle, etc.

37.	In Self Help Groups, _____ decide the savings and loan activity option.	
38.	Self Help Groups are successful in _____ area.	
39.	85% of the loans taken by the poor households in the rural areas are from which of the following sources?	
40.	The rates of economic growth for different countries from 1950 to 2000 were highest among _____.	
41.	_____ stands much superior to any other form of government in promoting dignity and freedom of the individual.	
42.	State whether true or false – Democracy is not just ruled by majority opinion.	
43.	State whether true or false – In democracies, there can be a very high degree of economic inequality.	
44.	The rise of political parties is directly linked to the emergence of _____.	
45.	Identify soil on following information. (i) Red to Brown in colour (ii) Sandy in texture and saline in nature (iii) Lacks humus and Moisture	

Read the passage given below:

BE BONE HEALTHY

(1) Every time a child takes a soft drink, is he laying the ground work for a dangerous bone disease? Fizzy and sugary drinks don't cause osteoporosis but, because they are often a substitute for a glass of milk, the children miss out on taking in the calcium and vitamin D they need to build a strong skeleton. Many of them also lead a sedentary lifestyle, so they aren't getting the bone-building benefits of vigorous exercise either. These children tend to suffer from brittle bones and fractures later on in life. In addition, they could be at a risk of being diagnosed with osteoporosis at an earlier age than most others.

(2) The Indian Society for Bone and Mineral Research (ISBMR), a body comprising experts on osteoporosis, was established in 1996, with the aim of promoting research and circulating awareness about metabolic bone diseases especially this bone-crippling disease. Osteoporosis starts in childhood but its consequences are apparent at a later stage in life. This condition causes bones to become riddled with holes, like the framework of a house that's been attacked by termites. This can lead to broken bones, which in turn, can cause deformity, chronic pain, and disability. Osteoporosis can be fatal: up to 25 per cent of older people who suffer a broken hip, die within a year. Osteoporosis isn't just your grandmother's health threat. Although it strikes over 50 million women in India, it also menaces over 12 million men. It causes loss of height, pain in joints and back, and fractures, and can be very depressing. So, it is important that we adopt preventive measures to save millions of people from the risk of suffering from osteoporosis.

(3) There is a new medical understanding of the best ways to protect ourselves and our children. "Simple changes in lifestyle and nutrition will help save bones", says Dr. Mittal. He suggests, it's never too late to adopt bone-friendly habits, like exercise that includes walking, jogging or skipping, getting enough sunlight, and getting adequate calcium, especially through fruits, vegetables, and fermented dairy products. This move in the right direction will keep the bones healthy and prevent osteoporosis.

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

46.	What is the full form of ISBMR?	
	(a) Indian Society for Bone and Mind Research	
	(b) International Scheme for Bone and Mineral Reserve	
	(c) Indian Society for Bone and Mineral Research	
	(d) International Scheme for Bone and Mineral Research	

47.	Osteoporosis causes bones to become: (a) riddled with holes (b) strong like iron (c) shapeless (d) none of these	
48.	What is the aim of ISBMR? (a) To adopt bone-friendly habits (b) To promote research and circulate awareness about metabolic bone disease (c) To get bone-building benefits (d) To adopt preventive measures to save millions of people from the risk of suffering from osteoporosis	
49.	Based on your reading of the passage, choose the incorrect statement from the following. (a) Simple changes in lifestyle and nutrition will help save bones. (b) It's never too late to adopt bone-friendly habits. (c) Osteoporosis starts in childhood. (d) Fizzy and sugary drinks cause osteoporosis.	
50.	Choose the option that correctly states the two meanings of 'ground work', as used in the passage. 1. Difficult work 2. Important work 3. Basic work 4. Ordinary work 5. Preliminary work (a) (1) and (3) (b) (3) and (5) (c) (2) and (4) (d) (2) and (5)	
	Read the passage given below:	
	(1) Andy Dehart is a shark expert and TV presenter who lives in the United States of America. He has had a lifelong interest in sharks and is always trying to look for ways to educate the public about them. Many people think that sharks have little or no intelligence, but Andy points out that recent studies have shown that many shark species possess powerful problem-solving abilities and social skills. "Sharks do not want to attack humans," he asserts. "There is no shark species that eats humans as part of its regular diet. In most shark attack cases, sharks leave after realising that it has mistakenly bitten a human and not its intended prey."	

