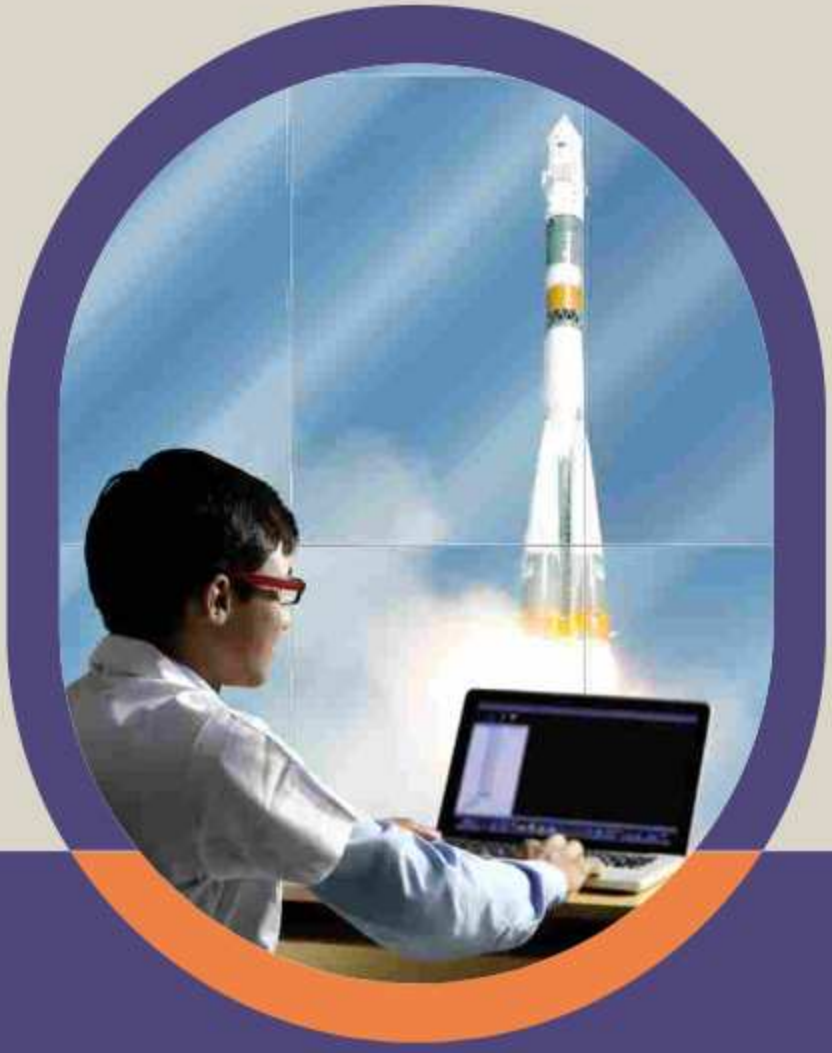
For Achieving Highest Result in S.S.C. Board

PAPER SET 2026



• Science & Tech. • Maths (Standard+Basic) • English • Social Science

The School Of Science (SOS)

| Our Goal |

The courses of Gujarat Board (CBSE Board) in 11th and 12th Science are completed by highly qualified and experienced teachers giving the equal priority and separetely preparation GUJ-CET Exams which are given innovatively so that the students can perform the best in NEET-UG and JEE-MAIN exams at national level and build their bright career in medical and engineering.

| The Organizers |

If you check the records of years in any institute, you will find that,
"TEACHERS ARE CHANGING IN EACH SCHOOL" BUT...

"The Only School In Gujarat Where...
... The Teachers Are The Organizers Of The Institute."

Prof. Paneliya (Physics)
M.Sc.

Dr. Ketan Bhalodiya (Biology)
M.Sc., B.Ed., M.Phil., Ph.D., C.C.I.T.R.

Mr. Punit Vyas (Physics)
M.Sc., B.Ed.

Dr. Vishal Narodiya (Chemistry)
M.Sc., B.Ed., Ph.D.

Mr. Dharmesh Patel (English)
M.A.

Mr. Shatrughan Sinhar (Chemistry)
B.E. Chemical - Nirma

Mr. Garala (Maths)
M.Sc., B.Ed.

Mr. Vipul Paneliya

NEET 2025

Leading in NEET... SOS

566
OUT OF 720
Solanki Abhijit

549
OUT OF 720
BHIMANI POOJAN

534
OUT OF 720
Shishangiya Tejas

532
OUT OF 720
Panara Ansh

524
OUT OF 720
Chauhan Rutika

GUJ-CET 2025

56 Students have obtained **90 PR** or more

Forth in Board
Vaghela Jash
PR **99.96**
MARKS
116.25 / 120

Solanki Abhijit
PR **99.79**
MARKS
112.75 / 120

JEE-MAIN 2025

TOPPERS

PR
98.90
BHINDI MEET

PR
97.88
Khatariya Mahesh

PR
97.66
Bakutra Rasik

59 Students QUALIFIED for JEE-ADVANCED

STD. 12 — 2025 — 39 Students achieving **Science Grade A1** in the Group-A & B

Second in the Board

Jadav Ankit

PR
99.98

Sci. Grade A1 Overall Grade A1

Second in the Board

Khatariya Mahesh

PR
99.98

Sci. Grade A1 Overall Grade A1

Fifth in the Board

Solanki Abhijit

PR
99.95

Sci. Grade A1 Overall Grade A1

Tenth in the Board

BHIMANI PUJAN

PR
99.90

E.M.

Sci. Grade A1 Overall Grade A1

Group A
Parmar Meet
PR **99.79**

Group B
Chauhan Rutika
PR **99.76**

Group A
Bakutra Rasik
PR **99.70**

Group A
Chavda Viren
PR **99.63**

Group B
Bodar Aayush
PR **99.47**

Group A
Bhuva Aashmi
PR **99.27**

Group B
Vaghela Jash
PR **99.22**

Group A
Makwana Bhargav
PR **99.20**

Group A
Kavathiya Virat
PR **99.11**

Group A
Pathar Ankit
PR **99.11**

RESULT AT A GLANCE BOARD 2025	
	The students Getting **95** PR or More **040**
The students Getting **99** PR or More **014**	The students Getting **90** PR or More **076**
The students Getting **98** PR or More **022**	The students Getting **85** PR or More **127**

STD. 12 — 2024 — 67 Students achieving **Science Grade A1** in the Group-A & B

First in SOS

Bhatiya Vasu

PR **99.86**

Sci. Grade A1 — Overall Grade A1

Second in SOS

Shingala Dhruv

PR **99.81**

Sci. Grade A1 — Overall Grade A1

Second in SOS

Chauhan Aditya

PR **99.81**

Sci. Grade A1 — Overall Grade A2

Chauhan Parthvi
PR 99.77

Vank Raj
PR 99.77

Parekh Maitri
PR 99.73

Mansara Harshil
PR 99.72

Dalsaniya Harshil
PR 99.72

Kalola Tej
PR 99.62

Songara Rahul
PR 99.38

Sherasiya Yagnik
PR 99.31

Parmar Samir
PR 99.15

Maradiya Prashil
PR 99.15

Sanghani Prince
PR 99.10

Jadeja Jaydipsing
PR 99.10

OZA PARTH
PR 99.04

RESULT AT A GLANCE BOARD 2024

The students Getting **95** PR or More **083**	
The students Getting **99** PR or More **016**	The students Getting **90** PR or More **139**
The students Getting **98** PR or More **037**	The students Getting **85** PR or More **178**

STD. 12 — 2023 — 10 Students achieving **Science Grade A1** in the board

First in SOS

Bavariya Diya

PR **99.73**

Sci. Grade A1 — Overall Grade A1

Second in SOS

Bakutra Jigar

PR **99.59**

Sci. Grade A1 — Overall Grade A1

Third in SOS

Bhatt Disha

PR **99.56**

Sci. Grade A1 — Overall Grade A2

Dethariya Yash
PR **99.36**

Kambariya Yash
PR **99.34**

Soni Het
PR **99.24**

Solanki Darshil
PR **99.23**

Solanki Neha
PR **99.21**

Ladumor Amit
PR **99.18**

Vaghela Nainil
PR **99.07**

RESULT AT A GLANCE BOARD 2023	
The students Getting **90** PR or More **089**	
The students Getting **98** PR or More **022**	The students Getting **85** PR or More **125**
The students Getting **95** PR or More **050**	The students Getting **80** PR or More **157**

PAPER – 1	SCIENCE & TECH.(11)	TIME : 3 Hrs.

Total Marks 80 **Section – A** **24 Marks**

♣ **Answer the following Q. nos.1 to 24 as directed. (1 Mark each)**

1. Ethane , with the molecular formula C_2H_6 has _____
   (A) 6 covalent bonds (B) 7 covalent bonds
   (C) 8 covalent bonds (D) 9 covalent bonds
2. 10 ml of a solution of NaOH is found to be completely neutralised by 8 ml of the solution of HCl. If we take 20 ml of the same solution of NaOH, the amount of HCl solution (the same solution as before) required to neutralise it, will be.....
   (A) 4 ml (B) 8 ml (c) 12 ml (D) 16 ml
3. Which of the following terms does not represent electrical power in a circuit ?
   (A) I^2R (B) IR^2 (C) VI (D) $\frac{V^2}{R}$
4. Write the correct order of anaerobic respiration occurring in yeast ?
   (A) Glucose $\longrightarrow$ Pyruvic $\longrightarrow$ Ethanol + Oxygen
   (B) Glucose $\longrightarrow$ Pyruvate $\longrightarrow$ Lactic-acid + CO_2 + H_2O
   (c) Glucose $\longrightarrow$ Pyruvate $\longrightarrow$ Lactic acid
   (D) Glucose $\longrightarrow$ Pyruvate $\longrightarrow$ Ethanol + Carbon dioxide
5. The rate of flow of an electric charge is known as _____ .
   (A) Electric potential (B) Electric conductance
   (C) Electric current (D) None of these
6. The least distance of distinct vision for a young adult with normal vision is about .
   (A) 25 m (B) 2.5 cm (c) 25 cm (D) 2.5 m

* **Fill in the blanks :**

7. The common formula of Alkane is _____ (C_nH_{2n+2}, C_nH_{2n}, COH_{2n-2})
8. _____ is digested by lipase enzyme. (Protein, Fat, Carbohydrate)
9. Carbohydrate is synthesized by the reduction of CO_2 in the process of _____ (Osmosis, Photosynthesis, Digesion)
10. The variations generated during_____ . become hereditary. (Sexual Reproduction, Asexual reproduction, Pollination)
11. Radius of the curvature of the spherical mirror is 20 cm, then its focal length is ____ cm. (10, 20, 5)
12. Cinnabar is an ore of _____ . (Carbon, Mercury, Chromium)

* **True or False :**

13. Gold is the most malleable element.
14. Female have 'XY'- sex chromosome and male have 'XX' -sex chromosome.
15. The splitting of white light into its component colours is called dispersion.

16. Farmers add lime to neutralise the acidic soil.

* **Answer in one word :**

17. Name any two phytohormones, which are growth promoters.
18. What is the possibility of an offspring being son or daughter?
19. What is the difference between actual sunset & apparent sunset ?
20. How many Joules are equal to 10 unit ?

* Match the following pairs correctly.

Column 'A' (Endocrine Glands)	**Column 'B' (Hormone)**
21. Thyroid Gland	(a) Adrenaline
22. Adrenal Gland	(b) Insulin
	(c) Thyroxine

Section-A	**Section-B**
23. (a) Fission	(I) Spirogyra
24. (b) Fragmemntation	(ii) Amoeba
	(iii) Rhizopus

Section – B 18 Marks

♣ **Answer any 9 (nine) questions from the Q.nos. 25 to 37 within the limit of 40 to 50 words as directed : (2 marks each)**

25. Give one example of a combination reaction which is also exothermic.

OR

Describe combination reaction with examples.

26. Give a scientific reason : Reaction of Copper with diluted H_2SO_4 does not release hydrogen gas.
27. Draw Neat & labelled structure of Nephron.
28. Give names of asexual reproduction method and explain fission in amoeba.
29. Draw a labelled diagram of longitudinal section of flower.
30. Explain the Tyndall effect.
31. Use the data in Table to answer the following :

	Material	Resistivity (Ωm)
Conductors	Silver	1.60×10^{-8}
	Copper	1.62×10^{-8}
	Aluminium	2.63×10^{-8}
	Tungsten	5.20×10^{-8}
	Nickel	6.84×10^{-8}
	Iron	10.0×10^{-8}
	Chromium	12.9×10^{-8}
	Mercury	94.0×10^{-8}
	Manganese	1.84×10^{-6}
Alloys	Constantan (alloy of Cu and Ni)	49×10^{-8}
	Manganin. (alloy of Cu, Mn and Ni)	44×10^{-8}
	Nichrome (alloy of Ni. Cr, Mn and Fe)	100×10^{-8}
Insulators	Glass	$10^{10} \times 10^{14}$
	Hard rubber	$10^{13} \times 10^{16}$
	Ebonite	$10^{15} \times 10^{17}$
	Diamond	$10^{12} \times 10^{13}$
	Paper(dry)	10^{12}

(I) Which among iron and mercury is a better conductor ?

(II) Which material is the best conductor ?

32. When a 12 V battery is connected across an unknown resistor, there is a current of 2.5 mA in the circuit. Find the value of the resistance of the resistor.

33. Draw magnetic field lines around a bar magnet.

34. Give a scientific reason : Why is it necessary to stop the uncontrolled usage of pesticides and other chemicals ?

35. Give a scientific reason : Energy flow is unidirectional in ecosystem.

36. How are water and minerals transported in plants ?

37. Why is the colour of the clear sky blue ?

Section – C **18 Marks**

♣ **Answer any 6 (six) questions from the Q. nos. 38 to 46 within the limit of 60 to 80 words as directed : (3 Marks each)**

38. What is decomposition reaction ? What is known as thermal decomposition ? Explain with example.

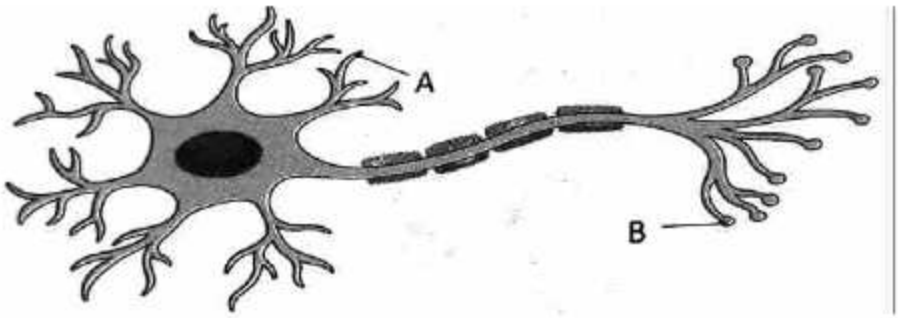
39. Write about the common properties of metals.

OR

Physical properties of metals.

40. (I) Write the electron-dot structures for sodium, oxygen and magnesium.
(II) Show the formation of Na_2O and MgO by the transfer of electrons.
(III) What are the ions present in these compounds ?

41. Answer the following questions on the basis of given diagram.



(a) Name the part 'A' and write its function.

(b) Name the part 'B' . Write its function.

42. Explain any two types of asexual reproduction.

43. Explain : Refraction of light through rectangular glass-slab.

44. Draw a ray diagram showing the image formation by a convex lens when an object is placed between F_1 & $2F_1$ of lens. Write position nature & size of image.

45. Explain budding in organism.

46. The potential difference between the terminals of an electric heater is 60 V when it current of 4A from the source, What current will the heater draw if the potential difference is increased to 120 V?

Section – D **20 Marks**

♣ **Answer any 5 (five) questions from the Q. nos. 47 to 54 within the limit of 90 to 120 words as directed : (4 Marks each)**

47. Write the manufacturing process and uses of Plaster of Paris.

OR

How is Plaster of paris formed ? Write an equation to show the reaction between Plaster of Paris & Water ? Write uses of Plaster of Paris.

