



Aakash

Medical | IIT-JEE | Foundations

**KNOWLEDGE
BYTES**

SEPTEMBER 2026

SEPTEMBER 2026

CLASS 10





Aakash

Medical | IIT-JEE | Foundations

ALL RIGHTS RESERVED

All rights including copyright and translation rights etc. reserved and vests exclusively with AESL. No part of this publication may be reproduced, distributed, redistributed, copied or transmitted in any form or by any means-graphical, electronic or mechanical methods including photocopying, recording, taping or stored on information retrieval systems of any nature or reproduced on any disc, tape, media, information storage device, without the prior written permission of AESL. Breach of this condition is liable for legal action (civil as well as criminal) under the applicable Laws.

Edition: 2026-27

© Aakash Educational Services Limited [AESL]



PREFACE

What is Knowledge Bytes ?

Knowledge Bytes is a collection of riddles, interesting facts, mnemonics and puzzles that will make your learning fun and engaging.

We want you to be delighted about studying. Knowledge Bytes helps you to know more about the subject in a fun, motivating and educational way and helps to implement what you learn in a creative way.

Benefits



Saves Time



Develops Learning Skills



Stimulates Interest



Leads to Increased Comprehension

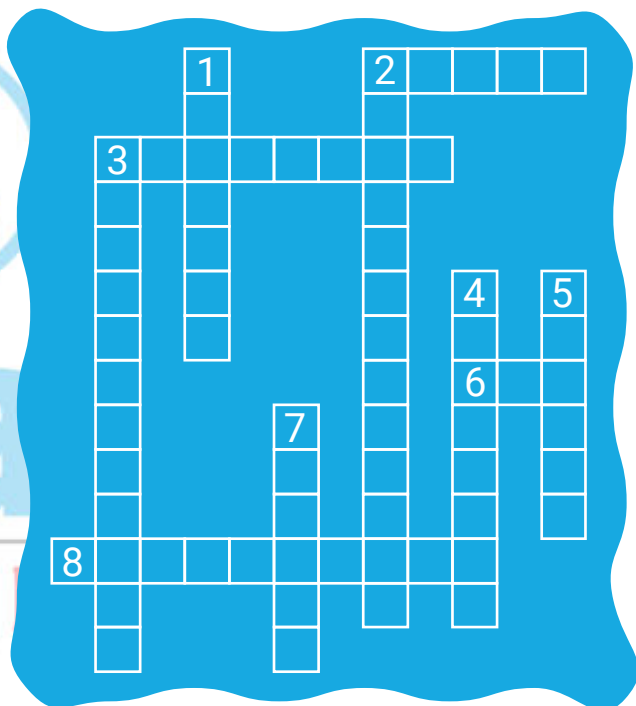


Circles

Crossword

Across

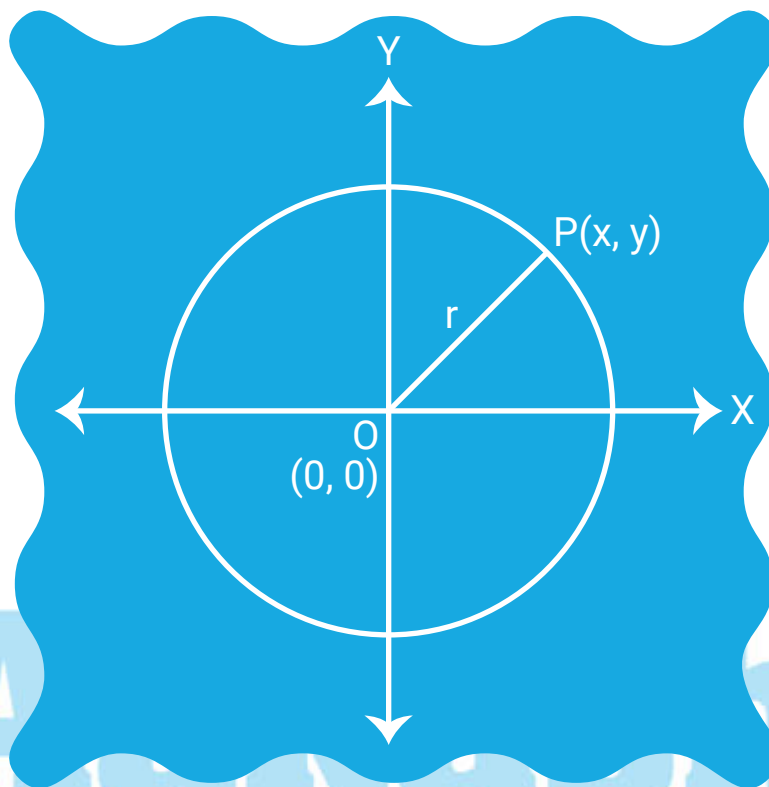
2. A line segment joining two points on a circle is a _____. [5]
3. If a chord divides the circumference of a circle into two unequal parts, then the smaller part is called a _____. [5, 3]
6. A part of circumference of a circle is called _____. [3]
8. Half of a circle. [10]



Down

1. A line that touches the circle at exactly one point is known as a _____. [7]
2. The perimeter of a circle. [13]
3. When a chord divides the circular region into two unequal parts, the bigger part is called the _____. [5, 7]
4. Longest chord of the circle. [8]
5. A line that intersects a circle at two distinct points is called a _____. [6]
7. The distance from the centre to a point on the circle is called as _____. [6]

Standard Equation of Circle



A circle is the locus of a point, which moves in a plane so that its distance from a fixed point is always constant.

We are taking a point $P(x, y)$ on the circle with centre ' $O(0, 0)$ ' and radius ' r '.

$$OP = r \text{ units}$$

$$OP = \sqrt{(x - 0)^2 + (y - 0)^2} = \sqrt{x^2 + y^2}$$

$$r = \sqrt{x^2 + y^2}$$

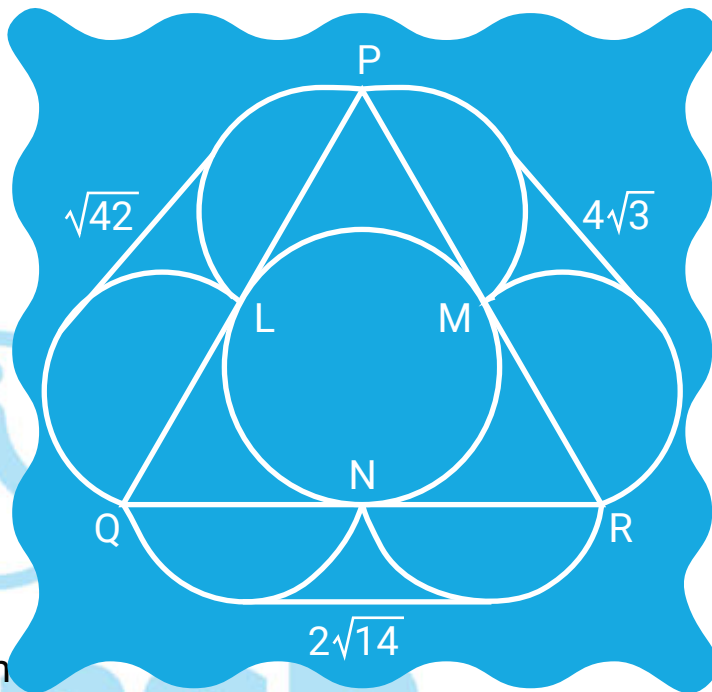
$\Rightarrow x^2 + y^2 = r^2$ is the standard equation of a circle with centre $(0, 0)$.

The circle with centre $C(h, k)$ and radius ' r ' has the equation :

$$(x - h)^2 + (y - k)^2 = r^2$$

Puzzle on Tangents

In the given figure, sides of $\triangle PQR$ are tangents to the circle inscribed, through the points L, M and N. Lengths of the common tangents to the semi-circles are marked. Find the radius of the inscribed circle.