Sharks caught globally
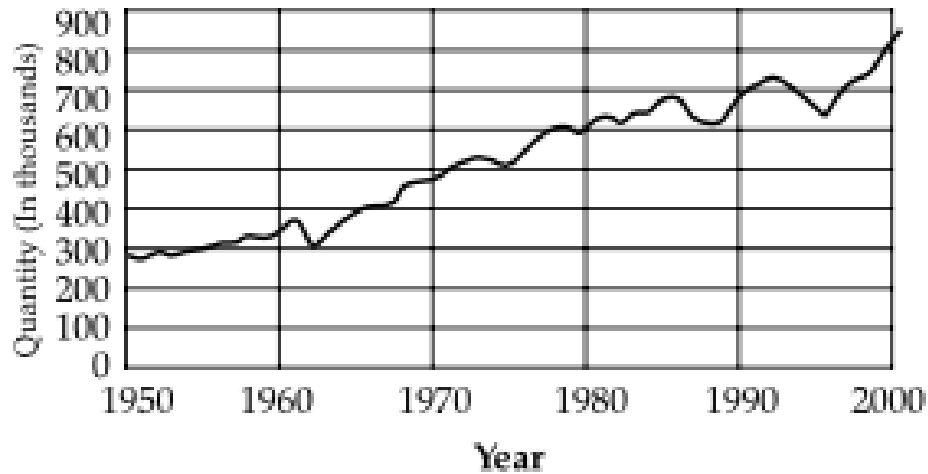
(2) In Andy's opinion, all shark fishing should be stopped until the shark populations have had time to grow again. We then need to do a better job of managing the fishing of sharks. However, even if the direct fishing of sharks is stopped, many will still be killed when they are caught up in the nets of boats fishing for other species of fish.

(3) When Andy was a boy, his father worked for a national oceanic organisation, and Andy travelled with him all over the Caribbean. He grew up by the coast and he has been connected with the sea for as long as he can remember. He also lived near one of the best aquariums in America. Andy then went on to build a career working with sharks in an aquarium environment. More recently, he has been involved with television and the making of programmes about the sharks.

(4) Andy and his wife had their first child two years ago. They were amused and amazed to see what extent their work with animals has proved to be useful in bringing up their daughter. They know how to observe her behaviour and teach her how to do things by rewarding her.

(5) Andy loves sharks and is very passionate about their survival and protection. He feels extremely lucky to have had opportunities working at the National Aquarium and the television station which presents the Nature Channel. He never wastes a moment in either place that could be spent educating people about sharks. He does admit that it is probably not possible for everyone to love sharks as he does. However, he does hope to persuade people personally or through the media to respect sharks and the critical role they play in our environment. His main objective is to keep spreading awareness that sharks are not dangerous man-eaters but essential creatures in our oceans, as they provide ecological balance and help to control other species.