48. What chemical does your mom use to make crispy pakoda or cake in the kitchen ? Write the name and manufacturing process with chemical equation.

49. What is a homologous series ? Explain with an example.

50. What is nutrition? Write its types and explain about auto-trophic nutrition.

51. What is Respiration ? Explain its types.

52. A student has difficulty in reading the blackboard while sitting in the last row. What could be the defect the child is suffering from ? How can it be corrected ? Explain with diagram .

53. Draw a common domestic electric circuit and explain about the main characteristics of the domestic electric circuit.

54. (a) What is biological magnification ?
(b) Classify the following into biodegradable & Non biodegradable susbtance ?

PAPER – 2	SCIENCE & TECH.(11)	TIME : 3 Hrs.

Total Marks 80 **Section – A** **24 Marks**

♣ **Answer the following Q. nos.1 to 24 as directed. (1 Mark each)**

(1) Which catalyst is used to convert vegetable oil into vegetable ghee ?
(A) Mineral acid (B) Nickel (C) Carbon (D) Aluminium.

(2) Metal + Acid → _____.
(A) Salt + Acid (B) Salt + H_2 (C) Base + Water (D) Base + H,

(3) Three resistors of resistance 5 Ω, 10 Ω and 15 Ω are connected in parallel then the equivalent resistance of the circuit would be _____ .
(A) less than 5 Ω (B) More than 15 Ω
(C) less than 30 Ω (D) Equal to 30 Ω

(4) What is the product from glucose in the first phase of respiration?
(A) Ethanol (B) Lactic acid (C) Pyruvate (D) CO_2

(5) Mahesh has no match-box to burn a paper. What can be used at daytime to burn the paper?
(A) Rectangular glass slab (B) Convex mirror
(C) Concave mirror (D) Convex lens

(6) Which phenomenon is responsible for the twinkling of stars
(A) Dispersion of light (B) Scattering of light
(C) Atmospheric reflection (D) Total internal reflection

♣ **Fill in the blanks so as to make each of the following statements true:**

(7) The earth's crust has only _____ % carbon in the form of minerals. (0.02, 0.5, 1)

(8) _____ j work is done in moving a charge of 2 C across two points having electric potential difference 12 V. (6, 10, 24)

(9) In anaerobic respiration by our muscle cells, the pyruvate is converted into ..... (ethanol, acetic acid, lactic acid)

(10) _____ animal can change sex. (Lizard, Snail, Frog)

(11) _____ is the SI unit to measure power of a lens. (watt, diopter, jule)

(12) _____ is an alloy of lead and tin. (Brass, Bronze, Solder)

♣ **State whether the following statements are true or False:**

(13) Gallium metal has very low melting point.

(14) In humans. the sex of the child is determined by the Y chromosome of the father.

(15) The wavelength of red colour of light is about 1.8 times than that of blue colour of light.

(16) The separation of H ion HCI molecules cannot occur in the absence of water.

♣ **Answer the following questions as directed** :

(17) Find mismatched pair:
(1) Pancreas - insulin
(2) Pituitary gland - adrenaline
(3) Ovary - Estrogen

(18) In Mendal's pea plant experiment. What do the progeny of cross made between tall plant with round seeds and a short plant with wrinkled seeds look-like?

(19) State the function of the Iris.

(20) **Define :-** Electric potential difference.

♣ **Match the following pairs correctly :**

Column: (A)	**Column: (B)**
(21) Thyroxine	(A) Development of female sex organ
(22) Testosterone	(B) Regulates metabolism for body growth
	(C) Development of male sex organ

Column: (A)	**Column: (B)**
(23) Herbivores	(A) Tiger
(24) Carnivores	(B) Human
	(C) Deer

SECTION:-B

♣ **Answer any 9 (nine) questions from the Q.nos. 25 to 37 within the limit of 40 to 50 words as directed : (2 marks each)** **(18)**

(25) A shiny brown coloured 'X' on heating in air element 'X' and the black coloured compound formed

(26) Write four general properties of iconic compounds.

(27) What is photosynthesis ? Write the equation for photosynthesis.

(28) How does binary fission differ from multiple fission?

(29) What could be the reasons for adopting contraceptive methods?

(30) The production of household waste can be reduced by somr simple steps. Explain.

(31) Why does the sky appear dark insted of blue to an astronaut?

(32)

Material	**Resistivity**
Silver	1.60×10^{-8}
Copper	1.62×10^{-8}
Iron	10.0×10^{-8}
Mercury	94.0×10^{-8}
Manganese	1.84×10^{-8}

Use the data from the above table to answer the following questions:

(A) Which among iron and mercury is a better conductor ?

(B) Which material is the best conductor ?

(33) Draw a labelled diagram of an electric circuit comparing a battery, electric bulb, ammeter and plug key (closed). show the direction of the conventional current.

(34) Explain Right- hand thumb rule with figure.

(35) Write the differences between Biotic factor and Abiotic factor.

(36) Describe double circulation of blood in human beings.
(37) Explain : Excretion in plants.

SECTION:-C

♣ **Answer any 6 (six) questions from the Q. nos. 38 to 46 within the limit of 60 to 80 words as directed : (3 Marks each) (18)**

(38) What is a balanced chemical equation ? Why should chemical equations be balanced?
(39) Explain Thermit process with equation.
(40) Explain the extraction of metals in the middle of the reactivity series.
(41) Draw the diagram showing the structure of nerve cell (neuron) and describe its functions.
(42) What are the advantages of sexual reproduction over asexual reproduction?
(43) Draw and explain the regeneration in planaria through a labelled diagram.
(44) Name the type of mirror used in the following situations:
(A) Headlights of a car
(B) Side/rear-view mirror of a vehicle
(C) Solar furnace.
(45) Draw a neat labelled ray diagram for the formation of Image by a concave mirror, when the object is placed at centre of curvature. State the position of Image, type and size.
(46) Mahesh keeps a lighted candle 30 cm in front of the mirror to study the image formed by a convex mirror. If the focal length of the mirror is 15 cm, then find the distance of the image from the mirror. State the type of image. Draw a ray diagram to verify your answer.

SECTION:-D

♣ **Answer any 5 (five) questions from the Q. nos. 47 to 54 within the limit of 90 to 120 words as directed : (4 Marks each) (20)**

(47) Describe the experimental setup and draw the diagram to show the reaction of sodium carbonate with dilute hydrochloric acid.
(48) Write four chemical properties of acids with chemical equations.
(49) Explain the oxidation of ethanol. Write the physical properties and uses of ethanol.
(50) Draw neat and clean diagram or digestive system of human. Describe the digestion in small intestine.
(51) (A) What are the necessary conditions for autotrophic nutrition and what are its byproducts?
(B) What is the function of mucus and pepsin in the gastric juice?
(52) What is dispersion of white light by a glass prism? Explain the dispersion of white light by the glass prism with a diagram.
(53) What is solenoid? Discuss the characteristics of magnetic field generated from a current- carrying solenoid coil with figure.
(54) (A) How is ozone formed? State the significance of ozone layer.
(B) Classify the following materials as biodegradable and non-biodegradable:
Leftover food, Iron scrap, polythene, fruit and vegetable peels.

PAPER – 3	SCIENCE & TECH.(11)	TIME : 3 Hrs.

Total Marks 80 **Section – A** **24 Marks**

♣ **Answer the following Q. Nos.1 to 24 as directed. (1 Mark each)**

1. By which name the compounds containing functional group-CHO are known ?
   (A) Ketone (B) Alcohol (C) Carboxylic (D) Aldehyde
2. Which of the following solution is most basic ?
   (A) pH = 8.2 (B) pH = 9.3 (C) pH = 11.5 (D) pH = 10.6
3. Which of the following formula represents voltage ?
   (A) $\frac{\text{Work}}{\text{current} \times \text{time}}$ (B) $\frac{\text{Work} \times \text{time}}{\text{current}}$
   (C) Work x electric charge (D) Work x electric charge x time
4. Which one of the following organisms can live without oxygen or air ?
   (A) Amoeba (B) Leech (C) Green plant (D) Yeast
5. What is the focal length of a convex lens having power + 5.0 D ?
   (A) -10 cm (B) -20 cm
   (c) + 10 cm (D) + 20 cm
6. Through which of the following points, will light ray passing through the centre of curvature (A) and reflected by a concave mirror pass ?
   (A) Focus (B) Centre of curvature
   (C) Pole (D) All

♣ **Fill in the blanks so as to make each of the following statements true:**

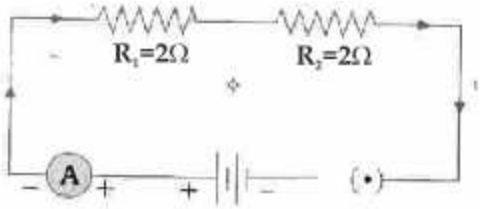
7. Substitution of hydrogen of methane by chlorine in the presence of sunlight forms _____ . (Chloro methane, chloro ethane, chloro methene)
8. When a ray of light travels from water to air, its speed _____. (Constant, Increasing, Decreasing)
9. Pepsin is an enzyme that can act only on _____ medium. (Acidic, Basic, Neutral)
10. When tall pea plant (TT) and short pea plant (tt) were hybridized, it produced all tall progency because tallness is _____ (Dominant traits, recessive traits, constant)
11. In case of a mirror or lens, the ratio of the image height to object height is called _____ (power, magnification, mirror formula)
12. Diamond and graphite are allotropes of _____ (carbon, hydrogen, oxygen)

♣ **State whether the following statements are true or False:**

13. Ionic compounds have low melting point.
14. In the experiment performed by Mendel on dihybrid inheritance, there are four types of plants formed in the F_1 generation.
15. The near point of every person is 25 cm.
16. Tooth decay starts when pH of the mouth is lower than 5.5.

♣ **Answer the following questions as directed :**

17. Name the structural and functional unit of nervous system.
18. State the example of animal in which sex is not genetically determined.
19. How much duration in second increases per day due to early sunrise and Sunset delayed ?
20. _____ is the equivalent resistance of the circuit shown below :



♣ **Match the following pairs correctly :**

Column: (A)	**Column: (B)**
21. Fore-brain	(A) Reflex arc
22. Medulla	(B) Main thinking part
	(C) Salivation

Column: (A)	**Column: (B)**
23. Autotroph	(A) Convert inorganic to organic
24. Decomposer	(B) prepare their own food
	(C) depends on others

SECTION:-B

♣ **Answer any 9 (nine) questions from the Q.nos. 25 to 37 within the limit of 40 to 50 words as directed : (2 marks each)** **(18)**

25. Write a note on corrosion.

26. What is called metallic lustre?

27. Write the events taking place during the process of photosynthesis ?

28. Draw a labelled diagram of longitudinal section of flower.

29. Why is DNA copying an essential part of the process of reproduction ? OR explain importance of DNA copying.

30. Give the reason for the advanced sunrise and delayed sunset.

31. A current of 0.5A us drawn by a filament of an electric bulb for 10 minutes. Find the amount of electric charge that flows through the circuit.

32. An electric bulb is connected to a 220 V generator. The current is 0.50 A. What is the power of the bulb ?

33. State the characteristics of magnetic field lines.

34. What is ozone and how does it affect any ecosystem ?

35. What is the main compound responsible for ozone depletion ? What is it used for ?

36. What are the components of the transport system in highly organized plants ? Explain in brief.

37. How many factor effect in Resistance.

SECTION:-C

♣ **Answer any 6 (six) questions from the Q. nos. 38 to 46 within the limit of 60 to 80 words as directed : (3 Marks each)** **(18)**

38. What happens when lead nitrate is heated in a boiling tube ? State the colour of the gas evolved. State its equation.

39. Write the exceptions of non-metallic elements.

40. On the basis of physical properties write the differences between metals and non-Metals.

41. Draw the structure of a Neuron and explain its function. OR Draw lebelled diagram of Neuron.

42. Explain Asexual reproduction method in Rhizopus organism.

43. A convex lens forms a real and inverted image of a needle at a distance of 50 cm from it. Where is the needle placed in front of the convex lens if the image is equal to the size of the object ? Also, find the power of the lens.

44. Draw a ray diagram showing the position , nature and size of the image formed by a concave mirror when the object is placed beyond the centre of curvature of the Mirror.

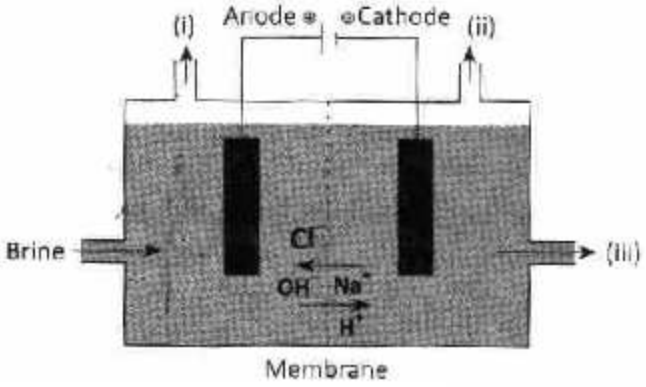
45. A wire of given material having length l and area of cross-section A has a resistance of 4 Ω. What would be the resistance of another wire of the same material having length $l/2$ and area of cross section 2A ?

46. Draw a labelled diagram of female part of flowering plant.

SECTION:-C

♣ **Answer any 5 (five) questions from the Q. nos. 47 to 54 within the limit of 90 to 120 words as directed : (4 Marks each)** **(20)**

47. Observe the figure carefully and answer the following as required.



(A) Name the process that you can see in above figure.
(B) Name element (I)near Anode.
(C) Name element (ii) near Cathode.
(D) Name product (iii) released from right side.
(E) Give the uses of product formed on right side.

48. (A) What are structural isomers ? Draw the Structure for Butane.
(B) Diff. between saturated & Unsaturated Hydrocarbon.

49. Explain chemical reaction of ethanol.

50. Draw a labelled schematic sectional view of the human heart and explain blood Circulation.

51. Write a short note on : Human Respiratory System.

52. What is myopia or near-sightedness ? What is the far point of a normal eye and a myopia eye ?

53. What is a solenoid ? Discuss the magnetic field due to a current -carrying solenoid.
OR
What is a solenoid ? State the characteristics of the magnetic field produced by a current carrying solenoid. Draw its magnetic field.

54. Explain about food chain with proper example.

Paper-1	MATHS (11)	Time - 3 Hrs.

Total marks 80

SECTION-A

♣ **Answer the following as per instruction given : [Q.no 1 to 24 - 1 Mark]** **[24]**

→ **Fill in the blanks by selecting the proper alternatives from those given below each question. (Q.no-1 to 6)**

Q.1 If two positive integer, a and b are written as, $a = xy^2$ and $b = x^2y$; x, y are prime number, then HCF (a, b) = _____

(A) xy^2 (B) x^2y (C) 1 (D) xy

Q.2 α, β and γ zeroes of polynomial $p(x) = ax^3 + bx^3 + cx + d\ (a \neq 0)$ then $\frac{1}{\alpha} + \frac{1}{\beta} + \frac{1}{\gamma} =$ _____

(A) $\frac{c}{d}$ (B) $\frac{-b}{a}$ (C) $\frac{-c}{d}$ (D) $\frac{-c}{a}$

Q.3 -9 and 9 are quadratic polynomial zeroes, which of the following is a quadratic polynomial ?

(A) $x - 81$ (B) $x^2 - 9$ (c) $x^2 - 64$ (D) $x^2 - 81$

Q.4 If $2x + 3y = 15$ and $3x + 2y = 25$ are two, equation then $x - y =$ _____

(A) 10 (B) -10 (c) -40 (D) 40

Q.5 $(x^2 + 1)^2 - x^2 = 0$ has _____

(A) four real roots (B) two real roots

(C) No real roots (D) one real roots

Q.6 The mean of the first n natural number s is _____ x (Median-Mean) .