Sol.:- As, $QL = QN$

$$RN = RM$$

$$PL = PM$$

[$\therefore$ Lengths of the tangents from exterior points]

Let ' r_1 ' be the radii of semi-circles with diameters QL and QN

' r_2 ' be the radii of semi-circles with diameters RN and RM

' r_3 ' be the radii of semi-circles with diameters PL and PM

$$\therefore PQ = 2r_3 + 2r_1, \quad QR = 2r_1 + 2r_2$$

$$PR = 2r_2 + 2r_3$$

In right angled triangle $OO'T$

By pythagoras, $(OO')^2 = (O'T)^2 + (OT)^2$
theorem

$$(r_2 + r_3)^2 = (r_2 - r_3)^2 + (4\sqrt{3})^2$$

$$r_2 r_3 = 12 \quad \dots(i)$$

Similarly,

$$r_3 r_1 = \frac{21}{2} \quad \dots(ii)$$

$$\begin{cases} OT = 4\sqrt{3} \\ OO' = r_2 + r_3 \\ O'T = r_2 - r_3 \end{cases}$$

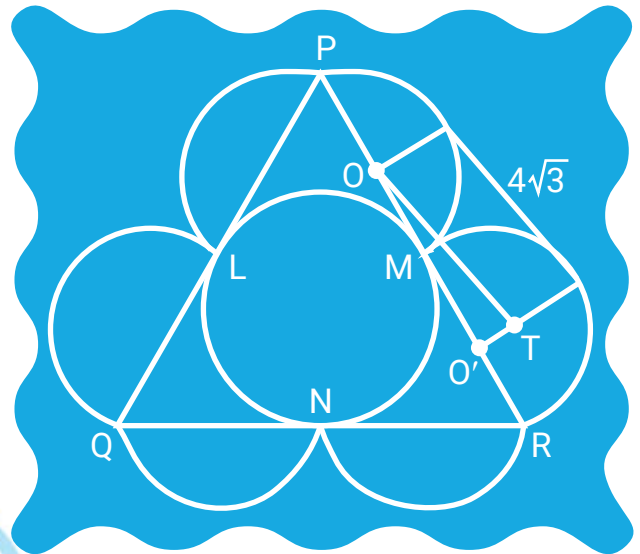
$$r_1 r_2 = 14 \quad \dots(iii)$$

Solving, (i), (ii) and (iii)

$$r_1 = \frac{7}{2}, \quad r_2 = 4, \quad r_3 = 3$$

$$PQ = 13, \quad QR = 15, \quad PR = 14$$

$$\text{Also, } r = \frac{\Delta}{s}, \quad s = \frac{13 + 15 + 14}{2} = 21$$

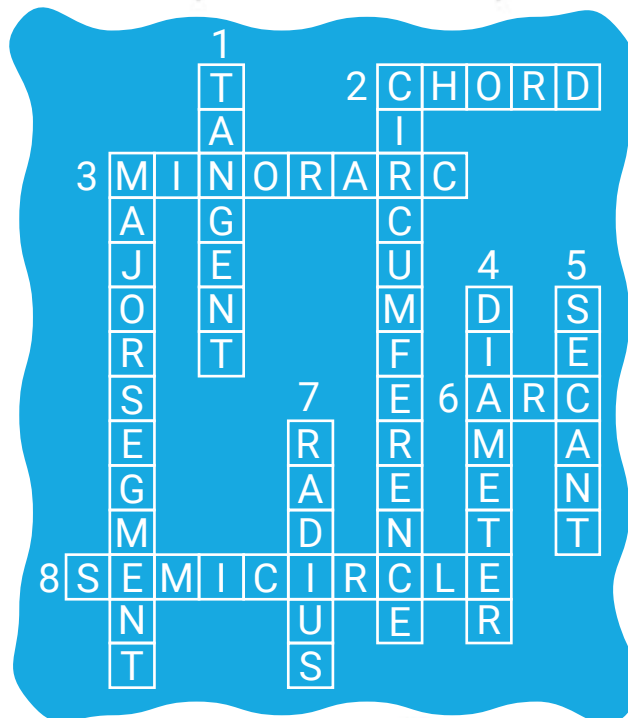


$$r \rightarrow \text{inradius} \quad r = \frac{\sqrt{21(21-15)(21-14)(21-13)}}{21}$$

(Radius of circle inscribed)

$$r = 4$$

Answer (Crossword)



Electricity

$$\text{P.D.} = \frac{\text{WORK DONE}}{\text{CHARGE}}$$

$$V = \frac{W}{Q}$$

Unit of V is Volt

OHM'S LAW

$$V \propto I$$

$$V = RI$$

Unit of R is Ohm

ELECTRIC ENERGY

$$\text{Work} = \frac{V^2 t}{R} = I^2 R t$$
$$= V I t$$

Unit of EE is kWh

$$1 \text{ kWh} = 3.6 \times 10^6 \text{ J}$$

RESISTANCE
= P.D./CURRENT

$$R = \frac{V}{I}$$

ELECTRIC POWER

$$P = \frac{\text{Work}}{\text{Time}} \quad \text{OR}$$

$$P = \frac{V^2}{R} = I^2 R = VI$$

Unit of P is Watt

RESISTIVITY

$$\rho = \frac{RA}{L}$$

Unit of resistivity is ohm-m

RESISTANCE IN SERIES

$$R_s = R_1 + R_2 + R_3 + \dots + R_n$$

RESISTANCE IN PARALLEL

$$\frac{1}{R_p} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots + \frac{1}{R_n}$$

JOULE'S LAW

$$\text{HEAT ENERGY (H)} = \frac{V^2 t}{R}$$

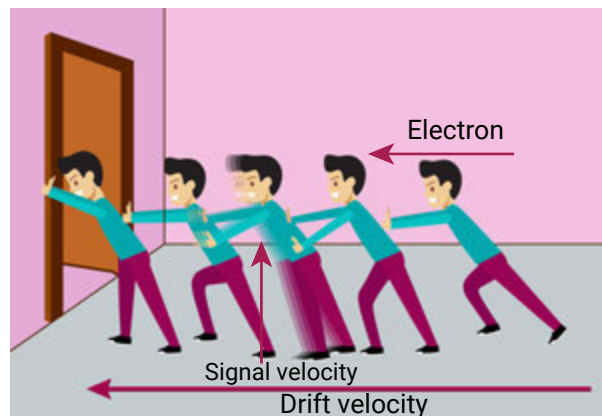
$$= I^2 R t = V I t$$

Unit of heat energy is joule



Fact 1 'Flow' of charges inside a wire

Electrons in the conductor move with a certain average 'drift velocity', this drift velocity of electrons for a typical copper wire carrying a small current is found to be actually very small, of the order of 1 mm/s.



How is it then that an electric bulb lights up as soon as we turn the switch on?

It is not that a current starts only when an electron from one terminal of the electric supply physically reaches the other terminal through the bulb, because the physical drift of electrons in the conducting wires is a very slow process.

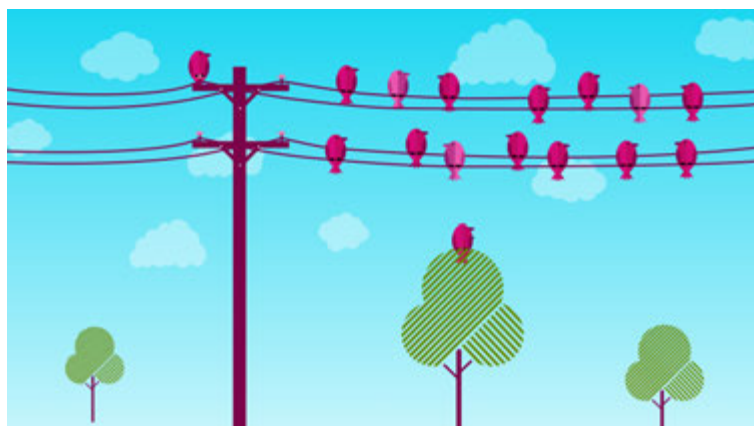
The exact mechanism of the current flow, which takes place with a speed close to the speed of light, is fascinating, actually when an electric field is applied, electrons at all parts of the conductor start drifting. The electrons just near the negative terminal of the battery drifts, the electrons at the middle of the conductor drifts and the electrons near the positive end of the conductor also drifts. So, even if the drift velocity is the order of a few mm/s, the current flows at the velocity of the propagation of the electric field, which is the velocity of light.

This is why, when you switch ON the bulb, we observe that the bulb glows instantly.



Fact 2

Birds won't get electrocuted if they sit on one power line. But if they touch two lines simultaneously, the bird will essentially become a circuit as the electricity from one line flows through it to the other line, resulting in electrocution.



Aakash



Fact 3

Do you know two same charged body can also attract each other if the charge on one body (Q_1) is much greater than that on the other (Q_2) and they are close enough to each other so that force of attraction between Q_1 and induced charge on the other exceeds the force of repulsion between Q_1 and Q_2 . (This is not valid for particles.)





Fact 4

Wondering what actually a UFO- (Unidentified Flying Object) is ?

Most common answer – An Alien ship out of this world ?

Actually electricity may be the force behind sightings of unidentified flying objects (UFOs). The fact is that what many have reported as UFOs have actually been static electrical charges on transmission lines that cause glowing corona discharges, giving the appearance of a bright flying object. So if you hear of a sighting near your area and it happens to be in the vicinity of a power plant static electricity is more than likely the culprit.



Aakash



Fact 5

Alloys are used in heating elements which have higher resistance so when current flows through the heating element, it becomes too hot and glows red. But the cord of electric heater is usually made up of copper or aluminium which have very low resistance so it does not glow.

