



RAJIV SCHOOL OF EXCELLENCE

MATRICULATION HIGHER SECONDARY SCHOOL
(Recognised by Govt. of Tamil Nadu)

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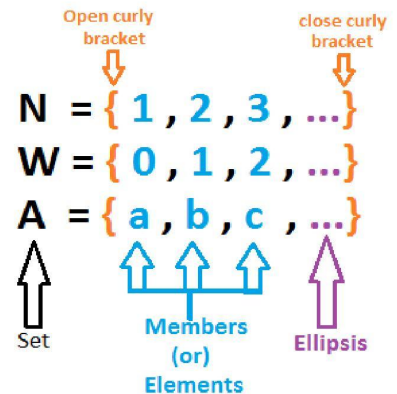
STD : IX

MATHEMATICS

SET LANGUAGE – SYMBOLS INTRODUCTION 1.

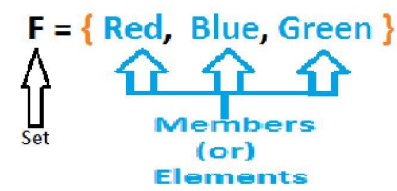
KEY POINTS:

- => A set is a well-defined collection of objects.
- => "well-defined collection of objects" means that given a specific object it must be possible for us to decide whether the object is an element of the given collection or not.
- => The objects of a set are called its members or elements
- => Elements of a set are listed only once.
- => The order of listing the elements of the set does not change the set.
For example, the collection 1,2,3,4,5,6,7,8, ... as well as the collection 1, 3, 2, 4, 5, 7, 6, 8, ... are the same though listed in different order.
- => A set is usually denoted by capital letters of the English Alphabets A, B,C, ...
- => The elements (members) are denoted by small letters of the English Alphabets a, b, c, ... or Numbers etc
- => Three dots (...) is called ellipsis. It indicates that the pattern of the listed elements continues in the same manner.
- => The elements of a set is written within curly brackets "{ }".



Roster form (or) Tabular form
A set can be described by listing all the elements of the set.
For example,
 $A = \{a, e, i, o, u\}$

$A = \{a, e, i, o, u\}$



\in \Rightarrow 'is an element of' or 'belongs to'		
L.H.S	SYMBOL	R.H.S
Element	\in	Set
x	\in	A
Here, x is an element of the set A (or) x belongs to A, we write $x \in A$		

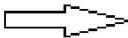
\notin \Rightarrow 'is not an element of' or 'does not belong to'		
L.H.S	SYMBOL	R.H.S
Element	\notin	Set
x	\notin	A
Here, x is not an element of the set A (or) x does not belong to A, we write $x \notin A$		

EXERCISE:

1. Which of the following are sets?
 - (i) The collection of prime numbers upto 100.
 - (ii) The collection of rich people in India.
 - (iii) The collection of all rivers in India.
 - (iv) The collection of good Hockey players.
2. Write the set of letters of the following words in Roster form:
Example: ASSESSMENT
Ans: $X = \{A, S, E, M, N, T\}$
 - (i) INDIA
 - (ii) PARALLELOGRAM
 - (iii) MISSISSIPPI
 - (iv) CZECHOSLOVAKIA
 - (v) PRINCIPAL

3. Consider the following sets $A = \{0, 3, 5, 8\}$, $B = \{2, 4, 6, 10\}$ and $C = \{12, 14, 18, 20\}$.

(a) State whether True or False:

Example: $18 \in C$  Ans: TRUE

(i) $6 \notin A$ (ii) $14 \notin C$ (iii) $10 \in B$ (iv) $5 \in B$ (v) $0 \in B$

(b) Fill in the blanks:

Example: $3 \in \underline{A}$

(i) $14 \in \underline{\hspace{2cm}}$ (ii) $18 \underline{\hspace{1cm}} B$ (iii) $4 \underline{\hspace{2cm}} B$

4. Consider the set $A = \{\text{Ashwin, Murali Vijay, Vijay Shankar, Badrinath}\}$.

Fill in the blanks with the appropriate symbol \in or \notin

(i) Murali Vijay $\underline{\hspace{2cm}}$ A

(ii) Ashwin $\underline{\hspace{2cm}}$ A

(iii) Badrinath $\underline{\hspace{2cm}}$ A

(iv) Ganguly $\underline{\hspace{2cm}}$ A

(v) Tendulkar $\underline{\hspace{2cm}}$ A

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SCIENCE

CHOOSE THE CORRECT ANSWER :

1. The process of placing seeds in the soil is called as -----
a. Crop rotation b. Sowing c. Ploughing
2. Which of the following is not present in Panchagavya?-----
a. Cow dung b. Curd c. Sugar
3. ----- is the coal of superior quality.
a. Lignite b. Anthracite c. Peat
4. The main component of natural gas is -----
a. Methane b. Ethane c. Butane

II. FILL IN THE BLANKS :

5. The term petroleum means -----
6. An example for fossil fuel is -----
7. ----- is known as marsh gas.
8. ----- is a plant growing in a place where it is not wanted.

