



MACRO VISION ACADEMY, BURHANPUR

Sample Paper 2022-23

Office Use

Class: XI COMMERCE

Time : 80 min

M.M.: 40

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

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

Studying in Class:-_____ Appearing for class:-_____ Board: MP/CBSE/Other_____

GENERAL INSTRUCTIONS:

- The question paper has 40 questions in all. Each question carries 1 mark.
- All questions are compulsory.
- Section A contains 15 questions of Mathematics.
- Section B contains 10 questions of Social Science.
- Section C contains 5 questions of MAT (Mental Ability Test).
- Section D contains 10 questions of English.

Mathematics (15)	Social Science (10)	MAT (05)	English (10)	OBTAINED (40)

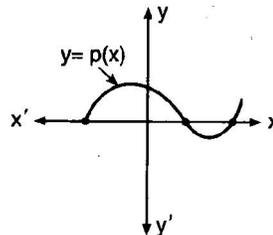
Section A

Mathematics

1. Let p and q are two co-prime numbers and m and n are two whole numbers, then $\frac{p}{q}$ is rational if:

(a) $q = 2^m \times 5^n$ (b) $q = 2^m \times n^5$ (c) $q = 2^5 \times m^n$ (d) $q = m^2 \times 5^n$

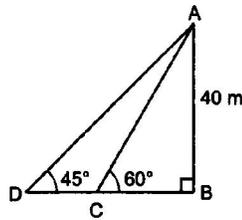
2. The graph of $y = p(x)$ is given below. The number of zeroes of $p(x)$ are:



- (a) 0 (b) 2 (c) 4 (d) 3
3. The pair of equations $y = 0$ and $y = -7$ has:
- (a) one solution (b) two solutions
(c) infinitely many solutions (d) no solutions
4. If $\sin A = \cos A$, the value of $\sin^3 A - \cos^3 A$ is:
- (a) 1 (b) -1 (c) 0 (d) 2
5. The point $P(x, 0)$ is equidistant from the points $O(0, 0)$ and $A(2, 4)$. The value of x is:
- (a) 4 (b) 3 (c) 0 (d) 5

6. If the area of a circle is 616 cm^2 , then its perimeter is:
 (a) 14 cm (b) 28 cm (c) 88 cm (d) 616 cm
7. Eleventh term of the A.P., $-3, -\frac{1}{2}, 2, \dots$ is:
 (a) 28 (b) 22 (c) -38 (d) $-48\frac{1}{2}$
8. The quadrilateral ABCD circumscribes a circle, then:
 (a) $AB + BC = CD + DA$ (b) $AB + DC = AD + BC$
 (c) $AB + DC > AD + BC$ (d) $AB + AD < BC + CD$
9. The probability that a leap year contains 53 Sundays is:
 (a) $\frac{1}{7}$ (b) $\frac{2}{7}$ (c) $\frac{3}{7}$ (d) $\frac{5}{7}$
10. From a solid cube of side 14 cm, a sphere of largest volume is cut. The volume of the sphere is:
 (a) 359.3 cm^3 (b) 1437.3 cm^3 (c) 2874.7 cm^3 (d) 4312 cm^3

11. In the given figure, if $AB = 40 \text{ m}$, then CD is:



- (a) 40 m (b) $\left(40 + \frac{40}{\sqrt{3}}\right) \text{ m}$ (c) $\left(40 - \frac{40}{\sqrt{3}}\right) \text{ m}$ (d) $\left(40\sqrt{3} - \frac{40}{3}\right) \text{ m}$
12. Consider the data:
- | Class | 65-85 | 85-105 | 105-125 | 125-145 | 145-165 | 165-185 | 185-205 |
|-----------|-------|--------|---------|---------|---------|---------|---------|
| Frequency | 4 | 5 | 13 | 20 | 14 | 7 | 4 |
- The difference of the upper limit of the median class and the lower limit of the modal class is:
 (a) 0 (b) 19 (c) 20 (d) 38
13. The ratio between the areas of two similar triangles is 7: 6, then the ratio between their perimeter is:
 (a) 49 : 36 (b) 7 : 6 (c) $\sqrt{7} : \sqrt{6}$ (d) $\sqrt{6} : \sqrt{7}$
14. The discriminant of $3x^2 - 2x + \frac{1}{3} = 0$ is:
 (a) negative (b) positive integer (c) zero (d) negative integer
15. Aruna has only Rs. 1 and Rs. 2 coins with, her. If the total number of coins that she has is 50 and the amount of money with her is Rs. 75, then the number of Rs. 1 and Rs. 2 coins are respectively:
 (a) 35 and 15 (b) 35 and 22 (c) 15 and 35 (d) 25 and 25