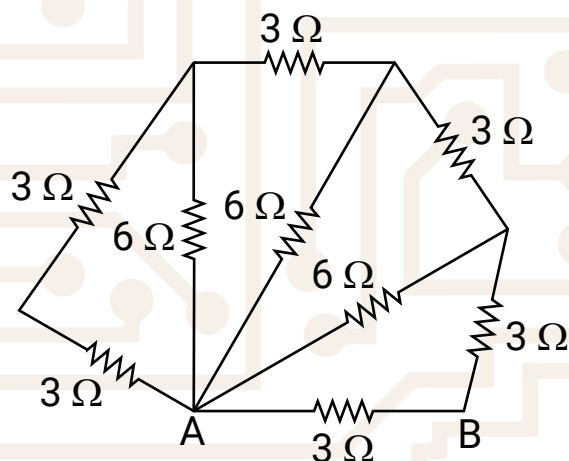




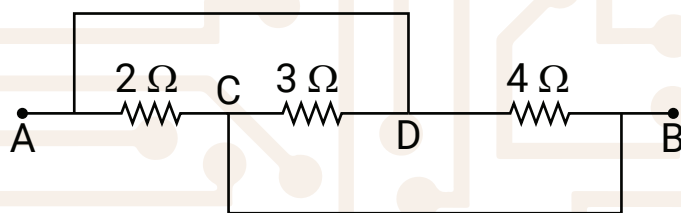
Thunderbolt



Circuit-I Find the equivalent resistance between A and B.



Circuit-II Find the equivalent resistance between A and B.

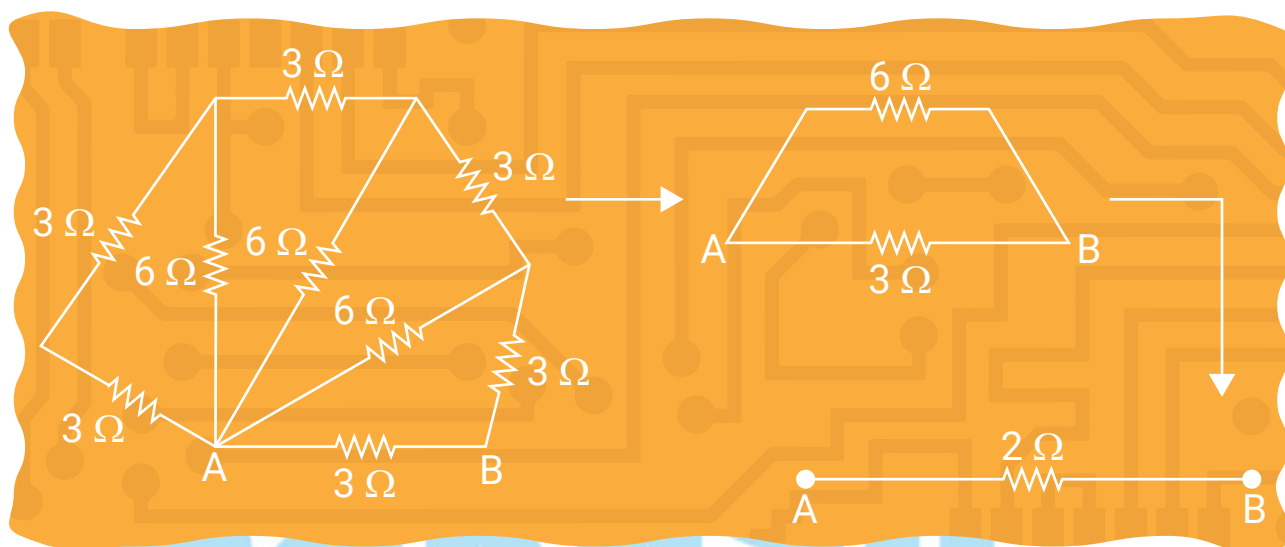




Answer (Thunderbolt)



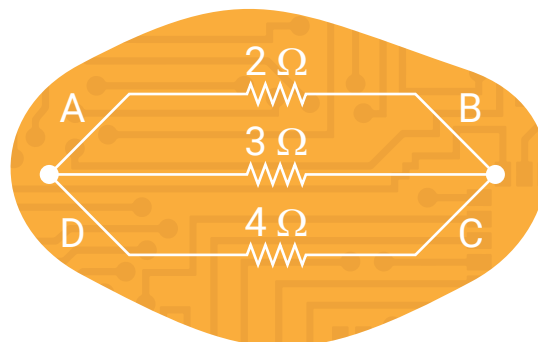
Circuit-I Reconstructed figure equivalent to given figure are given step by step as



Circuit-II The equivalent figure is given as

$$\text{So, } \frac{1}{R_{\text{eq}}} = \frac{1}{2} + \frac{1}{3} + \frac{1}{4}$$

$$R_{\text{eq}} = \frac{12}{13} \Omega$$



Carbon and Its Compounds

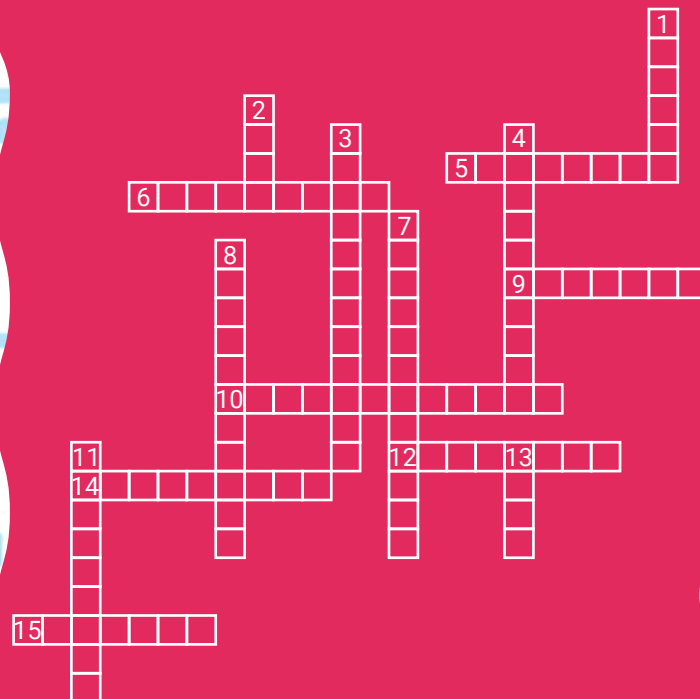
Crossword

Across

- 5. Allotrope of carbon having hexagonal rings. [8]
- 6. Allotrope of carbon also known as bucky ball. [9]
- 9. Common name of saturated hydrocarbons. [7]
- 10. Organic compounds of hydrogen and carbon only. [12]
- 12. Amorphous form of carbon. [8]
- 14. Different physical forms of same element. [9]
- 15. Hardest crystalline form of carbon. [7]

Down

- 1. Unsaturated hydrocarbon containing atleast one double bond between carbon atoms. [6]
- 2. Almost pure form (95%) of carbon. [4]
- 3. Type of charcoal used to decolourise cane sugar. [4, 8]
- 4. Property of self linking of carbon atoms. [10]
- 7. Type of charcoal which is a better fuel than wood. [4, 8]
- 8. Shape of methane. [11]
- 11. Black pigment made from burning kerosene oil used in shoe polishes. [4, 5]
- 13. Greyish black hard solid used for steel manufacturing. [4]



Hydrocarbon as a Fuel

Although hydrocarbons have lot of important uses, they are most importantly used as fuels. This is because their covalent bonds store a large amount of energy, which is released when the molecules are burned.

METHANE

Methane is the main constituent of natural gas. Natural gas is stored under high pressure as compressed natural gas (CNG). It is now being used as a fuel for transport vehicles because it is less polluting. It is a cleaner fuel.

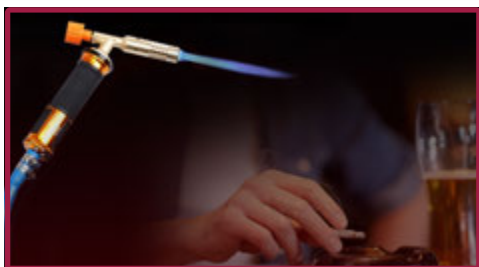


PROPANE AND BUTANE

Liquefied Petroleum Gas or LPG consists mainly of butane and propane. LPG is commonly used as a fuel for cooking and in portable heaters.

ETHYNE

Ethyne (also known as Acetylene) is used for cutting and welding. The welding process that uses oxygen and fuel gas like acetylene is known as oxy-fuel cutting or gas cutting.



BUTANE

Butane is a highly flammable gas which can be easily liquefied. It is typically used as a fuel for cigarette lighters and portable stoves.