(A) n + 1 (B) $\frac{n(n+1)}{2}$ (c) n^2 (D) $\frac{n+1}{2}$

♣ **Fill in the blanks by selecting the proper option from those given in the brackets to make the statement true : (Q. nos. 7 to 12)**

7. The distance between point (2, 3) and (4, 1) is _____. $(2\sqrt{2}, 8, 2)$

8. If $\sin\theta + \cos\theta = 1$, then $\sin\theta - \cos\theta =$ _____ (0, 1, 2)

9. Circle touches all sides of quadrilateral ABCD . AB = 7 cm, BC = 3 cm, CD = 4 cm, AD = _____ (8, 7, 11)

10 The volume of a cone with a radius of 2 cm and a height of 6 cm, is _____ .πcm^3. (8, 12, 24)

11. If the ratio of areas of two sphere is 1 : 2 then the ratio of their volume. Will be _____ $(2:\sqrt{2}, 1:2\sqrt{2}, 3:2\sqrt{2})$

12. If $\bar{x} - z = 3$ and $\bar{x} + z = 45$ then M = _____ (21, 23, 24)

♣ **State whether the following statements are true or false : (Q.nos. 13 to 16)**

13. The standard form of $\frac{x}{3} + \frac{y}{2} = -3$ is $x + y + 18 = 0$

14. The distance of point (3, -4) from y-axis.

15. Quandratic equation $x^2 - 7x + 12 = 0$ have solution (3, 4).

16. Can -1.5 be the probability of an event ?

♣ **Answer the following questions in one sentence , word or figure.**
[Q. nos. 17 to 20]

Q.17 Find the CSA of 5 rupee coin .

Q.18 What is the class mark of the class 10- 25 ?

Q.19 What is the HCF of 18 and 81 ?

Q.20 What would a $6x - 2x^2 + 7$ graph look like ?

♣ **Match the following pairs correctly : [Q. nos. 21 to 24]**

	A	B
21.	$\alpha\beta + \beta\gamma + \alpha\gamma$	(a) $\frac{-b}{a}$
22.	$\alpha.\beta.\gamma$	(b) $\frac{c}{a}$
		(c) $\frac{-d}{a}$

	A	B
23.	$\cos 0°$	(a) $\frac{1}{\sqrt{3}}$
24.	$\cot 30^n$	(b) 1
		(c) $\sqrt{3}$

SECTION-B

♣ **Answer any 9 questions out of the following 13 question with necessary calculations :**
[Q. nos 25 to 37 - 2 Marks each] **[18]**

25. Show that $5 - \sqrt{3}$ is irrational.

26. Solve $2x + 3y = 11$ and $2x - 4y = -24$, and hence find the value of 'm' for which $y = mx + 3$.

27. Find the discriminant of the quadratic equation $2x^2 - 4x + 3 = 0$ and hence find the nature of its roots.

28. Find the discriminant of the equation $3x^2 - 2x + \frac{1}{3} = 0$ and hence find the nature of its roots. Find them, if they are real.

29. Find the 10th term of the AP : 2, 7, 12, ...

30. Evaluate : $2\tan^2 45° + \cos^2 30° - \sin^2 60°$.

31. Prove : $\sqrt{\frac{1+\sin A}{1-\sin A}} = \sec A + \tan A$.

32. Two concentric cirlces are of radii 5 cm and 3 cm. Find the length of the chord of the large circle which touches the smaller circle.

33. 2 cubes each of volume 64 cm^3 are joined end to end. Find the surface area of the resulting cuboid.

34. Find the median for the clear distribution data when n = 53, l = 60 cf = 22, f = 7, and h = 10.

35. For any grouped data $l = 40, h = 15, f_1 = 7. f_0 = 3$ and $f_2 = 6$ find mode of given data.

36. Savita and Hamita are friends. What is the probability that both will have (I) different birthdays ? (ii) the same birthday ? (ignoring a leap year)

37. A box contains 3 blue, 2 white and 4 red marbles. If a marble is drawn at random from box, what is the probability that it will be

(i)white ?

(ii) blue ?

(iii) red ?

SECTION-C

♣ **Answer any 6 questions out of the following 9 questions with necessary calculations.**
[Q.nos 38 to 46 - 3 Mark each) **[18]**

38. Find the zeroes of $x^2 - 7$ and verify relation between its zeroes and coefficients.

39. Find the value of $\alpha^2 + \beta^2$ with finding actual α and β for $p(x) = x^2 + 9x + 14$.

40. Find the sum of first 51 terms of, an AP whose second and third terms are 14 and 18 respectively.

41. How many two digit numbers are divisible by 3 ?

42. If A and B are (-2, -2) and (2, -4) respectively, find the coordinates of P such that $AP = \frac{3}{7}AB$ and

P lies on the line.

43. The length of tangents drawn from an external point to a circle are equal.

44. Prove that the parallelogram circumsribing a circle is a rhombus.

45. A chord of a circle of radius 15 cm subtend an angle of 60° at the centre. Find the areas of the corresponding minor and major segment of the circle. ($\pi = 3.14$ and $\sqrt{3} = 1.73$)

46. A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears (i)a two - digit number (ii) a perfect square number (iii) a number divisible by 5.

SECTION-D

♣ **Answer any 5 questions out of the following 8 questions with necessary calculations :**
[Q. nos. 47 to 54 - 4 Mark each] **[20]**

47. The taxi charges in a city consist of a fixed charge together with the charge for the distance covered. For a distance of 10 km, the charge paid is Rs. 105 and for a journey of 15 km, the charge paid is Rs. 155. What are the fixed charges and the charge per km? How much does a person have to pay for travelling a distance of 25 km?

48. The sum of a two-digit number and the number obtained by reversing the digits is 66. If the digit of the number differ by 2, find the number. How many such numbers are there?

49. If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.

50. A girl of height 90 cm is walking away from the base of a lamp-post at a speed of 1.2 m/s. If the lamp is 3.6 m above the ground, find the length of her shadow after 4 seconds.

51. From a point on a bridge across a river, the angles of depression of the banks on opposite sides of the river are 30° and 45° respectively. If the bridge is at a height of 3 m from the banks, find the width of the river.

52. From a solid cylinder whose height is 2.4 cm and diameter 1.4 cm, conical cavity of the same height and same diameter is hollowed out. Find the total surface area of the remaining solid to the nearest cm^2.

53. A gulab jamun, contains sugar syrup up to about 30% of its volume. Find approximately how much syrup would be found in 45 gulabjamuns. Each shaped like a cylinder with two hemispherical ends with length 5 cm and diameter 2.8 cm.

54. The median of the following data is 525. Find the values of x and y, if the total frequency is 100 .

Class interval	Frequency
0-100	2
100-200	5
200-300	x
300-400	12
400-500	17
500-600	20
600-700	y
700-800	9
800-900	7
900-1000	4

Paper-2	MATHS (11)	Time - 3 Hrs.

Total marks 80

SECTION-A

♣ **Answer the following as per instruction given :** **[24]**
[Q.no 1 to 24 - 1 Mark]

→ **Fill in the blanks by selecting the proper alternatives from those given below each question. (Q.no-1 to 6)**

Q.1 The HCf of two number is 8 and their multiplication is 384. So their LCM is _____
(A) 24 (B) 16 (C) 48 (D) 32

Q.2 One of zeroes of cubic polynomial is 0. So the product of the other two zero is _____
(A) $\frac{-c}{a}$ (B) $\frac{c}{a}$ (C) 0 (D) $\frac{-b}{a}$

Q.3 For a pair of linear equation $x + 2y - 4 = 0$ and $2x + 4y - 12 = 0$. These are _____ solution.
(A) Infinite (B) Unique (C) Zero (D) No solution

Q.4 The discriminant of the quandratic equation $5x^2 - 6x + 1 = 0$ is _____
(A) 16 (B) -16 (C) 56 (D) 18

Q.5 In any of AP if $a = 7, d = 3, n = 8$, then $a_n =$ _____
(A) 125 (B) 26 (C) 27 (D) 28

Q.6 Two _____ are always similar.
(A) Square (B) Rectangle (C) Triangle (D) Trapeziums

♣ **Fill in the blanks by selecting the proper option from those given in the brackets to make the statement true : (Q. nos. 7 to 12)**

7. The distance from the origin point to the point P(-6, 8) is _____. (6, 8, 10)

8. If $\tan\theta = 1$, then $\sin\theta \bullet \cos\theta =$ _____ $\left(\frac{1}{2}, \frac{1}{\sqrt{2}}, 1\right)$

9. _____ tangents can be drawn from the point lying in the interior of the circle. (2, 1, 0)

10 Over a period of 10 minutes the minute hand will from an angle measuring _____ in front of the centres. (30°, 60°, 90°)

11. Tangents drawn at the end of diameters are _____ to each other.
(Parallel, Perpendicular, Intersect)

12. Central value of class 30-40 is _____ (30, 35, 40)

♣ **State whether the following statements are true or false : (Q.nos. 13 to 16)**

13. The sum of probabilities of 'Event E' and 'Event not E' is 1.

14. If $\frac{a_1}{a_2} = \frac{b_1}{b_2} + \frac{c_1}{c_2}$ then the pair of linear equation has no solution.

15. Discriminant D = -9 is there for $\sqrt{2}x^2 + 7x + 5\sqrt{2} = 0$

16. The distance of a point P (-6, 8) from the origin is = -10.

♣ **Answer the following questions in one sentence , word or figure.**
[Q. nos. 17 to 20]

Q.17 Volumes of two spheres are in the ratio 8 : 27. Find the ratio of radii.

Q.18 What is the HCF of two prime numbers ?

Q.19 If the mean and median of the data are 28.2 and 30.5 respectively.

Q.20 Which greak mathematician developed the geometric method of finding length ?

♣ **Match the following pairs correctly : [Q. nos. 21 to 24]**

	A	B
21.	$p(x) = x^3 + x^2$	(a) 1
22.	$p(x) = x^3 - x$	(b) 2
		(c) 3

	A	B
23.	$\tan\theta \bullet \cos\theta$	(a) $2\cos^2\theta - 1$
24.	$\cos^2\theta - \sin^2\theta$	(b) 1
		(c) $\sin\theta$

SECTION-B

♣ **Answer any 9 questions out of the following 13 question with necessary calculations :**
[Q. nos 25 to 37 - 2 Marks each] **[18]**

25. Prove that $3 \times 2\sqrt{5}$ is irrational,
26. Solve the pair of linear equation by the substidution $x - y = 4, x + y = 14$.
27. Find two numbers whose sum is 27 and product is 182,
28. Find the roots of the quadratic equation by factorisation : $100x^2 - 20x + 1 = 0$.
29. Determine the AP whose 3rd term is 5 and the 7th term is 9.
30. If $\tan(A+B) = \sqrt{3}$ and $\tan(A-B) = \frac{1}{\sqrt{3}}$ $0° < A+B \leq 90°, A > B$, find A and B.
31. Prove that : $(\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2 = 7 + \tan^2 A + \cot^2 A$.
32. The length of a tangent from a point A at distance 5cm from the centre of the circle is 4 cm. Find the radius of the circles.
33. 2 cubes each of volume $64cm^3$ are joined end to end. Find the surface area of the resulting cuboid.
34. For any grouped data $a = 30, \Sigma fidi = -26, \Sigma fi = 13$ find mean $(\bar{x})$.
35. For any grouped data, $l = 40, h = 15, f_1 = 7, f_0 = 3$ and $f_2 = 6$, find mode of given data.
36. A bag contains 3 red balls and 5 black balls. A ball is drawn at random from the bag what is the probability that the ball drawn is (I) red ? (ii) not red ?
37. A child has a die whose six faces the letters as given below :

A	B	C	D	E	A

The does is thrown once. What is the probability of getting
(I) A ? (II) D ?

SECTION-C

♣ **Answer any 6 questions out of the following 9 questions with necessary calculations.**

[Q.nos 38 to 46 - 3 Mark each) **[18]**

38. Find the zeroes of the polynomial $x^2 - 3$ and verify the relationship between the zeroes and the coefficients.
39. Find a quadratic polynomial the sum and product of whose zeroes are -3 and 2 respectively.
40. Find the sum of odd numbers between 0 and 50.
41. If the sum of first 7 terms of an AP is 49 and that of 17 terms is 289, find the sum of first n terms.
42. Show that the point (1, 7), (4, 2), (-1, -1) and (-4, 4) are the vertices of a square.
43. The tangent at any point of a circle is perpendicular to the radius through the point of contact.
44. Prove that the parallelogram circumscribing a circle is a rhombus.
45. A chord of a circle 12 cm subtends an angle of 120° at the centre. Find the area of the corresponding segment of the circle. (use $\pi = 3.14$ and $\sqrt{3} = 1.73$)
46. A die is thrown once. Find the probability of getting.
    (I) a prime number (ii) a numbers lying between 2 and 6 (iii) an odd number

SECTION-D

♣ **Answer any 5 questions out of the following 8 questions with necessary calculations :**

[Q. nos. 47 to 54 - 4 Mark each] **[20]**

47. The sum of the digits of a two digit number is 9. Also, nine times this number is twice the number obtained by reversing the order of the digits. Find the number.
48. Five year ago. Nuri was thrice as old as Sonu. Ten years later, Nuri will be twice as old as Sonu. How old Nuri and Sonu ?
49. If aline is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two side are divided in the same ratio.
50. A girl of height 90 cm is walking away from the base of a lamp-post at a speed of 1.2 m/s. If the lamp is 3.6 m above the ground, find the length of her shadow after 4 seconds.
51. The shadow of a tower standing on a level ground is found to be 40 m longer. When the sun's altitude is 30° than when it is 60°. Find the height of the tower.
52. A solid iron pole consists of a cylinder of height 220 cm and base diametre 24 cm, which is surmounted by another cylinder of height 60 cm and radius 8 cm. Find the mass of the pole, given that 1 cm^3 of iron has approximately 5 g mass . (use $\pi = 3.14$)
53. A juice seller was serving his customer using glasses as shown in fig. The inner diameter of the cylindrical glass was 5 cm, but the bottom of the glass had a hemispherical raised portion which reduced the capacity of the glass. If the height of a glass was 10 cm, find the apparent capacity of the glass and its actual capacity . (use $\pi = 3.14$)

54. The following distribution shows the daily pocket allowance of children of a locality. The mean pocket allowance is Rs. 18. Find the mission frequency f.

Daily pocket allowance (in Rs.)	11-13	13-15	15-17	17-19	19-21	21-23	23-25
Number of children	7	6	9	13	7	5	4

Paper-3	MATHS (11)	Time - 3 Hrs.

Total marks 80

SECTION-A

♣ **Answer the following as per instruction given :** **[24]**
[Q.no 1 to 24 - 1 Mark]

→ **Fill in the blanks by selecting the proper alternatives from those given below each question. (Q.no-1 to 6)**

Q.1 If HCF (96. k) = 4 and LCM (96, k) = 9696 than k = _____
(A) 96 (B) 440 (C) 404 (D) 4

Q.2 The product of zeroes in quadratic polynomial of $p(x) = x^3 - 3x + 2$ _____
(A) 2 (B) $\frac{3}{2}$ (C) 1 (D) -2

Q.3 If $17x + 23y = 40$ and $23x + 17y = 80$ then $x + y =$ _____
(A) 120 (B) 40 (c) 3 (D) 80

Q.4 $b^2 - 4ac$ _____ O is for tis 2 equal real roots.
(A) ≥ (B) > (C) < (D) =

Q.5 The mean of the first n natural numbers is _____
(A) $n + 1$ (B) $\frac{n(n+1)}{2}$ (C) n^2 (D) $\frac{n+1}{2}$

Q.6 Two _____ are always similar.
(A) Square (B) Rectangle (C) Triangle (D) Trapeziums

♣ **Fill in the blanks by selecting the proper option from those given in the brackets to make the statement true : (Q. nos. 7 to 12)**

7. If A(1, 2) and B(3, -2) are given points, then the mid - point of AB is _____. [(1, 0), (2, 2), (4, 0)]

8. If $\sin\theta = \cos 30°$, then θ = _____ (30°, 60°, 90°)

9. A circle can have _____ parellel tangents at the most. (1, 2, 3)

10 Distance between two tangents parallel to each other of circle of radius 4 cm is _____ (5, -5, 10)

11. The formula for finding the total surface area of 5 rupee coin is _____ [$2\pi rh$, $\pi r(l+r)$, $2\pi r(r+h)$]

12. If M = 26 and Z = 6 then, $\bar{x}$ = _____ (18, 24, 36)

♣ **State whether the following statements are true or false : (Q.nos. 13 to 16)**

13. One digit of a natural number is likely to be a prime number $\frac{4}{9}$.

14. There are 3 zeroes for $p(x) = x^3 - x$.

15. If graph of a pair of linear equation , if the coincide, then there are infinitely many solution.

16. In ΔABC and ΔPQR If ∠A = ∠R and ∠C = θ. then ΔABC ~ ΔPQR.

♣ **Answer the following questions in one sentence , word or figure.**
[Q. nos. 17 to 20]

Q.17 How many tangents does a circle have ?