III. MATCH THE FOLLOWING :

9. Peat - Control white flies
10. Octane rating - First stage coal
11. Bio-fertilizer - brown in colour
12. Lignite - Improve soil fertility
13. Bio- predators - Petrol

IV. ANSWER THE FOLLOWING :

14. Define ploughing.
15. What is green manure?
16. Name the methods of sowing.
17. Define acid.
18. What is an indicator?

IV. DRAW A DIAGRAM OF DESTRUCTIVE DISTILLATION OF COAL

Std: IX

Social Science

- I. Fill ups:
 - a) is the emergency number for fire service.
 - b) is the emergency number for Ambulance
 - c) is the emergency number for emergency police
 - d) The child helpline number is -----
 - e) The expansion for WHO is-----

- II. Answer in two or three words.
 - a. What are the three colours in the traffic signal?
 - b. Who are current Chief minister and governor of Tamil Nadu?
 - c. Write the name of any 3 political parties in our state?
 - d. How will you identify the fake currency?
 - e. Define Democracy

- III. Write a paragraph about child labour

- IV. Mark the following on the world map
 - a) 7 Continents
 - b) 5 Oceans
 - c) Tropic of cancer
 - d) Tropic of Capricorn
 - e) Equator
 - f) Antarctica
 - g) Arctic circle.

- V. Mark the following in the outline map of India
 - a) Bay of Benga
 - b) Arabian sea
 - c) Indian ocean
 - d) Andaman Nicobar islands
 - e) Lakshadweep
 - f) Delhi
 - g) Chennai
 - h) Mumbai
 - i) Calcutta
 - j) Cape Comorin

STD: IX**ENGLISH****A. Fill in the blanks within / on/ at appropriately.**

1. In Nepal most people don't work _____ Saturdays.
2. I like to look at the stars _____ night.
3. We enjoy a lot _____ Tihar. We put BhaiTika _____ Tihar Day.
4. The first man walked on the moon _____ 21 July, 1969.
5. Baikuntha can run 100 metres _____ 20 seconds.
6. Many of these temples were built _____ the 16th century.
7. I usually go out for a walk _____ the evenings.
8. They began to build this bridge _____ March, 2005.
9. I last met her _____ Friday afternoon.
10. It's difficult to understand when everyone speaks _____ the same time.

B. Put in a / an or the appropriately.

1. a) Is there _____ hotel near here?
b) _____ hotel where I'm staying is very nice.
c) He stayed in _____ most expensive hotel in Pokhara.
2. a) She has _____ English name, but she's _____ Nepali.
b) _____ English man we met yesterday was really interesting.
c) We saw _____ American film yesterday. I can't remember _____ name though.

C. Complete each of the following with the correct form of the verbs in brackets.

1. Don't keep (tease) the dog.
2. I have learnt how (play) the guitar.
3. Why (waste) time here? Let's go home.
4. How about (go) to the cinema this weekend?

D. Choose the correct form of the verb (active or passive) to go in the blanks.

1. My jacket _____
a) has washed.
b) has been washed.
2. My sister _____ the jacket
a) has washed
b) has been washed
3. The tree _____
a) is felling.
b) is being felled.
4. The room _____
a) locked.
b) was locked.
5. Rina _____ to my party.
a) invited
b) was invited

வகுப்பு: ஒன்பதாம் வகுப்பு தமிழ்

I) சரியான விடையைத் தேர்ந்தெடுத்து எழுதுக :

1) சொல் _____ வகைப்படும்.

அ) மூன்று ஆ) இரண்டு இ) நான்கு

2) பெட்டி என்பது _____ ஆகும்.

அ) இடுகுறிப்பெயர் ஆ) காரணப்பெயர் இ) சுட்டுப் பெயர்

3) உயிர்மெய் எழுத்துகள் ----- வகையில் அடங்கும் .

அ) சார்பெழுத்து ஆ) சுட்டெழுத்து இ) முதலெழுத்து

4) தமிழில் ஓரெழுத்து ஒரு மொழிகள் ----- உள்ளன.

அ) முப்பது ஆ) இருபது இ) நாற்பத்திரண்டு

II) கோடிட்ட இடத்தை நிரப்புக :

1) யாப்பின் உறுப்புகள் _____ வகைப்படும் .

2) செய்யுளின் கருத்தை அழகுபடுத்துவது _____ எனப்படும்.

3) பெயரெச்சம் _____ வகைப்படும்.

4) வேற்றுமை _____ வகைப்படும்.

III) பொருத்துக :

1) பொருட்பெயர் - பாடல்

2) இடப்பெயர் - சதுரம்

3) காலப்பெயர் - மரம்

4) சினைப்பெயர் - தோட்டம்

5) குணப்பெயர் - காலை

6) தொழிற்பெயர் - கிளை

IV) பின்வரும் வினாக்களுக்கு விடையளிக்கவும் :

1)பெயர்ச்சொல் எத்தனை வகைப்படும் ? அவை யாவை?

2)சார்பெழுத்துகள் என்றால் என்ன ?

3)பகுபத உறுப்புகள் எத்தனை ? அவை யாவை?

4)ஆகுபெயர் என்றால் என்ன ?

5)அசை எத்தனை வகைப்படும் ? அவை யாவை?