Quiz

- Q. 1** In diamond, each carbon atom is bonded to
- (1) Four other carbon atoms
 - (2) Three other carbon atoms
 - (3) Two other carbon atoms
 - (4) Five other carbon atoms

- Q. 2** In graphite, each carbon atom is bonded to
- (1) Five other carbon atoms
 - (2) Four other carbon atoms
 - (3) Two other carbon atoms
 - (4) Three other carbon atoms

- Q. 3** Which one of the following statements is incorrect ?
- (1) An unsaturated hydrocarbon containing a triple bond is called alkyne.
 - (2) An unsaturated hydrocarbon containing a single bond is called alkane.
 - (3) An unsaturated hydrocarbon containing a double bond is called alkene.
 - (4) All of the above

- Q. 4** The property of carbon which enables it to form a large number of carbon compounds is called
- (1) Acidity
 - (2) Catenation
 - (3) Electropositivity
 - (4) All the above

- Q. 5** Which of the following has a free delocalized electron between layers that gives rise to electrical conductivity ?
- (1) Graphite
 - (2) Diamond
 - (3) Fullerenes
 - (4) None of these





Answer

(1) (1)

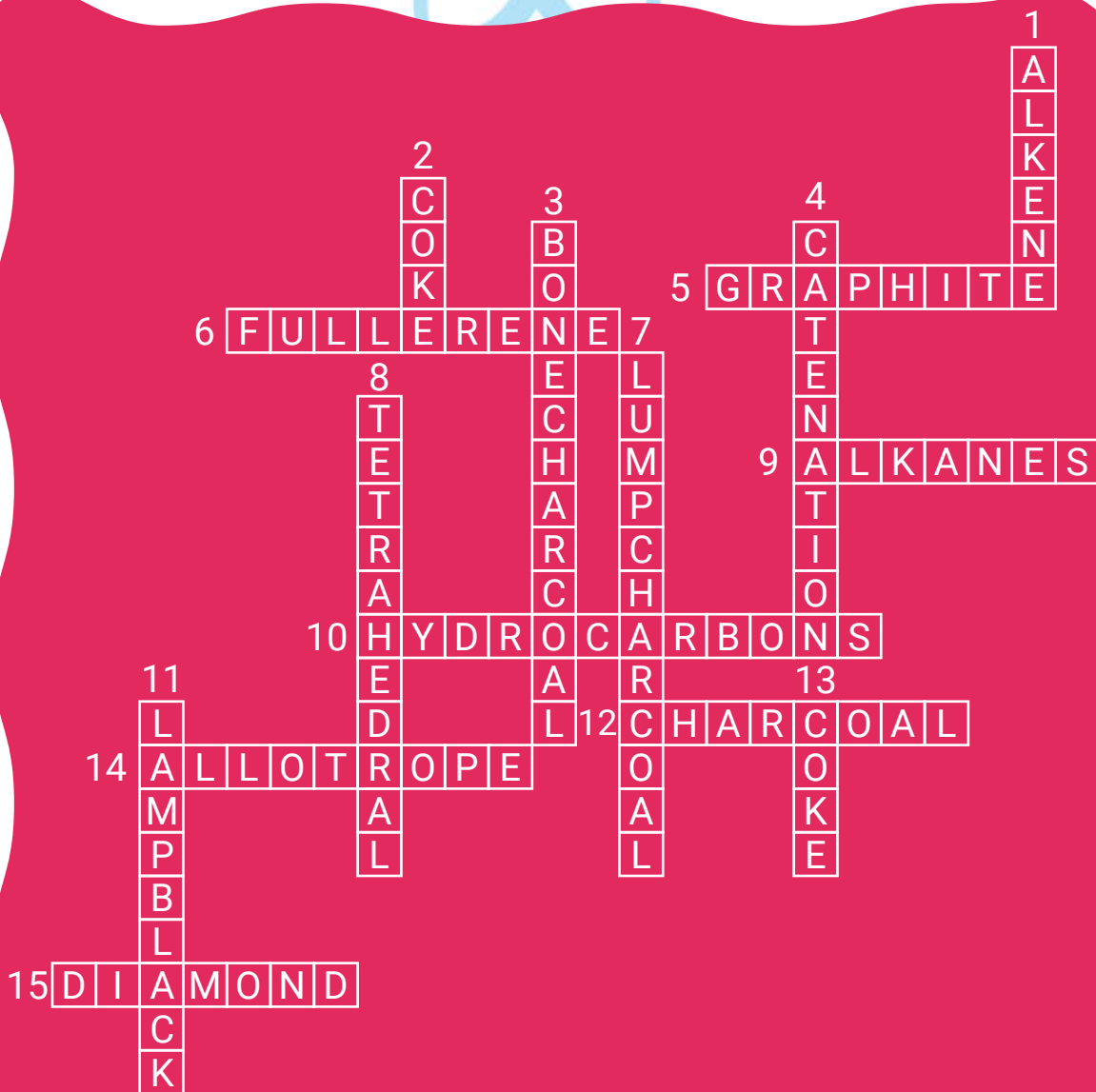
(2) (4)

(3) (2)

(4) (2)

(5) (1)

Answer (Crossword)



Heredity

1. Mendel's Marvels

Mendel studied the seven characters in the pea plant. He died of a kidney disease before he could be rewarded with any fame. We call him the father of genetics today but when three scientists Carl Correns, Hugo de Vries, and Erich von Tschermak rediscovered his work, they had to learn the 7 characters he chose. Let us see how many of these do you know ?

- (i) Dominant flower colour
- (ii) Recessive pod shape
- (iii) Dominant pod colour
- (iv) Recessive seed shape
- (v) Dominant plant height
- (vi) Recessive flower position
- (vii) Dominant seed colour

C	O	N	S	T	R	I	C	T	E	D
Y	D	F	T	E	G	I	J	L	D	G
E	Z	A	Y	R	P	R	L	L	W	F
L	L	B	P	M	O	Q	E	M	R	V
L	K	J	C	I	F	G	H	E	I	S
O	M	K	L	N	B	M	C	O	N	E
W	R	I	T	A	T	G	L	A	K	R
S	D	O	E	L	R	E	D	F	L	T
T	P	O	L	E	T	D	A	L	E	L
P	N	X	A	K	H	B	Z	H	D	Q
W	R	O	L	K	T	V	C	X	Z	W



2. Stupefying Stats of the Ginormous Genome

a. The Human Genome Project: 13 years, \$100 million!

In 2003, the first human genome was revealed. This human genome sequencing took 13 years (1990 - 2003) and US \$100 million. Whereas today some companies offer to do it for you in two days with a price of US \$1000.



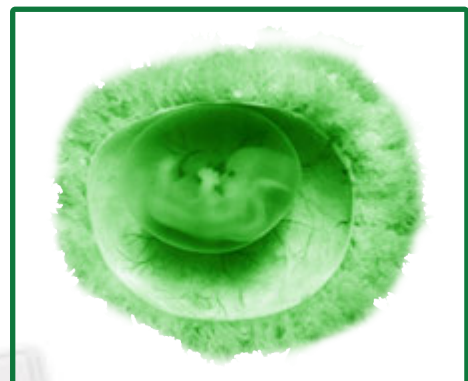
b. Onion genome 5 times bigger than ours

Onion (*Allium cepa*) has a genome size of 15.9 GB, which is ~5 times as much DNA as a human genome (3.3 GB).



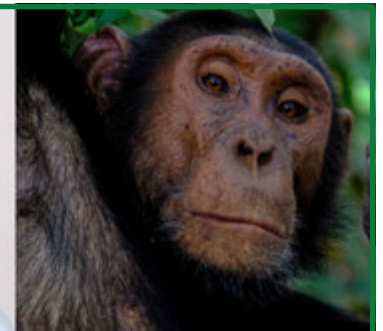
c. We have 8% viral DNA in our genome

The human genome contains around 22,000 genes, but not all of it is our perse. Eight percent of our DNA consists of remnants of ancient viruses that had infected us years ago and inserted their DNA during an infection.



d. You share 99.9% of your genome with the person sitting next to you!

Yes! Your genes are 99% same as a chimp, 97.5% as a mouse, 50% that of a banana! These stats are proof that all living organisms on Earth share the same basic genetics. Our DNA is made up of same four base pairs Adenine, Thymine, Guanine and Cytosine, found wherever life exists, even in viruses!