Q.18 Find the mode of the data.2, 6, 4, 5, 0, 2 , 1, 3, 2, 3

Q.19 What is the HCF of 18 and 81 ?

Q.20 A quadratic equation $9x^2 - mx - 1 = 0$ has two opposite roots then what is the value of m.

♣ **Match the following pairs correctly : [Q. nos. 21 to 24]**

	A	B
21.	$\alpha + \beta$	(a) $\frac{c}{a}$
22.	$\alpha \bullet \beta$	(b) $\frac{-d}{a}$
		(c) $\frac{-b}{a}$

	A	B
23.	$1 - \sin^2 A$	(a) $\sec^2 A$
24.	$1 + \tan^2 A$	(b) $\cos^2 A$
		(c) $\cot^2 A$

SECTION-B

♣ **Answer any 9 questions out of the following 13 question with necessary calculations : [Q. nos 25 to 37 - 2 Marks each]** **[18]**

25. Find the HCF and LCM of 6, 72 and 120, using the prime factorisation method.
26. Solve $2x + 3y = 11$ and $2x - 4y = -24$ and hence find the vlaue of 'm' for which $y = mx + 3$.
27. Find the discriminant of the quadratic equation $2x^2 - 4x + 3 = 0$, and hence find the nature of its roots.
28. Find two \consecutive positive integers sum of whose square is 365.
29. Evaluate the following: $\sin 60^\circ \cos 30^\circ + \sin 30^\circ \cos 60^\circ$
30. "Given $15 \cot A = 8$, find $\sin A$ and $\sec A$.
31. Find the sum of the first 22 terms of the AP: 8, 3, -2, ...
32. A tangent PQ at a point P of a circle of radius 5 cm meets a line through the centre O at a point Q so that OQ = 12 cm. Length PQ is.
33. A toy is in the form of a cone of radius 3.5 cm mounted on a hemisphere of same radius. The total height of the toy is 15.5 cm. Find the total surface area of the toy.
34. A survey conducted on 20 households in a locality by a group of students resulted in the frequency table for the number of family members in a household.

Family size	1-3	3-5	5-7	7-9	9-11
Number of Families	7	8	2	2	1

Find the mode of this data

35. Find the median for the class distribution data when n =53,l=60, cf=22, f=7and h=10.
36. If P(E)=0.05, what is the probability of 'not E'?
37. A bag contains 3 red balls and 5 black balls. A ball is drawn at random from the bag. What is the probability that the ball drawn is (i) red? (ii) not red?

SECTION:-C

♣ **Answer any 6 questions out of the following 9 questions with necessary calculations: [Q. nos. 38 to 46 - 3 mark]** **[18]**

38. Find quadratic polynomial whose zeroes are $\alpha = 5 + \sqrt{3}$ and $\beta = 5 - \sqrt{3}$.

39. Find the quadratic polynomial whose sum of the zeroes and product of the zeroes are $\sqrt{3}$ and $\frac{1}{\sqrt{3}}$ respectively.

40. Find the sum of all integers from 51 to 100.

41. Find sum of first ten terms of an AP: -10, -5, 0, 5, ...

42. If distance between P(3, -2) and Q(7, y) is 4 units, find value of y.

43. The tangent at any point of a circle is perpendicular to the radius through the point of contact.

44. Prove that the tangents drawn at the ends of a diameter of a circle are parallel.

45. A chord of a circle of radius 10 cm subtends a right angle at the centre. Find the area of the corresponding (i) Minor segment (ii) Major Sector. (Use $\pi = 3.14$)

46. A dice is thrown once. Find the probability of getting
(i) a prime number (ii) a number lying between 2 and 6; (iii) Number of 7.

SECTION-D

♣ **Answer any 5 questions out of the following 8 questions with necessary calculations. [Q nos-47 to 54 - 4 marks each]** **[20]**

47. The sum of the squares of two consecutive positive odd numbers is 394. Find the numbers.

48. A charity trust decided to build a prayer hall having a carpet area of 300 sq. metres with its length one metre more than twice its breadth. Find the length and breadth of the hall.

49. If a line divides any two sides of a triangle in the same ratio, then the line is parallel to the third side.

50. ABCD is a trapezium in which AB || DC and its diagonals intersect each other at the point O.
Show that $\frac{AO}{BO} = \frac{CO}{DO}$

51 From a point P on the ground the angle of elevation of the top of a 10m tall building is 30°. A flag is hoisted at the top of the building and the angle of elevation of the top of the flag staff from P is 45°. Find the length of the flagstaff and the distance of the building from the point P.
(take $\sqrt{3} = 1.73$)

52. A solid consisting of a right circular cone of height 120cm and radius 60cm Standing on a hemisphere of radius 60cm is placed upright in a right circular cylinder full of water Such that it touches the bottom. Find the volume of water left in the cylinder, if the radius of the cylinder is 60 cm and its height is 180 cm.

53. A Cylinder is closed from both the sides by two hemisphere at the ends. If radius is 0.42m and total height is 3.84m, find its capacity.

54. The mean of following frequency distribution is 54 then find the value of p.

Class	0-20	20-40	40-60	60-80	90-100
Frequency	7	f	10	9	13

Paper-1	MATHS (18)	Time - 3 Hrs.

Total marks 80 **SECTION-A**

♣ **Answer the following as per instruction given :** **[24]**
[Q.no 1 to 24 - 1 Mark]

→ **Fill in the blanks by selecting the proper alternatives from those given below each question. (Q.no-1 to 6)**

Q.1 If $7x + 3y = 21$ and $3x + 7y = 19$ then $x + y =$ _____
(A) 40 (B) -4 (C) 4 (D) 2

Q.2 If the discriminant of the equation $6x^2 - kx + 2 = 0$ is 1, then $k =$ _____
(A) 7 (B) -7 (C) ± 7 (D) $\pm\sqrt{7}$

Q.3 If $2k + 1$, 13 and $5k - 3$ are three consecutive terms of an AP, then $k =$ _____
(A) 9 (B) 4 (C) 17 (D) -3

Q.4 The distance of point (8, -3) from the x axis is _____ units.
(A) 3 (B) -8 (c) 8 (D) -3

Q.5 When the length of the shadow of a tree is equal to the height of the tree, then the magnitude of a sun's angle is _____
(A) 90° (B) 45° (C) 60° (D) 30°

Q.6 Mode-Mean = _____ x (Median-Mean).
(A) 2 (B) 4 (c) 3 (D) 6

♣ **Fill in the blanks by selecting the proper option from those given in the brackets to make the statement true : (Q. nos. 7 to 12)**

7. $3 + 2\sqrt{5}$ is a/an _____ number. (rational, irrational, negative)

8. The sum of the zeros of the polynomial $4x^2 - 3x - 7$ is _____ $\left(\frac{3}{4}, \frac{4}{3}, \frac{7}{3}\right)$

9. $\cot^2\theta - \operatorname{cosec}^2\theta =$ _____ (1, -1, 0)

10 A line intersecting a circle at two distinct points is called a _____. (tangent, secant, normal)

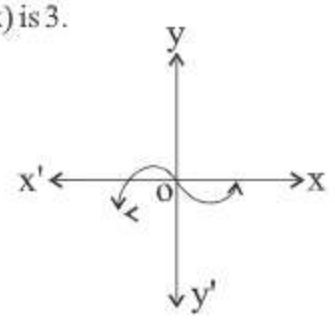
11. The probability of an event that is certain to happen is _____ (1, -1, 0)

12. If $Z = 24$, $\bar{x} = 18$ then $M =$ _____ (10, 20, 30)

♣ **State whether the following statements are true or false : (Q.nos. 13 to 16)**

13. For any two positive integers a and b, HCF (a, b) x LCM (a, b) = a x b

14. From the given graph of $y = p(x)$, the number of zeros of $p(x)$ is 3.



15. For a given pair of linear equation in two variable, is $\frac{a_1}{a_2} = \frac{b_1}{b_2}$, then the pair of equation is consistent.

16. The sum of probabilities of all the elementary event is 0.

♣ **Answer the following questions in one sentence , word or figure.**
[Q. nos. 17 to 20]

Q.17 For a given AP, $a_{25} - a_{15} = 24$. Find the common difference of the AP.

Q.18 How many tangents can a circle have ?

Q.19 $P(A) = 0.65$, then find $P(\overline{A})$.

Q.20 HCF of 12, 15 and 21.

♣ **Match the following pairs correctly : [Q. nos. 21 to 24]**

	A	B
21.	Curved surface area of a cylinder	(a) $\frac{1}{3}\pi r^2 h$
22.	volume of a cone	(b) $2\pi r^2$
		(c) $2\pi rh$

	A	B
23.	The circumference of a circle with radius r.	(a) $\frac{\pi r\theta}{180}$
24.	The area of a minor sector of a circle of an angle θ	(b) $2\pi r$
		(c) $\frac{\pi r^2\theta}{360}$

SECTION-B

♣ **Answer any 9 questions out of the following 13 question with necessary calculations :**
[Q. nos 25 to 37 - 2 Marks each] **[18]**

25. Find the zeroes of the quadratic polynomial $p(x) = x^2 + x - 20$.

26. If α and β are the zeroes of the polynomial $p(x) = x^2 + 2x - 8$, then find the value of $\alpha^2 + \beta^2$.

27. Find the roots of the following quadratic equation by factorisation : $2x^2 - x + \frac{1}{8} = 0$.

28. Which term of the AP 31, 18, 15, ... is -81 .

29. In an AP given $a = 5$, $d = 3$ and $a_n = 50$ find n and s_n.

30. Find the distance between the points (a, b) and (-a, -b).

31. Find the coordinates of the midpoint of the line segment joining A(-4, -2) and B (6, 8).

32. If $\sin A = \frac{3}{4}$, calculate cosA and tanA.

33. Evaluate : $\frac{5\cos^2 60° + 4\sec^2 30° - \tan^2 45°}{\sin^2 30° + \cos^2 30°}$

34. The angle of elevation of the top of a tower from a point on the ground, which ism30 m away from the foot of the tower, is 30°. Find the height of the towers.

35. 2 cubes each of volume 64 cm^3 are joined end to end. Find the surface area of the resulting cuboid.

36. The height and the diameter of a base of a cone are 6 cm and 5 cm respectively. Find the slant height of the cone.

37. For a given frequency distribution in usual rotation $l = 15$, $n = 49$, $f = 11$ $cf = 15$ and $h = 5$. Find the median of the data.

SECTION-C

♣ **Answer any 6 questions out of the following 9 question with necessary calculations :**
[Q. nos. 38 to 46 - 3 Marks] **[18]**

38. Meena went to a bank to withdraw Rs. 2000. She asked the Cashier to give her Rs.50 and Rs. 100 notes only. Meena got 25 notes in all. Find how many notes of Rs. 50 and Rs. 100 she received.

39. Solve the following pairs of linear equation by substitution method : $3x + 5y = 21$; $2x - 3y = 14$

40. How many terms of the AP 9, 17, 25,..... must be taken to give a sum of 636 ?

41. Find the coordinates of the points which divide the line segment joining A(-2, 2) and B (2, 8) into four equal parts.

42. Find the coordinates of the points of trisection of the line segment joining the points A(2, 3) and B(-7, 4).

43. Prove that the length of tangents drawn from an external point to a circle are equal.

44. Two concentric circles are of radii 5 cm and 3 cm. Find the length of the chord of the larger circle which touches the smaller circle.

45. The following data gives the information on the observed life times (in hours) at 225 electrical components.

life times (in house)	0-20	20-40	40-60	60-80	80-100	100-120
frequency	10	35	52	61	38	29

Determine the modal life times of the components.

46. A dice is thrown once find the probability of getting.
(1) a prime number
(ii) a number lying between 2 and 6.
(iii) an odd number
(iv) number of 7.

SECTION-D

♣ **Answer any 5 questions out of the following 8 questions with necessary calculations :**
[Q. nos. 47 to 54 - 4 Mark each] **[20]**

47. State and prove the basic propotionally theorem.

48. E and F are points on the sides PQ and PR respectively of a ΔPQR. For each of the following cases, state whether EF || QR.
(I)PE = 3.9 cm, EQ = 3 cm, PE = 3.6 cm, FR = 2.4 cm.

(II) PE = 4 cm, QE = 4.5 cm, PF = 8 cm, RF = 9 cm.

49. Find two consecutive positive integers. Sum of whose squares is 365.

50. If the sum fo first 7 team of an AP is 49 and that of 17 terms is 289. Find the sum of first n terms.

51. If the median of the distribution given below is 28.5 find the values of x and y.

Class interval	0-10	10-20	20-30	30-40	40-50	50-60
frequency	5	x	20	15	y	5

52. The following table gives the literacy rate (in percentage) of 35 cities. Find the mean literacy rate.

Literacy rate	45-55	55-65	65-75	75-85	85-95
Number of cities	3	10	111	8	3

53. A box contains 5 red marbles, 8 white marbles and 4 green marble. One marble is taken out of the box at random . What is the probability that the marble taken out will be
(I)red ?
(II) white ?
(III) not green.

54. One card is drawn from a well-shuffled deck 52 cards. Find the probability of getting.
(I)a king of red colour

(ii) a face card.

(iii) a red face card.

(iv) the jack of hearts

(v) a spade

(vi) the queen of diamonds.

Paper-2	MATHS (18)	Time - 3 Hrs.

Total marks 80 **SECTION-A**

♣ **Answer the following as per instruction given :** **[24]**
[Q.no 1 to 24 - 1 Mark]

→ **Fill in the blanks by selecting the proper alternatives from those given below each question. (Q.no-1 to 6)**

1. If $m+n=14$ and $m-n=4$, then $m=$ _____
(A) 18 (B) 10 (C) 9 (D) 56

2. Pair of $x+2y-4=0$ and $2x+4y-12=0$ are having _____ solution.
(A) Infinite (B) unique (C) No (D) none of given

3. In an arithmetic progression 2, x, 26 are three consecutive term then $x=$ _____
(A) 12 (B) 14 (C) 20 (D) 30

4. The distance of point P(x, y) from the origin is _____
(A) x^2+y^2 (B) x^2-y^2 (C) $\sqrt{x^2+y^2}$ (D) $\sqrt{x^2-y^2}$

5. $\sqrt{1+\tan^2\theta}=$ _____
(A) $1+\tan\theta$ (B) $\sec^2\theta$ (C) $\operatorname{cosec}\theta$ (D) $\sec\theta$

.6 Mode-Mean = _____ 2 (Median-Mean).
(A) 3 (B) 2 (c) 20 (D) 18

♣ **Fill in the blanks by selecting the proper option from those given in the brackets to make the statement true : (Q. nos. 7 to 12)**

7. LCM (180, 150) = _____ . (30, 900, 90)
8. Sum of zeroes of cubic polynomial $p(x)=x^3-5x^2+6x-11$ is _____ (5, -5, 11)
9. If $P(A)=0.62$ then $P(\bar{A})=$ _____ (0.36, 0.38, 0.34)
10. $\sin 60^\circ=$ _____ $\left(\frac{1}{2}, 0, \frac{\sqrt{3}}{2}\right)$
11. The tangent intersect the circle at _____ point. (one, two, Infinite)
12. For any information if $\sum fixi=75$ and $\sum fi=12$ then $\bar{x}=$ _____ (6.52, 5.26, 6.25)

♣ **State whether the following statements are true or false : (Q.nos. 13 to 16)**

13. HCF of 17 and 23 is 1.
14. $\sqrt{2}$ is irrational number.
15. The number of real zeroes of $p(x)=x^2-4$ is 2.
16. $P(E)+P(\bar{E})=-1$.