On the basis of your understanding of the passage, attempt the following questions.
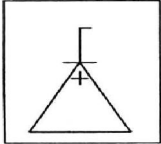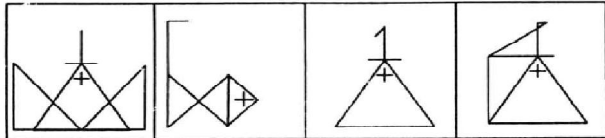
51.	How can it be proved that many shark species are intelligent? (a) Their problem solving and social skills (b) Their social skills (c) Eating humans and their immediate realization (d) Their oceanic organisation	
52.	Why does Andy believe that sharks only attack humans by mistake? (a) They don't eat humans as a part of their diet. (b) They leave after realising that it has mistakenly bit humans. (c) Human is not its intended prey. (d) All of these	
53.	How did Andy's work help him when bringing up his daughter? (a) They knew how to teach her things by rewarding her. (b) They taught her by reprimanding her. (c) They taught her to observe behaviour of others. (d) Connection of animals to the daughter's keenness.	
54.	According to the graph, how many sharks were caught in 1990? (a) 650,000 (b) 700,000 (c) 750,000 (d) 800,000	
55.	With reference to the following example, complete the given analogy: Realize : Realization :: Grow: ? (a) Growing (b) Growth (c) Grown. (d) Grew	
	Fill in the blanks in the paragraph given below with the help of options that follow. (From Q. No. 56 – 60) Communication (56) _____ become very effective (57) _____ instant due to smart phones. People are able (58) _____ convey their message all around the globe to (59) _____ loved ones (60) _____ spending hefty sums of money.	
56.	(a) is (b) has (d) have (d) had	
57.	(a) but (b) as (c) or (d) and	

58.	(a) for	(b) in	(c) to	(d) of	
59.	(a) his	(b) her	(c) their	(d) your	
60.	(a) with	(b) without	(c) and	(d) to	
61.	In each question below, there is a sentence of which some parts have been jumbled up. Rearrange these parts which are labelled P, Q, R and S to produce the correct sentence. Choose the proper sequence. When he _____ P: did not know Q: he was nervous and R: heard the hue and cry at midnight S: what to do The Proper sequence should be: (a) RQPS (b) QSPR (c) SQPR (d) PQRS	
62.	In each question below, there is a sentence of which some parts have been jumbled up. Rearrange these parts which are labelled P, Q, R and S to produce the correct sentence. Choose the proper sequence. It has been established that _____ P: Einstein was Q: although a great scientist R: weak in arithmetic S: right from his school days The Proper sequence should be: (a) SRPQ (b) QPRS (c) QPSR (d) RQPS	
63.	Choose the correct meaning of below proverb/idiom from the given options: To keeps one's temper : _____ (a) To become hungry (b) To be in good mood (c) To preserve ones energy (d) To be aloof from	

64.	In the following question find out the alternative which will replace the question mark. Carbon : Diamond :: Corundum : ? (a) Garnet (b) Ruby (c) Pukhraj (d) Pearl	
65.	In the following question find out the alternative which will replace the question mark. Architect : Building :: Sculptor : ? (a) Museum (b) Stone (c) Chisel (d) Statue	

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Section-D

VMAT

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66.	Find out the alternative figure which contains figure (X) as its part. (a) (1) (b) (2) (c) (3) (d) (4)	
67.	In a certain code, SOBER is written as RNADQ. How LOTUS can be written in *that code?* (a) KNSTR (c) KMSTR (b) MPUWT (d) LMRST	
68.	The first republic day of India was celebrated on 26th January, 1950. It was – (a) Monday (b) Tuesday (c) Thursday (d) Friday	
69.	A book always have: (a) fiction (b) pages (c) pictures (d) learning	
70.	In a row of boys, If A who is 10th from the left and B who is 9th from the right interchange their positions, A becomes 15th from the left. How many boys are there in the row ? (a) 23 (b) 31 (c) 27 (d) 28	

71.	As 'Bald' is related to 'Blond', in the same way, 'Barren' is related to	
	(a) Vegetation (b) Farm	
	(c) Fertile (d) Inhibited	
72.	Find the mirror image of 'JUDGEMENT'.	
	(a) TNEMEGDUJ (b) TИƎMƎGⓊUᒻ	
	(c) TИƎMƎ⅁DUᒻ (d) ᒻUⅅ⅁ƎMƎИT	
73.	Complete the following number series: 36, 34, 30, 28, 24,?	
	(a) 23 (b) 26 (c) 20 (d) 22	
74.	A and B are brothers. C and D are sisters. A's son is D's brother. How is B related to C?	
	(a) Father (b) Brother	
	(c) Grand father (d) Uncle	
75.	If South-East becomes North, North-East becomes West and so on. What will West become?	
	(a) North-East (b) North-West	
	(c) South-East (d) South-West	

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Rough Work