Punnett Square Made Easy

Gametes	(RY)	(Ry)	(rY)	(ry)
(RY)	RRYY	RRYy	RrYY	RrYy
(Ry)	RRYy	RRyy	RrYy	Rryy
(rY)	RrYY	RrYy	rrYY	rrYy
(ry)	RrYy	Rryy	rrYy	rryy

a. Phenotypic ratio- 9 : 3 : 3 : 1

9 Round Yellow (Red -Biggest triangle)

3 Round Green (Yellow -Corners of smaller triangle)

3 Wrinkled Yellow (Pink -Smallest triangle)

1 Wrinkled Green (Green- Corner most)

- b.** All Heterozygous combinations- In Red diagonal line
- c.** All Homozygous combinations- In other diagonal line (Red, Yellow, Pink, Green)

Answer (Mendel's Marvels)

- (i) Violet
- (ii) Constricted
- (iii) Green
- (iv) Wrinkled
- (v) Tall
- (vi) Terminal
- (vii) Yellow

C	O	N	S	T	R	I	C	T	E	D
Y	D	F	T	E	G	I	J	L	D	G
E	Z	A	Y	R	P	R	L	L	W	F
L	L	B	P	M	O	Q	E	M	R	V
L	K	J	C	I	F	G	H	E	I	S
O	M	K	L	N	B	M	C	O	N	E
W	R	I	T	A	T	G	L	A	K	R
S	D	O	E	L	R	E	D	F	L	T
T	P	O	L	E	T	D	A	L	E	L
P	N	X	A	K	H	B	Z	H	D	Q
W	R	O	L	K	T	V	C	X	Z	W

Forest and Wildlife Resources

Apart from humans, the earth is a home to various microorganisms, bacteria, plants and animals species. We humans along with all living organisms form a complex web of ecological system in which we are only a part and very much dependent on this system for our own existence. For example, the plants, animals and micro-organisms re-create the quality of the air we breathe, the water we drink and the soil that produces our food without which we cannot survive. Hence, it is important for us to know about them.

Interesting Facts

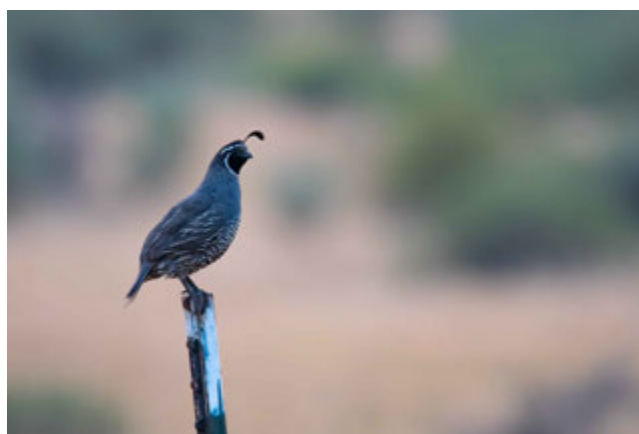
India is one of the 12 Mega Bio-Diversity Countries of the World

- It has about 47,000 plant species which is tenth place in the world and fourth in Asia in plant diversity.
- There are about 15,000 flowering plants in India, which accounts for 6 per cent in the world's total number of flowering plants.
- The country has many non-flowering plants, such as ferns, algae and fungi.
- India also has approximately 90,000 species of animals, as well as, a rich variety of fish in its fresh and marine waters.



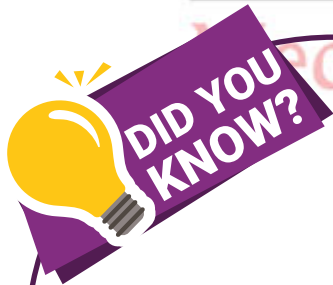
**DID YOU
KNOW?**

About 10 per cent of India's recorded wild flora and 20 per cent of its mammals are on the threatened list. Many of these would now be categorised as 'critical', that is on the verge of extinction like the cheetah, pink-headed duck, mountain quail, and forest spotted owlet.



Reasons Behind The Declining Population of Flora and Fauna

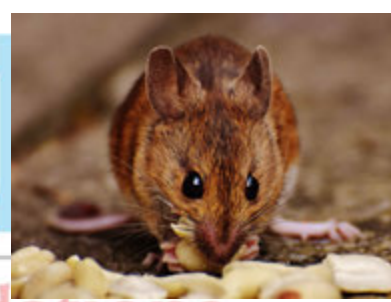
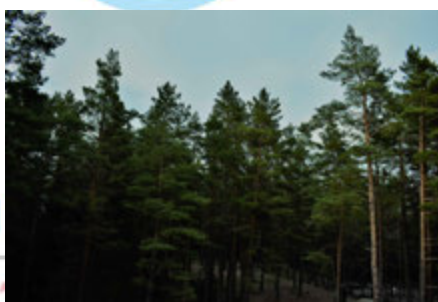
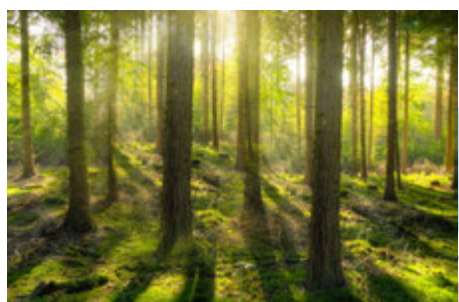
- ◆ Deforestation
- ◆ Habitat Destruction
- ◆ Climate Change
- ◆ Large Scale development projects



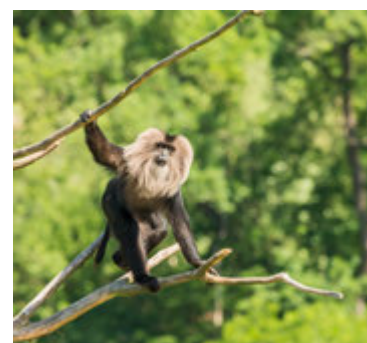
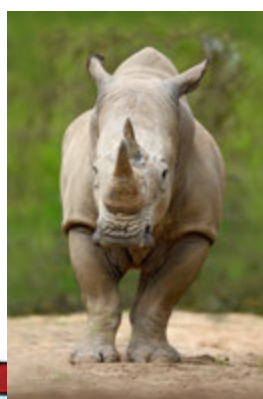
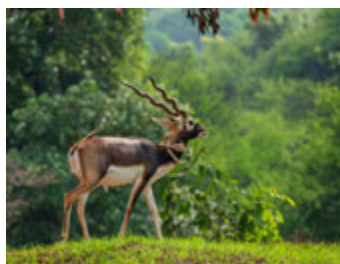
- ◆ 17% of the Amazon rainforest has been lost in the last 50 years due to deforestation.
- ◆ Since 1951, over 5,000 sq km of forest was cleared for river valley projects in India.
- ◆ The Buxa Tiger Reserve in West Bengal is seriously threatened by the ongoing dolomite mining.
- ◆ Over 80,000 tigers, 150,000 leopards and 200,000 wolves were killed for reward in the period 1875-1925.
- ◆ Gradually, the tiger came to be seen as a sporting trophy and Tiger hunting in India became a Royal Sport. The Maharaja of Sarguja alone shot 1,157 tigers and 2,000 leopards up to 1957. A British administrator, George Yule, killed 400 tigers.

Because of the persistent deforestation and declined level of flora and fauna, an International Institution called IUCN (International Union for Conservation of Nature and Natural Resources) led the conservation measures by classifying species into different categories.

- ◆ **Normal Species:** Species whose population levels are considered to be normal for their survival, For example: Cattle, Sal, Pine, Rodents etc.



- ◆ **Endangered Species:** The Species with small population may move into the extinct category if the negative factors affecting them continue to operate. The examples of such species are black buck, crocodile, Indian rhino, lion-tailed macaque etc.

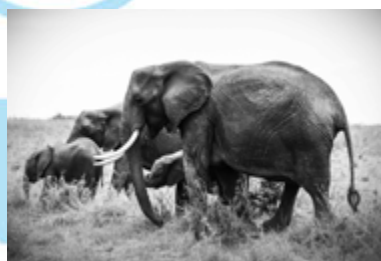




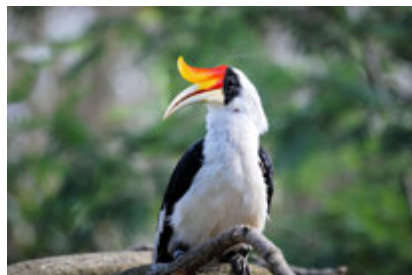
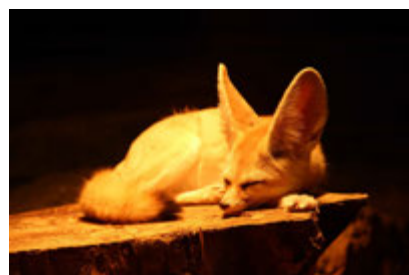
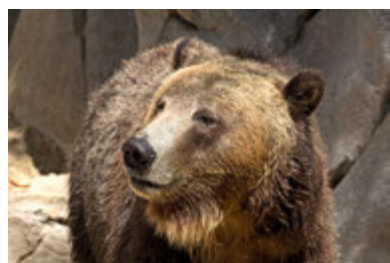
DID YOU KNOW?

Bishnoi Community of Rajasthan known to be the protector of the Blackbucks. They were an instrumental part of the Blackbuck case or Salman Khan Case.

- ◆ **Vulnerable Species:** These are species whose population has declined to levels from where it is likely to move into the endangered category in the near future if the negative factors continue to operate. The examples of such species are blue sheep/ bharal, Asiatic elephant, Gangetic dolphin, etc.