♣ **Answer the following questions in one sentence, word or figure. [Q. nos. 17 to 20]**

17. What is the common difference of AP - 5, -1, 3, 7 ?
18. What is common point between circle and tangent called ?
19. Find the mean of first 11 natural number.
20. What is the sum of the probability of all the elementary events of an experiment ?

♣ **Match the following pairs correctly : [Q. nos. 21 to 24]**

	A	B
21.	CSA of sphere	(a) $6l^2$
22.	CSA if cylinder	(b) $4\pi r^2$
		(c) $2\pi rh$

	A	B
23.	Length of minor arc	(a) $2\pi r$
24.	perimeter of circle	(b) $\frac{\pi r^2\theta}{360^\circ}$
		(c) $\frac{\pi r\theta}{180^\circ}$

SECTION-B

♣ **Answer any 9 questions out of the following 13 question with necessary calculations :**
[Q. nos 25 to 37 - 2 Marks each] **[18]**

25. Find a quadratic polynomial the sum and product of whose zeroes -3 and 2, respectively.
26. Find the sum and product of the quadratic polynomial $p(x) = 3x^2 + 7x + 4$ without finding the zeroes. .
27. Find the discriminant of the quadratic equation $2x^2 - 6x + 3 = 0$ and determine the nature of its roots.
28. The 17th term of an AP exceeds its 10th term by 7. Find the common difference.
29. If the sum of the first 14 terms of an AP is 1050 and its first term is 10, find the 20th tern.
30. Find the distance between the points (a, b) and (-a, -b)
31. Find the coordinates of the midpoint of the line segment joining A (-4, -2) and B(6, 8)
32. Evaluate : $\tan 30^\circ \sec 45^\circ + \tan 60^\circ \sec 30^\circ$.
33. Prove that , $(\operatorname{cosec}\theta - \cot\theta)^2 = \frac{1-\cos\theta}{1+\cos\theta}$
34. A tower stands vertically on the ground, which is 15 m away from the foot of the tower, the angle of elevation of the top of the tower is found to be 60°. Find the height of the tower.
35. Height and radius of a cylinder is same and it its 7 cm. Find its volume.
36. Height of a cone is 21 cm and base radius is 6 cm. find its volume.
37. For a given frequency distribution in usual notations $a = 80$, $\Sigma fi = 50$, $\Sigma fiui = 40$ and $h = 20$. Find the mean of the data.

SECTION-C

♣ **Answer any 6 questions out of the following 9 question with necessary calculations :**
[Q. nos. 38 to 46 3 Mark each] **[18]**

38. Five years hence, the age of Jacob will be three times that of his son. Five years ago Jacob's age was seven times that of his son. What are their present ages ?

39. Solve the following pair of linear equation by elimination method :

$3x - 5y - 4 = 0$ and $9x = 2y + 7$.

40. Find the sum of first 51 terms of an AP whose second and third terms are 14 and 18 respectively.

41. Show that (0, 6), (-5, 3) and (3, 1) are the vertices of an isoseles right angled.

42. Find the radio in which the line segment joining A (1, -5) and B(-4, 5) is divided by the x-axis. Also find the coordinates of the point of division.

43. Prove that the tangents drawn and the ends of a diameter of a circle are parallel.

44. The radii of two concentric circles are 13 and 8. A chord of the outer circle touches the inner circle. Find the length of the chord.

45. The distribution below gives the weights of 30 student of a class. Find the median weight of the students.

Weight(in kg)	40-45	45-50	50-55	55-60	60-65	65-70	70-75
Number of student	2	3	8	6	6	3	2

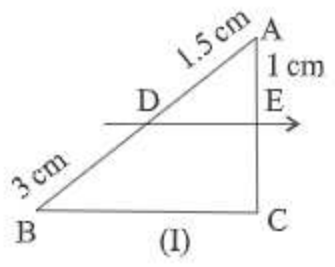
46. Two dice, one blue and one grey, are thrown at the same time. What is the probability that the sum of the two numbers. Appearing on the top of the dice is (I) 8 ? (ii) 13 ? (iii) less than or equal to 12 ?

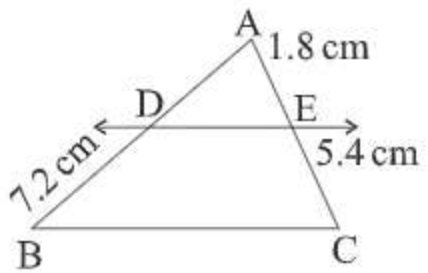
SECTION-D

♣ **Answer any 5 questions out of the following 8 question with necessary calculations :**
[Q. nos 47 to 54 - 4 Marks each] **[20]**

47. If a line is drawn parallel to one side of a triangle to intersect the others two sides in distinct points , prove that the other two sides are divided in the same ratio.

48. In the given figures (1) and (2) . DE || BC.
Find EC in (1) and AD in (2).





49. Solve $2x + 3y = 11$ and $2x - 4y = -24$ and hence find the value of 'm' for which $y = mx + 3$.

50. A manufacture of TV sets produced 600 sets in the third year and 700 sets in the seventh year.

Assuming that the production increases uniformly by a fixed number every year find :

(1) the production in the 1st year.

(2) the production in the 10th year.

(3) the total production in first 7 years.

51. The median of the following frequency distribution is 28.5 and the total frequency is 60 :

Class	0-10	10-20	20-30	30-40	40-50	50-60
frequency	5	x	20	15	y	5

Find the missing frequency because x and y.

52. The table below shoes the daily expenditure on food of 25 household in a locality:

Daily expenditure (in Rs.)	Number of households
100-150	4
150-200	5
200-250	12
250-300	2
300-350	2

Find the mean daily expenditure food.

53. A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box find the probability that it bears

(1) a two digit number.

(2) a perfect cube number

(3) a number
divisible by 5 and

(4) a number is a multiple of 2 and 3.

54. A card is selected at random from a well shuffled pack of 52 cards. Find the probability that the selected card is

(1) that of spades

(2) that of a black suit

(3) not a king

(4) the queen of hearts.

Paper-3	BASIC MATHS (18)	Time - 3 Hrs.

Total marks 80

SECTION-A

♣ **Answer the following as per instruction given :** **[24]**
[Q.no 1 to 24 - 1 Mark]

→ **Fill in the blanks by selecting the proper alternatives from those given below each question. (Q.no-1 to 6)**

1. If (1, 0) is one of the solution of equation $8x + 3y + 5k = 18$, then K = _____
(A) 8 (B) 4 (C) 2 (D) 5

2. If the equation $12x^2 + mx + 5 = 0$ has real equal roots, then m = _____
(A) $\pm 8\sqrt{15}$ (B) $\pm 2\sqrt{15}$ (C) $\pm 4\sqrt{2}$ (D) $\pm 10\sqrt{15}$

3. The sum of first n terms of the AP k, 3k, 5k, _____ is _____ $(k \neq 0)$
(A) nk (B) (2n - 1)k (C) (n+1)k (D) n^2k

4. Point (20, 21) lies on a circle with the origin as the centre . Then , the radius of that circle is _____ units.
(A) 41 (B) 29 (C) 42 (D) 40

5. For θ = _____ $\sin 2\theta = 2\sin\theta$ holds good.
(A) 60° (B) 0° (C) 30° (D) 45°

.6 The mean of first ten natural number is _____
(A) 5.5 (B) 6.5 (c) 5.05 (D) 5

♣ **Fill in the blanks by selecting the proper option from those given in the brackets to make the statement true : (Q. nos. 7 to 12)**

7. If LCM (x, 18) = 36 and HCF (x, 18) = 2, then x = _____ . (2, 3, 4)

8. If the product of the zeroes of the polynomial $p(x) = 6x^2 - x + k$ is $-\frac{1}{3}$, then K _____ (0, 1, -2)

9. A balanced dice is tossed once. Then the total number of possible outcomes are _____ (6,12, 36)

10 If $\sin A = \frac{1}{2}$ and $\cos B = \frac{1}{2}$, then A + B = _____ (30°, 60°, 90°)

11. _____ tangents can be drawn from the point lying in the interior of the circuit . (2, 1, 0)

12. The median of the observations -2, -3, 0, 1, 3, 2, 7 is _____ (-2, 1, 3)

♣ **State whether the following statements are true or false : (Q.nos. 13 to 16)**

13. If HCF (65, 117) = 3k -2, then k = 5.

14. The number of real zeroes of the polynomial $p(x) = x^3 - x$ is 3.

15. The graphs of equation $7x + 10y = 16$ and $3x - \frac{30}{7}y = \frac{48}{7}$ are coincident line.

16. $P(E) + P(\overline{E}) = 1$.

♣ **Answer the following questions in one sentence , word or figure. [Q. nos. 17 to 20]**

17. If the first two terms of an a pare -3 and 4 respectively. then find its 21st term.

18. At the most how many tangents can be drawn parallel to the diameters of a circle ?

19. If $P(A) = \frac{x}{3}$ and $P(\overline{A}) = \frac{2}{5}$, find x .

20. If the mode of the data 16, 15, 17, 16, 15 , x , 19, 17, 14 is 15, then find x.

♣ **Match the following pairs correctly : [Q. nos. 21 to 24]**

	A	B
21.	Total surface area of hemisphere	(a) $\pi r^2 h$
22.	volume of a cylinder	(b) 10π
		(c) $3\pi r^2$

	A	B
23.	Length of an arc of a sector of angle θ	(a) πd
24.	circumference of a circle	(b) πr
		(c) $\frac{\pi r\theta}{180^\circ}$

SECTION-B

♣ **Answer any 9 questions out of the following 13 question with necessary calculations : [Q. nos 25 to 37 - 2 Marks each]** **[18]**

25. Find the zeroes of the quadratic polynomial $4s^2 - 4s + 1$ and verify the relationship between the zeroes and the coefficients.
26. Find a quadratic polynomial, the sum and product of whose zeroes are $\frac{1}{4}$ and -1 respectively.
27. Find the discriminant of the quadratic equation $2x^2 - 6x + 3 = 0$ and determine the nature of its roots.
28. The 17th term of an AP exceeds its 10th term by 7. Find the common difference.
29. If the sum of the first 14 terms of an AP is 1050 and its first term is 10. find the 20th tern.
30. Find the point on the x-axis which is equidistant from (2, -5) and (-2, 9).
31. Three vertices of parallelogram ABCD are A(1, 2), B(2, 4) and C (5, 9. Find the coordinates of the fourth vertex D.
32. Prove that $\cos^2\theta - \sin^2\theta = 2\cos^2\theta - 1$.
33. Prove that $\sec A(1 - \sin A)(\sec A + \tan A) = 1$
34. If $\sqrt{3}\ \tan 2x = \cos 60^\circ + \sin 45^\circ\ \cos 45^\circ$, than find the value of x.
35. A toy is in the form of a cone of radius 3.5 cm mounted on a hemisphere of same radius. The lateral height of the toy is 12.5 cm. Find the total surface area of the toy.
36. A tent is in the form of a cylinder if diameter 4.2 m and height 8 m surmounted by a cone of equal base and height 6m. Find the volume.
37. For a given frequency distribution in usual notations $l = 200, f_1 = 37, f_0 = 21, f_2 = 13$ and $h = 100$. Find then mode of the data.

SECTION-C

♣ **Answer any 6 questions out of the following 9 question with necessary calculations : [18] [Q. nos. 38 to 46 3 Mark each]**

38. The ratio of incomes of two persons is 9 : 7 and the ratio of their expenditures is 4 : 3. If each of them mangoes to save Rs. 2000 per month, find their monthly incomes.

39. Solve the pair of linear equation by the substitution method.

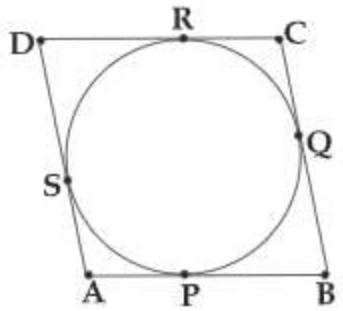
$S - t = 3 \qquad \frac{S}{3} + \frac{t}{2} = 6$

40. Find the area of a rhombus if its vertices area (3, 0) , (4, 5), (-1, 4) and (-2, -1) taken in order.

41. Find the sum of first 24 terms of the list of number whose nth term is given by an = 3 + 2n.

42. Find the ratio in which the y-axis divides the line segment joining the points (5, -6) and (-1, -4). Also find the point of intersection.

43. A quadrilateral ABCD is drawn the circumscribe a circle. Prove that AB + CD = AD+ BC.



44. Prove that the lengths of tangents drawn from an external point to a circle are equal.

45. The mode of the following frequency distribution is 64 and the total frequency is 200.

Class	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Frequency	8	12	27	x	55	37	y

Find the missing frequencies x and y.

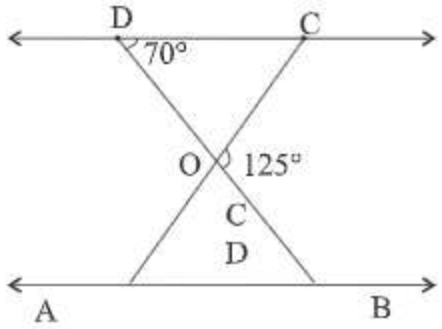
46. Card marked with numbers 13, 14, 15,..... 60 are placed in a box and at random from the box. Find the probability that the number of the card drawn is (I)divisible by 5 (2) a perfect square(3) multiple of 2 or 3.

SECTION-D

♣ **Answer any 5 questions out of the following 8 question with necessary calculations :**
[Q. nos 47 to 54 - 4 Marks each] **[20]**

47. If a line divides any two sides of a triangle in the same ratio, then prove that the line is parallel to the third side.

48. In the given figures, $\Delta ODC \sim OBA$, $\angle BOC = 125°$ and $\angle CDO = 70°$, find $\angle DOC$, $\angle DCO$, $\angle OBA$ and $\angle OAB$.



49. Product of the ages of Parth 6 years ago and 6 years later is 288. Find his present age.

50. The sum of the 4th and 8th terms of an AP is 24 and the sum of the 6th and 10 th terms is 44. Find the first three terms of the AP.

51. The following table gives the literacy rate (in percentage) of 35 cities :

Literacy rate +(in %)	45-55	55-65	65-75	75-85	85-95
Number of Cities	3	10	11	8	3

Find the mean literacy rate.

52. 100 surnames were randomly picked up from a local telephone directory and the frequency distribution of the numbers of letters is the English alphabets in the surnames was obtained as follows :

Numbers of letters	1-4	4-7	7-10	10-13	13-16	16-19
Number of surnames	6	30	40	16	4	4

Determine the median number of letters in the surnames.

53. A die is thrown once. Find the probability of getting (1) a prime number (2) a number lying between 2 and 6 (3) an odd number (4) 7.

54. Two coins are tossed simultaneously find the probabilty of getting (1) one head (2) two heads (3) at least one head and (4) no head.

Paper-1	ENGLISH (04)	Time - 3 Hrs.

Total marks 80

SECTION-A

♣ **Read the extracts and answer the questions.** **[02]**

→ A few moments later we all lifted our eyes in awe as a spectacular array of South African jets, helicopters and troop carriers roared in perfect formation over the Union Buildings. It was not only a display of pinpoint precision and military force, but a demonstration of the military's loyalty to democracy, to a new government that had been freely and fairly elected. Only moments before, the highest generals of the South African defence force and police, their chests bedecked with ribbons and medals from days gone by, saluted me and pledged their loyalty. I was no unmindful of the fact that not so many years before they would not have saluted but arrested me. Finally a chevron of Impala jets left a smoke trail of the black, red, green, blue and gold of the new South Africa flag.

Q.1 What was the awesome spectacle?

(A) View of the Union Buildings

(B) An array of South African jets, helicopters and troop carriers roaring in perfect formation.

(C) Parade of military force.

(D) All of these three.