Section B
Social Science

16. HDI stands for:
(a) Heavy Developed Industrial (b) Human Development Index
(c) Highly Developed Infrastructure (d) Highest Development Index.
17. Which of following is an unorganized sector?
(a) Public enterprise (b) State Bank of India
(c) Agriculture sector (d) Indian Railway
18. In a SHG, most of decisions regarding savings and loans are taken by:
(a) Bank (b) Members
(c) Non government organization (d) Government organisation.
19. Liberalisations means?
(a) Free trade (b) No government interference
(c) Private trade (d) Any of these.
20. Vertical power sharing helps in
(a) Concentration of power (b) Decentralization of power
(c) Creating differences (d) All of the above.
21. The list which includes subject of national importance such as defence of the country, foreign affairs, banking, communications and currency.
(a) Union list (b) State list
(c) Concurrent list (d) Residuary subjects
22. Organisations that mobilise people with a view to win political power are called:
(a) Public interest groups (b) Sectional interest groups
(c) Political parties (d) Pressure groups.
23. A legitimate government is one where
(a) Citizens through participation acquire a stake in the system.
(b) Citizen have unequal right.
(c) Majority rule over minority.
(d) Minorities' are provide with special privileges
24. Which type of soil is ideal for growing cotton?
(a) Black soil (b) Red soil (c) Alluvial soil (d) Arid soil.
25. Champaran Satyagraha was launched by Gandhiji to support which of the following?
(a) High revenue demands (b) Indigo planters
(c) Mill owners (d) Salt tax.

Section C

MAT

26. Sarita cuts a cake into two halves and cut one-half into smaller pieces of equal size. Each of the small pieces is twenty five grams in weight. If she has eleven pieces of the cake in all with her, how heavy was the original cake?
(a) 700 gm (b) 400 gm (c) 500 gm (d) 200 gm

27. The day before the day before yesterday is three days after Saturday. What day is it today?
 (a) Tuesday (b) Wednesday (c) Thursday (d) Friday

28. Which shape will assemble as water image of following:

B K 5 0 R P 6 2

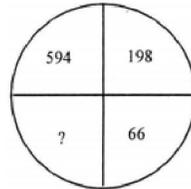
(a) B K 2 0 5 6 2

(b) B K 2 0 5 6 2

(c) B K 2 0 5 6 2

(d) B K 5 0 5 6 2

29. Find the missing character from given alternatives.



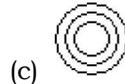
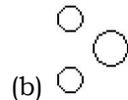
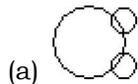
(a) 11

(b) 12

(c) 22

(d) 33

30. Which of the following diagrams indicates the best relation among Hockey, Football and Cricket?



Section D

English

Read the passage carefully and select the right answers (Q. 31 – Q. 35)

The United States has a lengthy history of going to war. It is a nation born from war. Pick any year since 1776, and the odds of America being involved in at least one war is over 90%. Every US President has faced war. Still, it may surprise you to hear that the US government is at war with a fish.

Asian carp were introduced to American waters during the 1970s. Southern fish farmers began importing them to help clean their ponds. Asian carp are phenomenal cleaners. Unfortunately, it didn't take too long for them to escape from these ponds, perhaps from flooding, and get into the Mississippi River. From there they have followed their natural tendency to swim upstream. This tendency may lead them into the Great Lakes and Canada, a nightmare scenario for fisherman.

Asian carp are large fish. One species, the silver carp, can grow to be 100 pounds. But despite their size, they feed from the bottom of the food chain. That means that they eat plankton and algae. A one hundred pound fish can eat an awful lot of sea scum, and some of it is toxic. The carp are resistant to the toxins, but we aren't. Some Asian carp are hazardous to eat because they have so many algal toxins in their systems. They also have lots of tiny bones in their meat, which makes them difficult to prepare. Asian carp is not a popular delicacy.