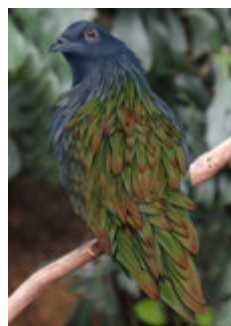
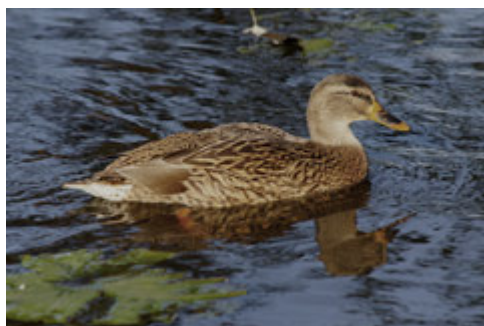


Medical | IIT-JEE | Foundations

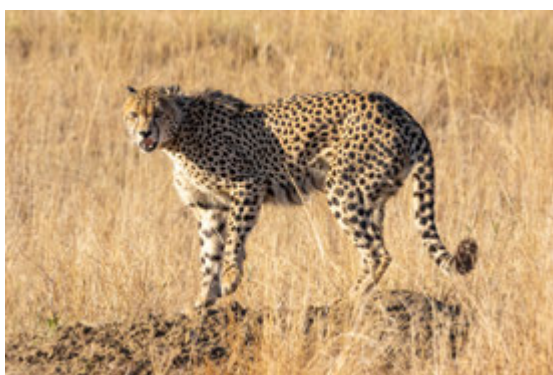


- ◆ **Rare Species:** Species with small population may move into the endangered or vulnerable category if the negative factors affecting them continue to operate. The examples of such species are the Himalayan brown bear, wild Asiatic buffalo, desert fox and hornbill, etc.

- ◆ **Endemic Species:** These are species which are only found in some particular areas usually isolated by natural or geographical barriers. Examples of such species are the Andaman teal, Nicobar pigeon, Andaman wild pig, Mithun in Arunachal Pradesh.



- ◆ **Extinct Species:** These are species which are not found after searches of known or likely areas where they may occur. A species may be extinct from a local area, region, country, continent or the entire earth. Examples of such species are the Asiatic cheetah, pink head duck.



Conservation Methods

- 1 **Wildlife Protection Act, 1972:** This Act provides for the protection of the country's wild animals, birds, and plant species, in order to ensure environmental and ecological security. This act provides for various protected areas like National Parks, Wildlife Sanctuaries, Conservation Reserves, Community Reserves and Tiger Reserves.
- 2 Project Tiger was launched in 1973 in order to protect Tigers.
- 3 Project Elephant was launched in 1992 by the Government of India Ministry of Environment and Forests to provide financial and technical support to wildlife management efforts by states for their free-ranging populations of wild Asian Elephants
- 4 Protection to Great Indian Hornbill by protecting its habitat.

It is high time for us to think, plan and act for the conservation of the flora and fauna for their contribution for the maintenance of the ecological balance until nature chooses its own way to do this.





Quiz

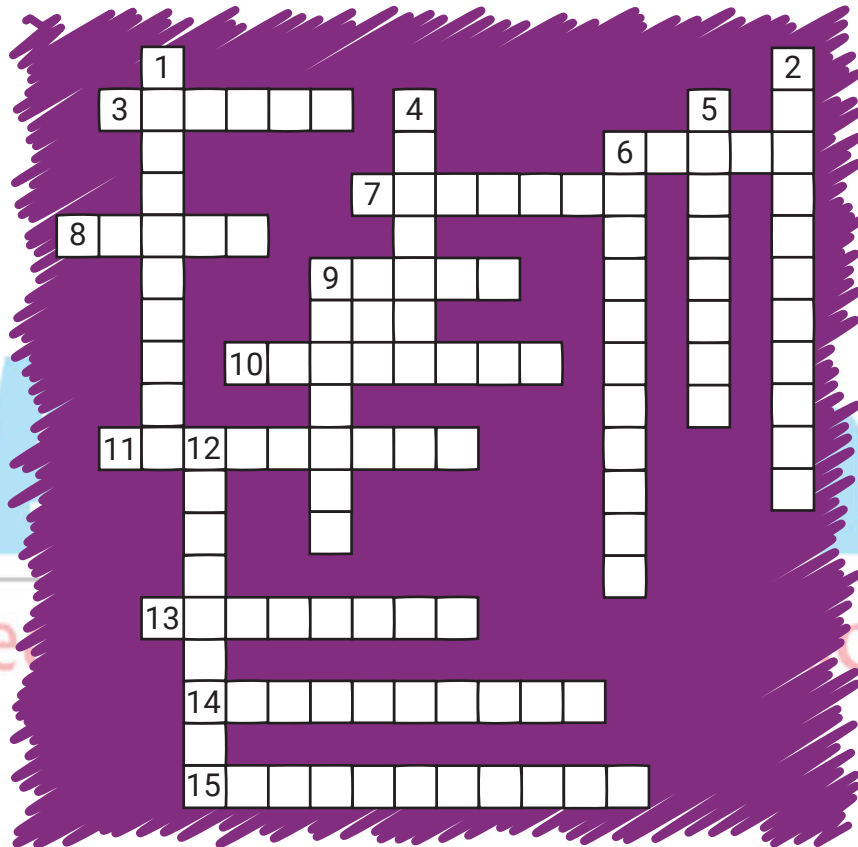
1. IUCN is abbreviated as:
 - (1) International Union for Conservation of Nature and Natural Resources
 - (2) International Union & Council of Nature and Natural Resources
 - (3) Indian Union for Conservation of Nature and Natural Resources
 - (4) International Union for Conservation of Nature and Wildlife
2. Identify the rare species:
 - (1) Desert fox
 - (2) Great Indian Hornbill
 - (3) Himalayan Brown Bear
 - (4) All of these
3. Which of the following is protected under the Wildlife Protection Act?
 - (1) Birds
 - (2) Flora
 - (3) Fauna
 - (4) All of these
4. Project Tiger was launched in which of the following National Parks of India?
 - (1) Rajaji National Park
 - (2) Jim Corbett National Park
 - (3) Gangotri National Park
 - (4) Kaziranga National Park
5. This international institution maintains a comprehensive list of all the species of the world, which is also known as the Red Book. Identify the institution.
 - (1) IUCN
 - (2) WWF
 - (3) Wildlife Conservation Society
 - (4) Conservation International

Answer

1. (1) 2. (4) 3. (4) 4. (2) 5. (1)

Vocabulary

Complete the crossword with nouns formed from the words given below.



Across

- | | |
|-------------|--------------|
| 3. Weigh | 10. Locate |
| 6. Peaceful | 11. Know |
| 7. Romantic | 13. Marry |
| 8. Noisy | 14. Invite |
| 9. See | 15. National |

Down

- | | |
|------------|-------------|
| 1. Permit | 9. Social |
| 2. Prepare | 12. Operate |
| 4. Think | |
| 5. Paint | |
| 6. Perform | |



Choose the correct word to fill in the blanks.

1. There is always the _____ that the plane will be early.

(Opportunity/ Chance/Possibility)

2. My grandfather gave me a very useful piece of _____.

(Advise/Advice)

3. The strike will _____ all trains in the London area.

(Effect/Affect)

4. The police will _____ anyone from leaving the building.

(Avoid/Prevent)

5. Come and sit down _____ me.

(Beside/Besides)

6. _____ managing the shop, he teaches in the evening.