Q.2 The spectacle was demonstrating _____

(A) The military's loyalty to democracy, to a new democratic government.

(B) the skill achieved my military air force

(C) the strength that the military had

(D) celebration of victory

♣ **Read the following paragraph and answer the questions.** **[3]**

→ Since no one would understand a word of my stories to Kitty if I were to plunge right in, I'd better provide a brief sketch of my life, much as I dislike doing so. My father, the most adorable father I've ever seen, didn't marry my mother until he was thirty-six and she was twenty-five. My sister, Margot, was born in Frankfurt in Germany in 1926. I was born on 12 June 1929. I lived in Frankfurt until I was four. My father emigrated to Holland in 1933. My mother, Edith Hollander Frank, went with him to Holland in September, while Margot and I were sent to Aachen to stay with our grandmother. Margot went to Holland in December, and I followed in February, when I was plunked down on the table as a birthday present for Margot.

Q.3 When was Anne born and where ?

Q.4 When did Anne's family move to Holland ?

Q.5 Why did Anne provide a brief sketch of her life ?

♣ **Fill in the blanks choosing the correct words given in the bracket. Write only the answers.** **[5]**

(above, sleeping, coming up, alone, shining) **(Q. 6 to 10)**

The moon was **....6....** in the east, behind me, and stars were **....7....** in the clear sky above me. There wasn't a cloud in the sky. I was happy to be **....8....** high up. **....9....** the **....10....** countryside.

♣ **Answer any Three of the following questions in five to six sentences each :** **[6]**

Q.11 Give a character sketch of Lencho ?

Q.12 Describe the narrator's experience as he flew the aeroplane into the storm.

Q.13 The author describes the things that Valli sees from an eight-year-old's point of view. Can you find evidence from the text for this statement?

Q.14 Would you agree that the 'depths of oppression' create 'heights of character'? How does Mandela illustrate this? Can you add your own examples to this argument?

Q.15. Why was Mr. Keesing annoyed with Anne ? What did he ask her to do?

SECTION-B

♣ **Read the following verse and answer the questions, given below :** [3]

→ *The trees inside are moving out into the forest,*
The forest that was empty all these days
Where no birds could sit
No insect hide No sun bury its feet in shadow
The forest that was empty all these nights
will be full of trees by morning.

Questions :

Q.16 What was the effect of the empty forest ?

Q.17 When will the forest be full of trees ?

Q.18 Where are the trees moving from the house ?

♣ **Select the correct figure of speech from the options given below .** [2]

Q.19 I saw it go merrily bouncing, down the street.
(A) Climax (B) Internal Rhyme (C) Pun (D) Personification

Q.20 If there is nothing on the tree, 'Tis the Chameleon you see.
(A) Repetition & smile (B) Personification & Climax
(c) Litotes & Rhyme (D) Pun & Irony

♣ **Answer any Three of the following questions in five to six sentences. each.** [6]

Q.21 Have there been times when you felt depressed or hopeless ? Have you experienced a similar moment that changed your mood that day ?

Q.22 Why does poet say, ' I would not intrude on him' ? Why doesn't he offer him money to buy another ball ?

Q.23 Do you know the story of Rapunzel ? Why does she want to be Rapunzel ?

Q.24 Does the poet actually say that the fog is like a cat ? Find three things tell us that the fog if like a cat.

Q.25 Comment on the humour in the poem 'The Tale of Custard the Dragon'.

♣ **Read the passage and answer the questions.** [3]

Now, walking in the bright July sunshine, he felt sure that this year's robbery was going to be as successful as all the others. For two weeks he had been studying the house at Shotover Grange, looking at its rooms, its electric wiring, its paths and its garden. This afternoon the two servants, who remained in the Grange while the family was in London, had gone to the movies. Horace saw them go, and he felt happy in spite of a little tickle of hay fever in his nose. He came out from behind the garden wall, his tools carefully packed in a bag on his back.

Questions:

Q.26 What did Horace feel sure about his next robbery ?

Q.27 Where did the family live of Shot over Grange ?

Q.28 Which problem did Horace suffer from ?

♣ **Read the passage and answer the questions.** [2]

Ramlal had seven children- three sons and four daughters, and the youngest of them was Bholi. It was a prosperous farmer's household and there was plenty to eat and drink. All the children except Bholi were healthy and strong. The sons had been sent to the city to study in schools and later in colleges. Of the daughters, Radha, the eldest, had already been married. The second daughter Mangla's marriage had also been settled, and when that was done, Ramlal would think of the third, Champa. They were good-looking, healthy girls, and it was not difficult to find bridegrooms for them.

But Ramlal was worried about Bholi. She had neither good looks nor intelligence.

Questions:

Q.29 How many children did Ramlal have ?

Q.30 For whom did Ramlal worry about and why ?

SECTION-C

♣ **Rectify the errors.** [4]

		Errors	corrections
Q.31	The following Sunday Lencho came a beat earlier	_____	_____
Q.32	then usual to ask if there was a letter for him.	_____	_____
Q.33.	It was the postman himself who had handed the letter	_____	_____
Q.34	to him while the postmaster, experienced the contentment of a man.	_____	_____

♣ **Punctuate the following passage appropriately. (35 to 38)** [2]

→ From morning to night it's you're going to pass No I'm not yes you are No I'm not Even G.S pleading glances and my angry out bursts can't calm them down.

♣ **Fill in the blanks with proper article (s) Conjunction (s) and preposition (s). Write only the answers. (39 to 42)** [4]

(across, into, to, from)

The climb **...39...** the Brahmagiri hills brings you **...40....** a panoramic view of the entire misty landscape of Coorg. A walk **...41...** the rope bridge leads to the sixty-four-acre island of Nisargadhama. Running into Buddhist monks **...42...** .

Q.43 Convert the following into indirect form of narration. [3]

"Follow me," he was saying.

"He knows that I am lost"

I thought. "He's trying to help me."

♣ **Do as directed.** [5]

Q.44 Otters are as common as mosquitoes in the Tigri's marshes. (Select the correct Comparative degree)

(A) Otters are commoner in the Tigri's marshes than Mosquitoes.

(B) Mosquitoes are not commoner than Otters in the Tigri's marshes.

(C) Mosquitoes are commoner than Otters in the Tigri's marshes.

(D) Otters are not commoner in the Tigri's marshes than Mosquitoes.

Q.45 The baker and his family never starved. (Select the correct Affirmative sentence)

(A) The baker and his family always remained away from starving.

(B) The baker and his family starved a little.

(C) The baker and his family never starved but ate happily.

(D) The baker and his family starved only few days a week.

Q.46 I switched on the radio and said to Paris control room.(Select the correct Simple sentence)

(A) I switched on the radio then said to Paris control room.

(B) Switching on the radio and said to Paris control room.

(C) Switching on the radio, he said to Paris control room.

(D) Switching on the radio, I said to Paris control room.

Q.47 The British airline to London would not fly animals. (Select the correct Interrogative sentence)

(A) Will the British airline to London fly animals ?

(B) Wouldn't he British airline to London fly animals ?

(C) Would the British airline to London fly animals ?

(D) Won't the British airline to London fly animals ?

Q.48 He placed a stamp on the letter and dropped it into the mail-box.
(Select the correct Use of 'No sooner.... than')
(A) No sooner did he place a stamp on the letter then he dropped it into the mail-box.
(B) No sooner did he place a stamp on the letter than he dropped it into the mail-box.
(C) No sooner did he place a stamp on the letter when he dropped it into the mail-box.
(D) No sooner does he place a stamp on the letter than he dropped it into the mail-box.

SECTION-D

Q.49 Read the following passages answer the questions given below: **[4]**

Attach the mind with Lord, but the mind races very swiftly like a horse that is difficult, yet not impossible to control. Arjun confesses; the mind is fickle. The student who didn't notice anything else except the bird's eye, such a steadfast person says, the mind is fickle! We need to then, certainly understand its solution.

The solution lies in 'Abhyaas' (practice). Abhyaas means (चितस्यसर्वात्: समाहत्यपुनः पुनः स्थापनम् अभ्यासः) steadfast concentration of the mind on one focal point; thereby persistently engaging in the same activity with unwavering effort. Through consistent study of a subject, concentration improves. Today's lesson may not be grasped immediately in its entirety, but with repeated reading and understanding, with thorough study, it is understood, yielding the desired results in the exams. Such is the significance of practice. Abhyaas is paramount to accomplish any pursuait

Questions:
Q.49 Why does Arjun confess that the mind is fickle?
Q.50. Mention the importance of 'Abhyaas' (practice).

नैनं छिन्दन्ति शस्त्राणि नैनं दहति पावकः
न चैनं क्लेदयन्त्यापो न शोषयति मारूतः

(Meaning: The soul can never be cut into pieces by any weapon, nor can it be burned by fire, nor moistened by water, nor withered by the wind.)the The heroes who embraced teachings of the Bhagavad-Gita sacrificed their lives for our the slogans Motherland, chanting "Bharatmata ki Jai". Even if one was hanged until death, many other brave hearts would arise from the same vicinity to lay down their lives for the freedom of the nation. One such courageous hero was Khudiram Bose, born on 3rd December, 1889, in the Midnapur district of West Bengal. Drawing strength from the Bhagavad-Gita, he sacrificed his life in the freedom struggle in the mere age of 19. He was a leading participant in the Bang Bhang movement and was hanged in Muzzaffarpur in 1908. Shreemad Bhagavad-Gita was in his hands when he was hanged. imbibing the idea of immortality described in this sacred book.

Questions:
Q.51 Mention any two qualities of the soul described here.
Q.52 How did the heroes, who embraced the teachings of the Bhagavad-Gita, display their patriotism?

OR

♣ **Read the following poem and answer the questions given below:** **[4]**

WEAVERS, weaving at break of day, Why do you weave a garment so gay? Blue as the wing of a halcyon wild, We weave the robes of a new-born child. Weavers, weaving at fall of night, Why do you weave a garment so bright? Like the plumes of a peacock, purple and green, We weave the marriage-veils of a queen

Questions:

49. What is the mood of the weavers i the morning?
50. To what is the new-born child's robe compared?
51. How is the garment in the night?
52. List the colours mentioned in the poem.

Q.53 You are Rajvi/Raj. Unfortunately, you lost your most precious thing. Write a diary entry expressing your feelings about the same. **(4)**

OR

Q.53 You visited a bank to inquire about the procedure to open a savings account. Write a dialogue between you and the manager regarding the inquiry you made there. **(4)**

Q.54 A notice to be displayed on the Students' Notice board is to be prepared regarding a tree plantation ceremony to be held on 1st December, 2025, in the school premises inviting students to participate in it. Each class should contribute at least three plants.

OR

Q.54. Showroom of Titan Watches is providing exclusive 40% off discount on selected watches. Draft an advertisement for a local newspaper.

OR

Q.54. Design a poster promoting the use of jute/cloth bag and discouraging the indiscriminate use of plastic. Give a suitable title and a slogan for it.

SECTION-E

Q.55. You observed a rescue operation during flood in a river in Himachal Pradesh. Write a report based on your observation. **(4)**

Q.56 Write an e-mail to the editor of "The Times of India" on the need of a city library with Wi-fi facilities for students. **(6)**

OR

Q.56. You visited your friend's painting exhibition last week. Write a letter to your uncle describing your experiences of the same.

Q.57 Write an essay on any one of the following in about 200 words: **(8)**

(A) Importance of Sports in Education
(various subjects - sports - benefits-fitness and health)

(B) Power of Press and Media
(powerful medium of communication -uses - misuses uses - your opinion)

OR

Q.57. Write a story in about 200 words based on the inputs given below: **(8)**

The illiterate boy - caught for pickpocketing – sent to juvenile prison - forced to do lessons – becomes sullen rebellious - watches French comic film on TV during recreation hour - requested for coaching classes – a French tourist guide today.

Paper-2	ENGLISH (04)	Time - 3 Hrs.

Total marks 80

SECTION-A

♣ **Read the extracts and answer the questions.** **[2]**

→ I sat in the back of the car with the box beside me as the driver tore through the streets of Basra like a ricochetting bullet. The aircraft was waiting to take off; I was rushed through to it by infuriated officials. Luckily, the seat booked for me was at the extreme front. I covered the floor around my feet with newspapers, rang for the air hostess, and gave her a parcel of fish (for Mij) to keep in a cool place. I took her into my confidence about the events of the last half hour. I have retained the most profound admiration for that air hostess; she was the very queen of her kind. She suggested that I might prefer to have my pet on my knee, and I could have kissed her hand in the depth of my gratitude. But, not knowing otters, I was quite unprepared for what followed.

1. What angered the air officials?
   (A) That the writer was carrying a huge box with him.
   (B) That the writer was carrying an animal with him in the flight.
   (C) That the flight was getting delayed because he came late.
   (D) That the writer was arguing against allotting him the extreme front seat.
2. How could have the writer shown his thankfulness to the air hostess?
   (A) He could have admired her as a queen. (B) He could have kissed her hand.
   (C) He could have given her some tip. (D) He could have gifted the otter to her.

♣ **Read the following paragraph and answer the questions.** **[3]**

→ Midway between Mysore and the coastal town of Manglore sits a piece of heaven that must have drifted from the kingdom of god. This land of rolling hills is inhabited by a proud race of martial men, beautiful women and wild creatures.Coorg, or Kodagu, the smallest district of Karnataka, is the home to evergreen rainforests, spices and coffee plantations. Evergreen rainforests cover thirty per cent of this district. During the monsoons, it pours enough to keep many visitors away. The season of joy commences from September and continues till March. The weather is perfect, with some showers thrown in for good measure. The air breathes of invigorating coffee. Coffee estates and colonial bungalows stand tucked under tree canopies in prime corners.

3. Which is the smallest district of Karnataka?
4. What time is the season of joy in Coorg?
5. What are the qualities found in the residents of Coorg?

→ **Fill in the blanks choosing the correct words given in the bracket. Write only the answers. [05]**
(a, to, when, was, the)

I returned to my seat. I **...6...** craning my neck trying to follow **...7...** hunt **...8...** suddenly I heard from my feet **...9...** distressed chitter of recognition and welcome, and Mij bounded on to my knee and began **...10...** nuzzle my face and my neck.

♣ **Answer any Three of the following questions in five to six sentences each :** **[6]**

Q.11 How did Mandela's 'hunger for freedom' change his life ?
Q.12. Anne feels that teachers are the most unpredictable. Is Mr Keesing unpredictable? How ?
Q.13. "The sight of the food maddened him." What does this fly ? suggest? What compelled the young seagull to finally fly ?
Q.14. Why did Lomov want to get married ?
Q.15. What guesses did the Londoners make about what Mij was?

SECTION-B

♣ **Read the following verse and answer the questions, given below :** **[3]**

→ *The fog comes*
On little cat feet,
It sits looking
Over harbour and city
On silent haunches
And then moves on.

Questions :

Q.16 How does the fog come?

Q.17. Where does the fog move ?

Q.18. What does the fog see while sitting over harbour ?

♣ **Select the correct figure of speech from the options given below .** **[2]**

Q.19. But if it had to perish twice.
(A) Exaggeration & Paradox
(B) Personification & Pun
(C) Alliteration & Simil
(D) Antithesis & Pun

Q.20. His strength behind bars'.
(A) Euphemism
(B) Antithesis
(C) Alliteration
(D) Metonymy

♣ **Answer any Three of the following questions in five to six sentences. each.** **[6]**

Q.21. How does the poet suggest that you identify the lion and the tiger? When can you do so, according to him?

Q.22. Give the central idea of the poem "The Ball Poem".

Q.23. Is Amanda an orphan? Why does she say so ?

Q.24. What colour is the young woman's hair ? What does she say she can change it to ? Why would she want to do so ?

Q.25. 'Belinda tickled him, she tickled him unmerciful.' Why?

♣ **Read the passage and answer the questions.** **[3]**

The scientist was always quick tempered; now he became furious. "You don't understand who or what I am !" he shouted. "Very well- I'll show you.

Suddenly he threw off bandages, whiskers, spectacles, and even nose. It took him only a minute to do this. The horrified people in the bar found themselves staring at a headless man!