Introducing the Asian carp into waters that have not known them can be devastating. Beneath the surface of the water is a unique ecosystem. This system rests delicately on a balance that has evolved over millions of years. Then along come these big, hungry bottom feeders to mess up everything. They breed rapidly and densely populate the waters. Worse still, they compete

with the native bottom feeders. The native bottom feeders are smaller. Larger, tastier fish like salmon eat them. The native bottom feeders are an important part of the ecosystem. When the Asian carp outperform them, the whole food chain suffers, all the way up to the people.

Not only do Asian carp mess up the food chain, they mess up people. Seriously. An Asian carp will bust you in head. Remember that silver carp can be 100 pounds. There is a reason why they are also known as "flying carp." This particular species of Asian carp has a tendency to jump when frightened. They can jump up to ten feet in the air, and the sound of boat motors frightens them. Watch out watersportists! In 2003 a woman jetskier collided with one and broke her nose and a vertebra. She almost drowned. In 2008 a teenager broke his jaw on one while tubing. Many others have been injured by these flying logs. Asian carp pose a serious threat to water skiers and boaters.

In 2007 the U.S. Department of the Interior declared all silver carp to be an injurious species. In 2010, the State of Michigan passed the \$30 million CARPACT. In 2012 Congress approved the "Stop Invasive Species" act, legislation written solely to protect the Great Lakes from Asian carp. The government has been on the offensive against these large-bellied invaders.

But Asian carp are difficult to catch. Since they eat from the bottom, they do not go for lures or baits like most large fish. The best way to stop them is to keep them out. The Great Lakes are connected to the Mississippi River through the 28-mile Chicago Sanitary and Ship Canal. For Chicagoans, it is the final point of resistance.

A series of multimillion-dollar electrical barriers have been built along the canal. The barriers are effective at keeping adult carp at bay, but some fear that baby carp may pass through. The United States Army Corps of Engineers has been deployed along with EPA. In 2009 they poisoned the entire canal with rotenone, a chemical that kills fish. The \$3 million operation netted over 90 tons of dead fish, and a single carp.

Some think that Great Lakes must be cut off from the Mississippi River. The Michigan Attorney General sued to have the canal closed. The Ontario government and some Great Lake states have also taken legal action. But the courts have been persuaded by the value of the canal as a shipping conduit thus far. In the meantime, the barriers continue to hold, but how long can they? The carp have the Great Lakes under siege. Is this a war that we are destined to lose?

31. Which statement best expresses the main idea of the second paragraph?
 - (a) Asian carp were brought to America during the 1970s to assist Southern fish farmers.
 - (b) Asian carp are remarkable cleaners, which makes them highly desirable fish to have.
 - (c) Asian carp were supposed to clean ponds but they escaped and are headed north.
 - (d) Asian carp are excellent at swimming upstream and cleaning up plankton.
32. Which is not a reason why Asian carp is an unpopular menu item?
 - (a) It is hard to prepare because of all the little bones.
 - (b) They are a very fattening fish.
 - (c) Some of them are toxic and unsafe to eat.
 - (d) They are bottom feeders.

33. Which statement would the author most likely disagree with?
 (a) Asian carp outperform many native bottom feeders.
 (b) Asian carp could disrupt the ecosystem in Lake Michigan.
 (c) One species of Asian carp is the silver carp.
 (d) Asian carp are disliked because they eat salmon.
34. Which best describes the text structure of the fourth paragraph?
 (a) Chronological order (b) Cause and effect
 (c) Compare and contrast (d) Problem and solution
35. Which person would be most threatened by silver carp in a local water source?
 (a) A water skier (b) A chicken farmer
 (c) A bungee jumper (d) A beachgoer

Fill in the blanks with the correct answers (Q. 36 – Q. 40)

The Delhi Police (i) ____busted a gang of robbers (ii) ____had robbed 20 crore (iii) ____a bank. The arrested have (iv) ____identified as Jaswant Tiwari, his brother Hemant Tiwari (v) ____his uncle Mithilesh Tiwari. The trio were caught red-handed with the money stuffed in suitcases.

36. (i) (a) has (b) have (c) had (d) is
37. (ii) (a) which (b) what (c) who (d) that
38. (iii) (a) to (b) for (c) from (d) form
39. (iv) (a) be (b) being (c) been (d) was
40. (v) (a) and (b) but (c) because (d) else