(Beside/Besides)

7. Can you switch to _____ 4 for the news?

(Channel/Canal)

8. Our team has a good _____ of winning.

(Opportunity/Chance/ Possibility)

9. You should travel early to _____ traffic jams.

(Avoid/Prevent)

10. I am getting fed up with her _____ complaints.

(Continual/Continuous)



11. It took two policemen to _____ the traffic.

(Direct/Conduct)

12. I _____ you to put all your money into a savings account.

(Advise/ Advice)

13. I didn't have much _____ on my birthday.

(Fun/Funny)

14. Don't _____ my sunglasses if you borrow them.

(Damage/Harm)

15. The English _____ is beautiful in spring.

(Nature/Countryside)

16. He didn't mean to _____ the girl.

(Damage/Harm)

17. You can get a good _____ of the sea from the church tower.

(View/ Scenery)

18. Her jewels were all imitations; they are quite _____.

(Priceless/ Worthless)

19. You can take a boat trip around the _____ of Amsterdam.

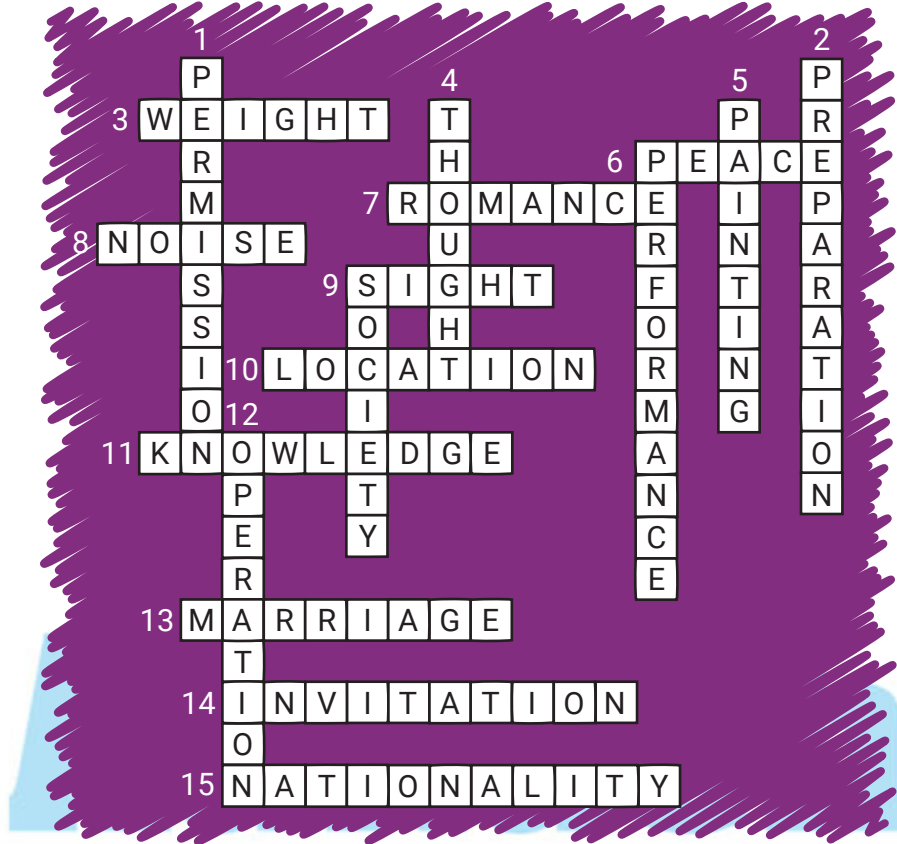
(Channel/ Canal)

20. Von Karajan will _____ the orchestra at the concert.

(Direct/Conduct)



Answer (Crossword)



Answer (Fill in the Blanks)

- | | |
|----------------|-----------------|
| 1. Possibility | 11. Direct |
| 2. Advice | 12. Advise |
| 3. Affect | 13. Fun |
| 4. Prevent | 14. Damage |
| 5. Beside | 15. Countryside |
| 6. Besides | 16. Harm |
| 7. Channel | 17. View |
| 8. Chance | 18. Worthless |
| 9. Avoid | 19. Canal |
| 10. Continual | 20. Conduct |

Syllogism and Series

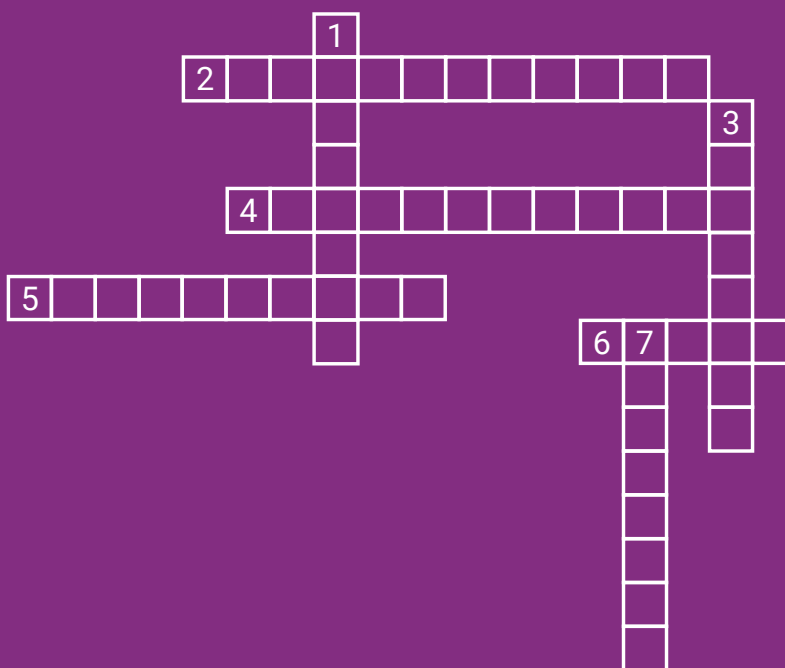
Crossword

Across

2. A syllogism is composition of _____ conditions.
4. 47, 53, 59, 61, 67, is a series of _____
5. _____ condition enough to bring about the effect.
6. One series can have more than one _____

Down

1. 10, 5, 11, 7, 12, 11, 13, is a _____ series
3. "All A is B" and "some A's are B's" are _____ statements
7. AZ, BY, CX, DW and so on, is an _____ alphabet series.



Interesting Facts

A, E, I, O propositions :-

The proposition "Every b is a" is now written "Aba";

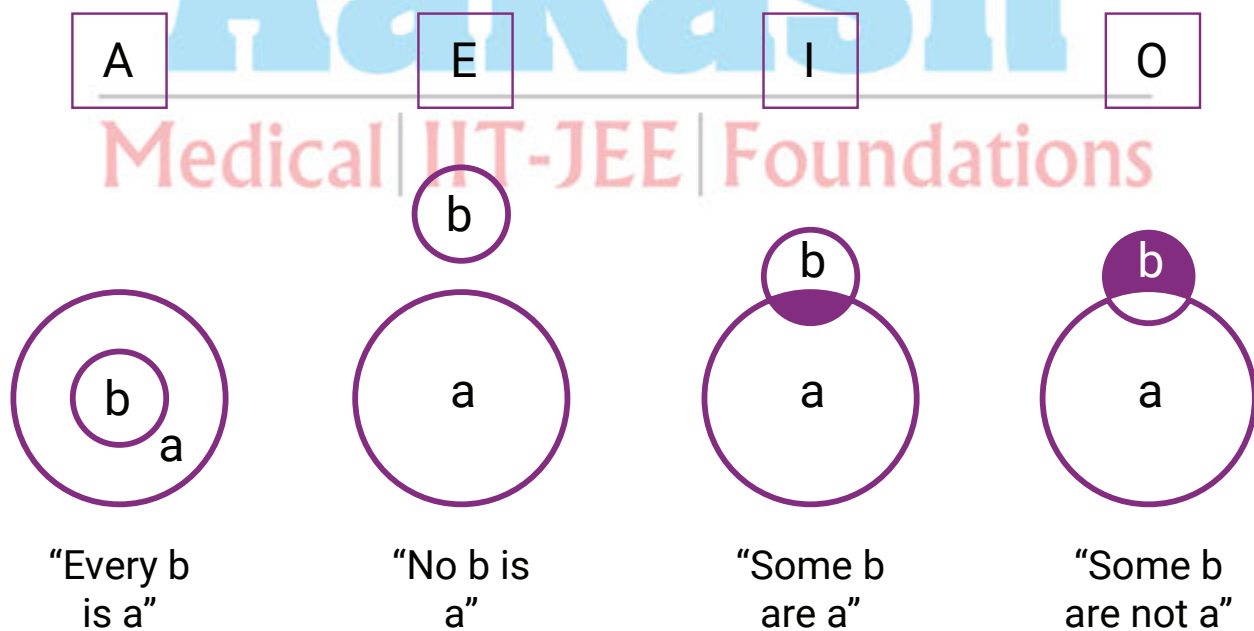
"No b is a" is written as "Eba";

"Some b are a" is written as "Iba";

"Some b are not a" is written as "Oba".