Mr. Jaffers, the constable, now arrived, and was quite surprised to find that he had to arrest a man without a head. But Jaffers was not easily prevented from doing his duty. If a magistrate's warrant ordered a person's arrest, then that person had to be arrested, with or without his head.

Questions:

Q.26. Why was Jaffers surprised ?

Q.27. How was the scientist by nature ?

Q.28. What did he do in anger to show in a minute?

♣ **Read the passage and answer the questions.** [2]

Later, he patted me on the head and said never mind, he'd teach me to cook. He also taught me to write my name and said he would soon teach me to write whole sentences and to add numbers. I was grateful. I knew that once I could write like and an educated man there would be no limit to what I could achieve. It was quite pleasant working for Anil. I made the tea in the morning and then would take my time buying the day's supplies, usually making a profit of about a rupee a day. I think he knew I made a little money this way but he did not seem to mind.

Q.29. What did Anil teach to Hari Singh ?

Q.30. How did Hari Singh make the money ?

SECTION-C

♣ **Rectify the errors.** [4]

		Errors	**corrections**
Q.31	When I casually mentioned this with a friends, he	_____	_____
Q.32.	casual replied that I had better get one in the	_____	_____
Q.33.	Tigris marshes, for there they were as common than	_____	_____
Q.34.	mosquitoes, and were often taming by the Arabs.	_____	_____

♣ **Punctuate the following passage appropriately. (35 to 38)** [2]

→ The bus slowed down to a crawl and the conductor sticking his head out the door said. Hurry then Tell whoever it is to come quickly It's me shouted valli I'm the one who has to get on.

♣ **Fill in the blanks with proper article (s) Conjunction (s) and preposition (s). Write only the answers.(39 to 42)** [4]

(while, with, nor, who)

"Of those **...39..** , depart by death, depart from life, a father cannot save his son,**...40...** Kinsmen their relations. Mark! **...41...** relatives are looking on and lamenting deeply, one by one mortals are carried off, like an ox that is led to the slaughter. so the world is afflicted. **...42...** death and decay, therefore the wise do not grieve, knowing the terms of the world.

Q.43 Convert the following into indirect form of narration. [3]

Natalya : "To propose? To me? Why didn't you tell me so before?"

Chubukov:"So he dresses up in evening clothes.

"Natalya :"To propose to me? Bring him back."

♣ **Do as directed.** [5]

Q.44 What a story!(Select the correct Assertive sentence)

(A) The story is good.

(B) It is an interesting story.

(C) The story is not good.

(D) It is not an interesting story.

Q.45 We'll all go hungry this year. (Select the correct Interrogative sentence)

(A) Wouldn't we all go hungry this year?

(B) Will we all go hungry this year?

(C) Would we all go hungry this year?]

(D) Won't we all go hungry this year?

Q.46. Puppies and kittens are too adorable to attract to them. (Select the correct usage of Remove 'Too')

(A) Puppies and kittens are so adorable that everyone is attracted to them.

(B) Puppies and kittens are so adorable that none is attracted to them.

(C) Puppies and kittens are so adorable that everyone was attracted to them.

(D) Puppies and kittens are so adorable that everyone to attract to them.

Q.47. The hail has left nothing. (Select the correct Passive voice)

(A) The hail has been left nothing.

(B) Nothing had been left by the hail.

(C) Nothing has been left by the hail.

(D) The hail had left by nothing.

Q.48. Paper has more patience than people. (Select the correct Positive Degree)

(A) People do not have as much patience as paper.

(B) People have as much patience as paper.

(C) Paper does not have as much patience as people.

(D) Paper have as much patience as people.

SECTION-D

Q.49 Read the following passages and answer the questions given below: **[4]**

The Shreemad Bhagavad-Gita is the Triveni Sangam of Karmyog, Bhaktiyog and Jnanayog. A notable aspect of the Triveni Sangam is that despite the Ganga, Yamuna and Saraswati being together in one flow, the Triveni Sangam is remarkably different. However, the trilogy of Bhagavad-Gita is mutually interdependent and yet so unique that each Yog is inextricably linked with the other two. Nonetheless, chapters 7 to 12 specifically explain Bhaktiyog in detail. The devotion depicted in Shreemad Bhagavad-Gita is distinctive because our Karma manifests itself in the form of Bhakti. The Bhaktiyog described in this sacred scripture is helpful and guiding to humanity at any place, any time.

Before understanding the Bhaktiyog described in the Gita, it is essential to understand the terminology of the words Bhakt and Bhakti.

A Devotee (Bhakt) is one who discards his personal attachment and surrenders himself to the Lord in relation to the omnipresence of theSupreme Being, pervading the spirit and matter of the entire universe. Regarding Bhakti, Garud Puran mentions.

भज इत्येष वै धातु सेवायं । परिकीर्तितः ।

(i.e., The word Bhakti is derived from the word 'Bhaj', which means service). The meaning of 'service' is broader and more independent than the limited interpretations like rites and rituals of 'seva'. In this sense. any activity of public interest done with dedication is also included. All acts done consciously come under the term of Bhakti if they are done sincerely and with a spirit of absolute devotion. Bhagavad-Gita explains Bhakti in this way,

ये तु सर्वाणि कर्माणि मयि संन्यस्फ मत्पराः

अनन्येनैव योगेन मां घ्यायन्त उपास्ते । ।।

(Meaning: Those who dedicate all their actions to me, regarding me as the Supreme Lord,

worshiping me and meditating on me with absolute devotion).The meaning of this verse is that we should perform all our actions or endeavours with the spirit that the 'God is the witness' and perform our duties with an unshakeable determination that our action is to be dedicated to the Supreme Father God so that action should be done effortlessly with a holy spirit. For example, any food that comes to our dish from the kitchen is a meal. but when we offer the same food to God. it becomes Prasad (Gift or blessing from God). When we cook daily, we should offer God; if we prepare food for the Lord with devotion, the cooking will effortlessly be full of purity and virtuous Intent. Bhakti, hence, is the union of mental dedication with physical effort in all our Karma. When it comes to offering anything. this verse of Shreemad Bhagavad-Gita comes to the mind.(Meaning: If one offers to Me with devotion a leaf, a flower, a fruit, or even water. I delightfully partake of that item offered with love by My devotee in pure consciousness.)

Questions:

Q.49. What are the three Yogas described as the Triveni Sangam in the Shreemad Bhagavad-Gita?

Q.50 Which chapters of the Bhagavad-Gita specifically explain Bhaktiyog in detail?

Q.51. From which word is the term Bhakti derived, and what does it mean?

Q.52. According to the Gita, what should be the spirit behind performing all our actions?

OR

♣ **Read the following poem and answer the questions given below:** **[04]**

Whose woods these are I think I know
His house is in the village though:
He will not see me stopping here
To watch his woods fill up with snow
My little horse must think it queer,
To stop without a farmhouse near,
Between the woods and frozen lake
The darkness evening of the year.
He gives his harness bells a shake
To ask if there is some mistake.
The only other sound's, the sweep
Of easy wind and down flake
The woods are lovely, dark and deep
But I have promises to keep
And miles to go before I sleep
And miles to go before I sleep.

Questions:

Q.49. Why does the speaker stop by the woods?

Q.50. Why does the horse find stopping there strange?

Q,51. How does the speaker find the woods?

Q.52. Explain the line: 'And miles to go before I sleep.'

Q.53. You are Saumya Amodia. Make a diary entry of your two day's visit to your friend's village. **(4)**

OR

Q.53 A famous cricketer visited your school. You are the sports secretary of your school. Write at least four dialogues which you used to interview him/her.

Q.54 You are the cultural secretary of your school. You have been asked to inform students of class 8 to 12 about an Inter-school Folk Dance Competition. Draft a notice in about 50 words to be put up on the school notice board with all necessary details. **(4)**

OR

Q.54 You want to sell your flat as you are shifting to another city for work. Draft a suitable advertisement in not more than 50 words to be published in The Times of India under the classified column.

OR

Q.54. You were very upset about the reports on communal riots in various parts of the country. As a concerned social worker, design a poster in not more than 50 words highlighting the importance of communal harmony.

SECTION-E

Q.55. Write a report on your visit to a school for the blind in about 150 words. **(4)**

Q.56. Write an e-mail to your friend who is suffering from deafness and he does not want to go for a check-up. Explain to him/her the importance and usefulness of hearing aids. **(4)**

OR

Q.56. Write a letter to the editor of a newspaper about the lack of parking space in front of the school.

Q.57. Write an essay on any one of the following in about 200 words: **(8)**

(1) A Street Quarrel

(happened to witness a quarrel scene - heated exchanges – cause takes serious turn - interference of wise men-pacified - quarrel ends)

(2) An Indian Festival (Holi)

(festivals in India-festival of colours - mythological belief - Bhakt Prahalad - how we celebrate - preparing snacks - buying colours, water balloons, water guns - patching up with people who are no longer friends-a day filled with fun)

OR

Q.57. Write a story in about 200 words based on the inputs given below: **(8)**

A milkmaid - carry the bucket of milk to the market - one day started daydreaming - I will sell the milk - make money - buy some eggs - chickens - many hens and cocks - shall grow rich-buy ornaments and dresses - look charming - suitors to see me - refuse them with a nod of my head - bucket of milk fell down - hopes were dashed to ground.

Paper-3	ENGLISH (04)	Time - 3 Hrs.

Total marks 80

SECTION-A

♣ **Read the extracts and answer the questions.** **[02]**

→ "Paris control? Paris control? can you hear me? There was no answer. The radio was dead too. I had no radio, no compass, and I could not see where I was. I was lost in the storm. Then, in the black clouds quite near me, I saw another aeroplane. It had no lights on its wings, but I cloud see it flying next. to me through the storm. I could see the pilot's face-turned towards me. I was very glad. to see another person. He lifted on hand and waved.

"Follow me," he was saying. "Follow me."

"He knows that I am lost," I thought. "He's trying to help me." He turned his aeroplane, slowly to the north, in front of my Dakota, so that it would be easier for me to follow him. I was very happy to go behind the strange aeroplane like an obedient child.

Q.1 Why could the writer not get help from Paris control?

(A) All of his contact means had failed.

(B) The radio was dead.

(C) The writer was lost in the storm.

(D) All of these three.

Q.2 The writer could come to know that the other plane wanted to help him as...

(A) The pilot of the other plane lifted one hand & waved to the writer.

(B) The pilot of the other plane turned his aeroplane slowly to the north, in front of the writer's aeroplane

(C) The writer could see the pilot's face.

(D) None of these three

♣ **Read the following paragraph and answer the questions.** **[3]**

→ Tenth May dawned bright and clear. For the past few days I had been pleasantly besieged by dignitaries and world leaders who were coming to pay their respects before the inauguration. The inauguration would be the largest gathering ever of international leaders on South African soil.

The ceremonies took place in the lovely sandstone amphitheatre formed by the Union Buildings in Pretoria. For decades this had been the seat of white supremacy, and now it was the site of a rainbow gathering of different colours and nations for the installation of South Africa's first democratic, non-racial government.

On that lovely autumn day I was accompanied by my daughter Zenani. On the podium, Mr de Klerk was first sworn in as second deputy president. Then Thabo Mbeki was sworn in as first deputy president.

Q.3 When did the inauguration take place ?

Q.4 Where did the inauguration take place ?

Q.5 With whom did Nelson Mandela accompany in the podium ?

→ **Fill in the blanks choosing the correct words given in the bracket. Write only the answers. [05]**
[Plantations, smallest, district, rainforest, evergreen]

Coorg, or Kodagu, the **..(6)..** district of Karnataka, is home to **..(7)..** rainforests; spices and coffee **..(8)..** . Evergreen **..(9)..** cover, thirty percent of this **..(10)..** .

♣ **Answer any Three of the following questions in five to six sentences each :** **[6]**

Q.11 Why does Anne need to give a brief sketch about her family? Does she treat 'Kitty 'As an insider or an outsider ?

Q.12 Write a character sketch of Rajvir.

Q.13 Justify the title of thte lesson, 'The Proposal'.

Q.14 How did Valli plan her bus ride ? What did she find out about the bus, and how did she save up the fare?

Q.15 Why does the postmaster send money to Lencho ? Why does he sign the letter 'God' ?

SECTION-B

♣ **Read the following verse and answer the questions, given below :** **[3]**

→ *If ever you should go by chance*
To jungles in the east;
And if there should to you advance
A large and tawny beast,
If he roars at you as you're dyin
You'll know it is the Asian lion...

Questions:

Q.16 Where is the jungle as per the poem ?

Q.17 What is the specialty of the Asian lion, according to the poet?

Q.18. How is the beast as per the poet?

♣ **Select the correct figure of speech from the options, given below.** **[2]**

Q.19 The moon is broken like a mirror, its pieces flash now in the crown of the tallest oak.
(A) Personification (B) Metaphor (C) Simile (D) Pun

Q.20. They bring me tokens of myself.
(A) Litotes (B) Synecdoche (C) Metaphor (D) Metonymy

♣ **Answer any Three of the following questions in five to six sentences each** **.[6]**

Q.21 Contrast Tiger's situation inside and outside the zoo.

Q.22 Do you think Amanda is sulking and is moody"?

Q.23 What does the poet say the boy is learning from the loss of the ball ?

Q.24 Writers use words to give us a picture or image without actually saying what they mean. Can you trace some images used in the poem 'The Tale of Custard the Dragon.'?

Q.25. What does the man say to Anne about love ?

♣ **Read the passage and answer the questions.** **[3]**

It was enrich Tricki's blood. Lunch became a ceremonial occasion with two glasses of wine before and several during the meal.

We could hardly believe it when the brandy came to put a final edge on Tricki's constitution. For a few nights the fine spirit was rolled round, inhaled and reverently drunk.

They were days of deep content, starting well with the extra egg in the morning, improved and sustained by the midday wine and finishing luxuriously round the fire with brandy.

It was a temptation to keep Tricki on as a permanent guest, but I knew Mrs. Pumphrey was suffering and after a fortnight, felt complelled to phon and tell her that the little dog had recovered and was awaiting collection.

Q.26. How did the narrator enjoy during his lunch?

Q.27. 'They were the days of deep content. Why did he say so?

Q.28. What was the temptation to the narrator?

♣ **Read the passage and answer the questions.** **[2]**

There followed a remarkable scene as the policeman tried to get hold of a man who was becoming more and more invisible as he threw off one garment after another. Finally a shirt flew into the air, and the constable found himself struggling with someone he could not see at all. Some people tried to help him, but found themselves hit by blows that seemed to come from nowhere.

In the end Jaffers was knocked unconscious as he made a last attempt to hold on to the unseen scientist.

There were nervous, excited cries of 'Hold him!' But this was easier said than done. Griffin had shaken himself free, and no one knew where to lay hands on him.

Questions :

Q.29. What happened when people tried to help the constable ?

Q.30. Was Jaffers successful in arresting the scientist ?

SECTION-C

♣ **Rectify the errors.** **[4]**

		Errors	**corrections**
Q.31	I get away well with all my teachers.	_____	_____
Q.32	There are nine among them, seven men	_____	_____
Q.33	and two woman. Mr keesing, the old fogey.	_____	_____
Q.34	Whom teaches maths was annoyed.	_____	_____

♣ **Punctuate the following passage appropriately. (35 to 38)** **[2]**

I have been reading as much as I could about tea Rajvir said No one really knows who discovered tea but there are Amany legends.

♣ **Fill in the blanks with proper article (s) Conjunction (s) and preposition (s). Write only the answers.(39 to 42)** **[4]**

(on, how, for, the)

Marriage gifts are meaningless without **..(39)..** sweet bread known as the bol, just as a party or a feast loses its charm without bread. Not enough can be said to show **..(40)..** important a baker can be **..(41)..** a village. The lady of the house must prepare sandwiches **..(42)..** the occasion of her daughter's engagement.

Q.43 Convert the following into indirect form of narration. **[3]**

"Don't be so upset, every thought this seems like a total loss. Remember, no one dies of hunger."

"That's what they say; no one dies of hunger".

♣ **Do as directed.** **[5]**

Q.44 No sooner did he stand in the middle of the field than he said to his sons.