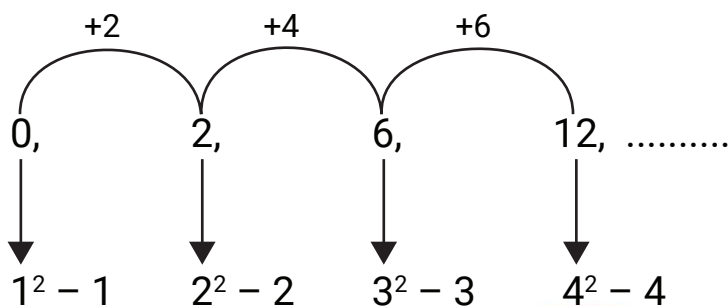


Venn Diagram For A, E, I, O Statements

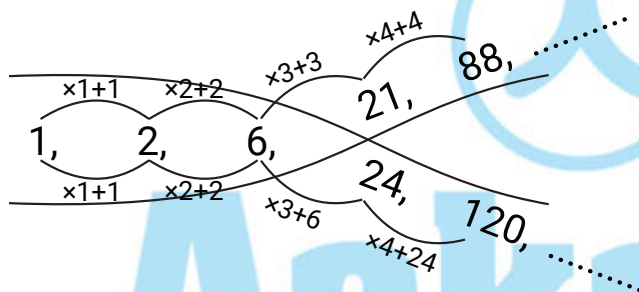


More Than One Logic in One Series

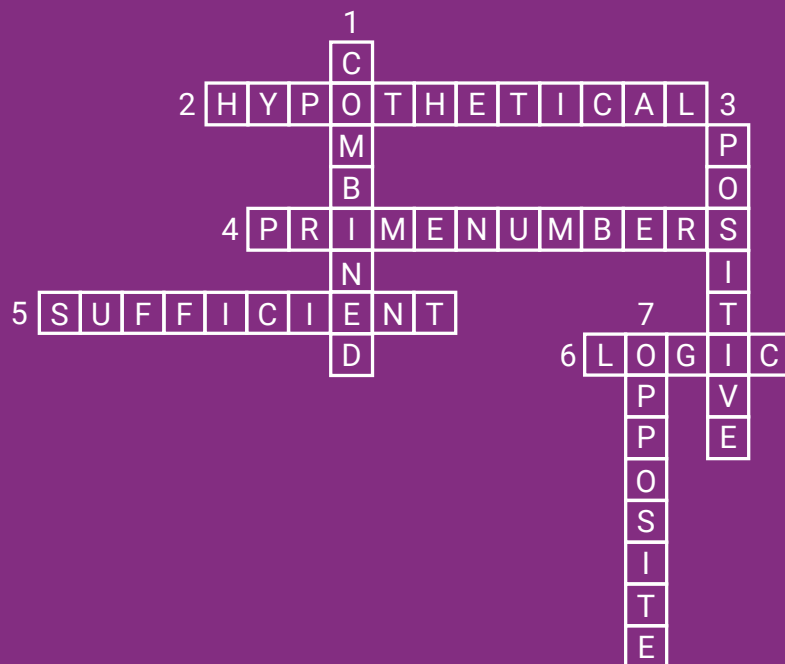
1.



2.



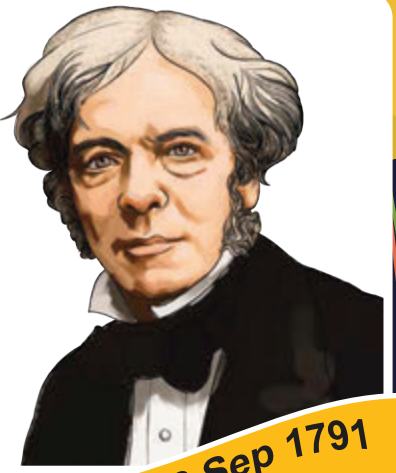
Answer (Crossword)



Happy Birthday

Michael Faraday

“Nothing is too wonderful to be true if it is consistent with the laws of nature.”



Born - 22 Sep 1791
Died - 25 Aug 1867

Born on September 22, 1791, this famous English physicist and chemist is best remembered for his understanding of electromagnetism. Once Faraday discovered that electricity could be made by moving a magnet inside a wire coil, he was able to build the first electric motor. He later built the first generator and transformer. He introduced several words that we still use today to discuss electricity : ion, electrode, cathode and anode.

OUR STUDENTS DELIVER OUTSTANDING RESULTS IN CBSE CLASS X BOARD 2026



Aashna Khurana

100%

Marks Obtained **500**/500



Jaskirat Singh

100%

Marks Obtained **500**/500



Siddhesh Ingale

100%

Marks Obtained **500**/500



Yuvaan Singh

100%

Marks Obtained **500**/500



Shibashis Behera

100%

Marks Obtained **500**/500



Thanmaya Binukumar

100%

Marks Obtained **500**/500



Himanshu Aggarwal

100%

Marks Obtained **500**/500



Misha Palepu

100%

Marks Obtained **500**/500



Atharv Varshney

100%

Marks Obtained **500**/500



Aditya Raj

99.80%

Marks Obtained **499**/500



Ayaan Chettiar

99.80%

Marks Obtained **499**/500



Yashraj Yadav

99.80%

Marks Obtained **499**/500



Advit Agarwal

99.80%

Marks Obtained **499**/500



Avni Kapila

99.80%

Marks Obtained **499**/500



Biswarupa Nanda

99.80%

Marks Obtained **499**/500



Amrita Pani

99.80%

Marks Obtained **499**/500



Ishaan Chattopadhyay

99.80%

Marks Obtained **499**/500



Arnav Gupta

99.80%

Marks Obtained **499**/500



Suhana Mehta

99.80%

Marks Obtained **499**/500



Arjun Dhar

99.80%

Marks Obtained **499**/500

Marks
500

9
Students

Marks
499
& above

20
Students

Marks
495
& above

177
Students

Marks
450
& above

6509
Students

CALL (TOLL-FREE): **1800-102-2727**
VISIT: **aakash.ac.in**

Admissions Open
NEET | JEE | Foundation
For Class 8th-12th

and many more...

NEET 2025 Wasn't Easy. Our Results Say Otherwise.

5 AAKASHIANS IN TOP 10 AIR NEET(UG) 2025



OUR NATIONAL TOPPERS IN NEET (UG) 2025



Our Problem *Solvers* shine bright in **JEE (Advanced) 2025**

Our Top 100 AIR



> Aakashians Create History in International Olympiads

(Classroom Program Students)



Dhruv Advani

IBO 2023



Gold Medalists

34th International Biology Olympiad



Rohit Panda



Chirag Falor



International Olympiad on
Astronomy & Astrophysics



Dhiren Bhardwaj



32nd International
Biology Olympiad



Anshul



32nd International
Biology Olympiad



Amritansh Nigam



33rd International
Biology Olympiad



Prachi Jindal



33rd International
Biology Olympiad



Tanishka Kabra



54th International
Chemistry Olympiad

420

Classroom Students
Qualified in
NSEs* 2024-25

1484 Students Scored Above MAS

(Group A & B)
49
NSEA*

(Group A & B)
229
NSEB*

(Group A & B)
70
NSEC*

(Group A & B)
38
NSEP*

34
NSEJS*

Aakashians Qualified for INO-2025



Krishna Agrawal
NSEA | NSEP | NSEC



Mohit Shekher Shukla
NSEA | NSEP | NSEC



Utkarsh Awadhiya
NSEB | NSEP | NSEC



Rupayan Pal
NSEC | NSEP | NSEP



Devansh Garg
NSEJS



Aaron Thakkar
NSEJS

*NSEA-National Standard Examination in Astronomy | NSEB-National Standard Examination in Biology | NSEC-National Standard Examination in Chemistry
NSEP-National Standard Examination in Physics | NSEJS-National Standard Examination in Junior Science | INO-Indian National Olympiad

and many more...

Aakashians Qualified for RMO 2024

899

Classroom Students

Qualified
in IOQM
2024



Joish Achyuta
Class - VIII



Dhanush Damu
Class - IX



Arnav Singh
Class - X



Pranit Goel
Class - XI



Aayush Agarwal
Class - XII

and many more...

Aakashians Qualified for INMO 2025

161

Classroom Students

Qualified
in RMO 2024-25



Kotha D Reddy
Reg. No. 00006657265



Abhipraya Verma
Reg. No. 00010407513



Aditya Singh
Reg. No. 00012631688



Rujul Garg
Reg. No. 00005153903



Mohit Shekher Shukla
Reg. No. 00006093814

and many more...

Aakashians Qualified for OCSC/IMOTC-2025

25

Classroom Students

Qualified
in INOs 2025



Pranit Goel
Qualified INMO



Harshit Singh
Qualified INJSO



Subhrojit Paul
Qualified INBO



Mohit Shekher Shukla
Qualified INChO



Rujul Garg
Qualified INPhO



Aditya Singh
Qualified INAO Jr

and many more...

Aakashians Qualified for Merit Certificate

1019

Classroom Students

Qualified
in IMO (Level-I)
2023-24



Intl.
Rank
1

Prisha Miglani
Class - IX



Intl.
Rank
2

Sushant Agarwal
Class - X



Intl.
Rank
4

Ekaashar Gupta
Class - IX



Intl.
Rank
7

Harshit Singh
Class - VIII

438

Classroom Students

Qualified
in IMO (Level-II)
2024

and many more...

Aakashians Qualified for Merit Certificate

4902

Classroom Students

Qualified
in NSO (Level-I)
2024-25



Intl.
Rank
2

Meghav Ladani
Class - X



Intl.
Rank
2

Anubhab Manna
Class - VIII



Intl.
Rank
3

Arnav Gupta
Class - IX



Intl.
Rank
7

Parshti Bajpai
Class - IX



Intl.
Rank
10

Shreya
Class - VIII

and many more...