(Select the correct usage of 'As soon as')

(A) As soon as he stood in the middle of the field than he said to his sons.

(B) As soon as he stands in the middle of the field, he said to his sons.

(C) As soon as he stood in the middle of the field, he said to his sons.

(D) As soon as he does stood in the middle of the field, he said to his sons.

Q.45 She was quiet and rarely said anything at all. (Select the correct Simple sentence)

(A) On quiet she said rarely anything at all.

(B) She was quiet or she rarely said anything at all.

(C) She was quiet so rarely said anything at all.

(D) Being quiet, she rarely said anything at all.

46. Unless I am taking away someone else's freedom, I am truly free.(Select the correct Use of 'If')

(A) If I am taking away someone else's freedom, I am truly free.

(B) If I am not taking away someone else's freedom, I am truly free.

(C) If I am taking away someone else's freedom then I am truly free.

(D) If I am not taking away someone else's freedom, I am not truly free.

Q.47 You don't have to help me.(Select the correct Affirmative sentence)

(A) You have to avoid helping me. (B) You have to help me.

(C) You have not to help me. (D) You have to try to help me.

Q.48 And you've not yet given me my ticket.(Select the correct Passive voice)

(A) And you have not yet been given my ticket.

(B) And I am not given my ticket by you.

(C) And I have not yet been given my ticket by you.

(D) And you are not given my ticket by you.

SECTION-D

Q.49 Read the following passages and answer the questions given below: **[4]**

When the youth Icon Veer Bhagat Singh was jailed for throwing a bomb in the national assembly in April 1929. he asked the prison administration for the Shreemad Bhagavad-Gita. The episode was printed in the then English Daily "The Tribunal". It was titled "Bhagat Singh wants the Gita". The Gita given to Bhagat Singh in jail is still stored in the Shaheed-e-Azam museum in Lahore. The copy bears Bhagat Singh's signature.

Everyone is familiar with the iconic image of a man twisting the tapered end of his moustache on the right side with his left hand. He is none other than the great patriotic revolutionary Chandrashekhar Azad. He was always having a Yagnopavit (the sacred thread) on his left shoulder, a copy of the Gita in his pocket, and a pistol tucked into his kammarband (belted cloth). Even during his days as an underground freedom fighter, battling against British oppression for India's independence, he made it a habit to read the Gita regularly. He was unwavering in his commitment to his pledges and exhibited remarkable bravery and virtue in numerous incidents. The Gita served as the source of inspiration for cultivating these qualities.

The Gita served as a morale booster for the revolutionaries of the time. providing a philosophical foundation for their freedom movement.

स्वधर्ममपि चावेक्ष्य न विकम्पितुमहर्सि ।

धर्म्याद्धि युद्धाच्छ्रेयोऽन्यत्क्षत्रियस्य न विद्यते ॥

(Meaning: Given your Swadharm, you should not harbour fear in your heart, for there is no other better duty for a Kshatriya other than to fight for Dharm)

Questions:

Q.49 Which book did Bhagat Singh request while he was in jail?

Q.50. What did Chandrashekhar Azad always carry in his pocket?

Subhash Chandra warrior. Bose. earned a the formidable nickname 'Netaji. He always carried the Gita with him and practised studying it every morning after his daily routine. Through the study of the Gita, he cultivated qualities such as steadfastness, courage and fearlessness. Netaji mobilised the "Azad Hind Fauj" and successfully challenged the British army.

Captain S. S. Yadav. recounts that even in the face of relentless gunfire, Netaji fought with unwavering focus. Inspired by Netaji's bravery, his comrades fought feverently until the end; our hero drew strength from the essence of the Gita.

सुखंदुखे समे कृत्वा लाभालाभौ जयाजयौ ।

ततो युद्धाय पुज्यस्य नैवं पापमवाप्स्यसि ॥

(Meaning: Fight for the sake of duty, treating alike happiness and distress, loss and gain, victory and defeat. Fulfilling your responsibility in this way, you will never incur sin.)

Questions:

Q.51. What was Netaji Subhash Chandra Bose's daily routine ?

Q.52. How did Netaji mobilise "Azad Hind Fauj" ?

OR

♣ **Read the following poem and answer the questions given below:** **[4]**

She dwelt among the untrodden ways
Beside the springs of Dove,
A maid whom there were none to praise
And very few to love:
A violet by a mossy stone
Half hidden from the eye!
Fair as a star, when only one
Is shining in the sky.
She lived unknown, and few could know
When Lucy ceased to be;
But she is in her grave, and, oh,
The difference to me!

Questions:

Q.49. Who dwelt among the untrodden ways ?

Q.50. Where the untrodden ways were ?

Q.51. 'Fair as a star, when only one is shining in the sky.'Which figures of speech is mentioned in the given line ?

Q.52. To whom does Lucy's death make difference?

Q.53. Write a diary entry how you caught a thief red-handed on night. **[4]**

OR

Q.53. Write a dialogue between a father and his son about a cricket match.

Q.54. As a Chairperson of a residential colony. Prepare a notice informing the residents of your colony to keep the volume of their music systems and TV sets low. **[4]**

OR

Q.54. Principal, Sunrise Global School, Agra requires a receptionist for her school. Draft a suitable advertisement in about 50 words to be published under the classified column of Times of India giving all the necessary details.

OR

Q.54. Prepare a poster on kindness towards animals to be displayed in the city at public places.

SECTION-E

Q.55. Local doctors conducted an Eye-examination Camp in your school on Sunday. Write a report in about 150 words on the camp. **[4]**

Q.56. Write an e-mail to the Municipal Commissioner complaining about the hygiene standards of the nearby restaurant. **[6]**

OR

Q.56. Write a letter to the Police Commissioner drawing his attention to the nuisance caused by noise during festivals and requesting him to take steps to put an end of it.

Q.57. Write an essay on any one of the following in about 200 words: (8)

(A) A Monument You Visited (Taj Mahal)

(visit of Taj Mahal - appearance - history - how it was built description of building and surrounding- a tomb-one of the seven wonders of the world)

(B) If There Were No Newspapers

(part of habit- variety of news and write-ups for all - news segments of society - knowing the world- different beneficiaries - 'Fourth Estate' - powerful media - if stopped, life would be stagnant, backward - life force)

OR

Q.57. Write a story in about 200 words based on the inputs given below:

Dispute between the sun and the wind - a traveller - the wind blows hard - traveller clasps his cloak tighter - the sun shines - traveller takes off the cloak.

PAPER – 1	SOCIAL SCIENCE(10)	TIME : 3 Hrs.

Total Marks 80

Section – A

♣ **Answer the following questions as required:**

[24 objectives questions - 1 mark each] **(24)**

♣ **Match the pairs correctly**

	Column - A	**Column - B**
1.	Capital of Chalukya dynasty	(A) Gujarat
2.	Stupa of Devanimori	(B) Madhya Pradesh
3.	Kalidas	(C) Pattadakal
4.	Bhavbhuti	(D) Khambhat
5.	Akik work	(E) Abhigyanshakuntalam
		(F) Uttar Ramcharit

♣ **State whether the following statements are True or False.**

6. The Dharoi multi-purpose project is on Sabarmati river.
7. Pavanhans Helicopters Limited offers air services to ONGC and Central Government.
8. Increase in population is not the main reason responsible for increasing unemployment in India.
9. Fiscal policy means Government's strategy with respect to public expenditure and rise revenue, taxation and public loan policy.
10. "Rashtriya Swavlamban Yojana" is implemented to provide pension to the proletarians and destitute old people in the half of their life.

♣ **Fill in the blanks with correct alternative:**

11. Local self Government institutions have control over _____ forests.
(Communal, Private, State)
12. In the Second century, the Grand Anicut Canal was constructed across the river _____. (Krishna, Koshi, Kaveri)
13. To make the trade balance of India positive, the government have started _____ project . (Start up India, Make in India, Digital India)
14. The concept of Human Development Index was propounded by _____ an economist of Indian origin, a Nobel Prize winner.
(C.V. Raman, Amartya Sen, John Franklin Kennedy)
15. At an intersection, junction or roundabout, vehicle coming from the _____ should be given priority (left, right, front)

♣ **Select the correct option from those given below each question and write the answer:**

16. Which is the correct option of arranging the following historical places in India in the sequence from north to South?
    (A) Taj Mahal, Khajuraho temples, Brihadeshwar temple, Ellora caves.
    (B) Ellora Caves, Taj Mahal, Khajuraho temples, Brihadeshwar temple
    (C) Taj Mahal, Brihadeshwar temple, Khajuraho temples, Ellora Caves
    (D) Taj Mahal, Khajuraho temples, Ellora caves, Brihadeshwar temple.
17. Which of the following is not an iron ore type?
    (A) Hematite (B) Magnetite
    (C) Limonite (D) Salanite
18. India's road system is the _____ largest in the world.
    (A) First (B) Second
    (C) Third (D) Fourth.
19. The policy of economic liberalization is the economic policy of _____ market.
    (A) free (B) controlled
    (C) uncontrolled (D) Socialism.
20. By which force is rainwater stored in the form of ground water?
    (A) gravitational force (B) capillary action
    (C) chemical (D) natural

♣ **Answer the following questions in short (one or two words)**

21. The green leaves of any plant take carbon from the air through which process?
22. Name the animal that is found in the cold forest of eastern Himalayas.
23. The first 'Earth Conference' in 1972 was organised in which city of Sweden?
24. When was the public Distribution System (PDS) introduced in India?

SECTION - B

♣ **Answer any nine questions out of thirteen questions given below.** **(18)**
[Question Number - 25 to 37 - 2 marks each]

25. How can we say that the Aryans were nature-lovers?
26. Give details about Nishad People.
27. Give information about Kathakali dance style.
28. Identify me and write:
    (1) The plaited green coloured petticoat worn by the artists performing Manipuri Dance.
    (2) The Ved that gives information about various types of rituals and Sanskars
29. "It is the moral responsibility of every citizen to preserve our heritage". Explain.
30. State the characteristics of laterite soil.

31. Explain the terms:
    (1) Tasar (2) Large scale industry
32. What is Internal Trade? Explain.
33. Write the limitations of the Socialist system.
34. What is poverty? What are the characteristics of the people living below poverty line?
35. Give information about the following:
    (1) H.A.C.C.P
    (2) Eco
36. Explain the importance of seat belt.
37. Mention the challenges against the cotton textile industry.

SECTION - C

♣ **Answer any six questions out of nine questions given below:** **(18)**
[Question numbers - 38 to 46 - 3 marks each]

38. Give information about Dholaveera
39. Write short note on Khajuraho temples
40. State the importance of multi-purpose projects
41. State the importance of Solar Energy
42. Write a note about the Sugar industry of India
43. Explain the advantages and disadvantages of liberalization
44. State the reasons for unemployment
45. Explain the difference between rebellion and terrorism.
46. See the picture given below and answer the following questions:

(1) Which sculpture is shown in the given picture?
(2) Where is this sculpture located?
(3) How many lions figures are there in this sculpture?

SECTION D

♣ **Answer any four questions in detail from the Question No. 47 to 53. (20)**
Question No. 54 is of map filling. It is compulsory question. [4 marks each]

47. Write detailed note on Nalanda University.
48. Give detailed information about Vastushastra in ancient India.
49. Explain ancient India's progress in Medical Science and Surgery.
50. See the picture given below and identify the important major grain of India and give detailed information about the crop

51. State the technical reforms made in Agrarian field.
52. Explain in detail the MANREGA Programme
53. What is in Juvenile Rights? Which rights are in the Indian Constitution regarding this?
54. Show the following details with correct signs and symbols in the outline map of India:
    (1) Laterite soil
    (2) Periyar wild life sanctuary.
    (3) One state producing wheat
    (4) Iron and Steel industry Dungarpur..

PAPER – 2	SOCIAL SCIENCE(10)	TIME : 3 Hrs.

Total Marks 80 **Section – A** **24 Marks**

♣ **Answer the following questions as required:**

[24 objective questions - 1 mark each]

♣ **Match the following correctly:**

	Column (A)	Column (B)
(1)	Bhadarvi Poonam fair	(A) Bhopal
(2)	Chariot Temples	(B) Ambaji
(3)	Kathasarit sagar	(C) Dholka
(4)	Manav Talav	(D) Kalhana
(5)	Rashtriya Manav Sangrahalaya	(E) Somdeva
		(F) Unique feature of Pallava age

♣ **State whether the following statements are True or False:**

(6) Generally available resources are known as easily available resources.

(7) Chariot temple of Dharmaraja is the smallest one.

(8) World Trade Organization was established on 1st January, 1959.

(9) Under "Mission Mangalam Yojna", government provides economic help to the women through Sakhi Mandal to make them self-reliant.

(10) Light, moderate speed, other heavy vehicles should normally be driven in the right most lane.

♣ **Fill in the blanks with correct alternative:**

(11) Minerals like coal, petroleum, gold are examples of _____resources (Solitary, Rare, Universal)

(12) The Ukai-Kakrapar multi-purpose project is on _____ river. (Narmada, Mahisagar, Tapi)

(13) _____ is the main economic activity of the people of developing countries. (Industry, Trade, Agriculture)

(14) NLFTF is a insurgent organization of _____ (Assam,Tripura, Manipur)

(15) The main function of a _____ is to protect the head and brain from serious injury by reducing the impact of trauma due to collisions on the head. (seat belt, driver belt, helmet)

♣ **Select the correct option from these given each question and write the Answer:**

(16) To make trade balance of India positive, the government have started _____Project.

(A) Make in India (B) Digital India

(C) Start up India (D) Swadesh Bharat

(17) Which of the following is not a national park?
(A) Bandipur (B) Kaziranga
(C) Chandraprabha (D) Dudhwa

(18) Which organization is established by FAO and WHO?
(A) ISO (B) CAC
(C) BIS (D) DMI

(19) Who declared manifesto of human rights?
(A) Great Britain (B) United Nations
(C) UNICEF (D) World Bank

(20) What is the age span of local earthworm.
(A) 10 years (B) 12 years
(C) 14 years (D) 15 years

♣ **Answer the following questions in short (one or two words)**

(21) After what age one gets a licence to drive a two-wheeler of engine capacity up to 50 cc without gear?

(22) Which economic system is called free economy?

(23) Name the type of forest which is controlled by Central or State Government.

(24) What was built in Lothal to facilitate the Ships?

SECTION - B

♣ **Answer any nine questions out of thirteen questions given below: (18)**
[Question No. 25 to 37, 2 marks each]

(25) The Indian heritage is a result of the social, economical, political and cultural fields over centuries. Explain.

(26) Name the writers of 'Sangeet Ratnakar' and 'Sangeet Parijat'.

(27) Write a brief note on Kailas temple of Ellora.

(28) State the characteristics of alluvial soil.

(29) Agriculture in South India is done through ponds, why?

(30) Define mineral based industries.Which industries included in mineral based Industry?

(31) How we can transport liquid material such as Water, mineral oil, natural gas and other liquids? In Gujarat, where this means of transportation installed?

(32) Explain the benefits of globalization.

(33) Distinguish between Economic activities and Non-Economic activities.

(34) What is the role of price mechanism in price regulation?

(35) "Child development and child welfare is a pre condition of social development." Explain.

(36) Write about Energy cycle.

(37) Natyashastra and Abhinav Darpan are main source of which dance form? Give information about this dance.

SECTION - C

♣ **Answer any six questions out of nine questions given below.** **(18)**

(Question no. 38 to 46, 3 marks each)

(38) Identify the picture given below and Give information about this Indian ancient city.

(39) Give information about Takshashila University.

(40) Explain the terms:
(1) Solitary resources
(2) Rhino Project
(3) Kharif crop

(41) Explain the types of forests according to administration purpose.

(42) Describe the contribution of agriculture in National economy

(43) Explain the idea of World labour market.

(44) What is poverty? What are the characteristics of people living below poverty line?

(45) What are the consequences of corruption on the society and economy?

(46) See the picture given below and answer the following questions:

(1) Name the architecture

(2) Who built this temple and where it is located?

(3) In which style of art it has been constructed?

SECTION - D

♣ **Answer any four questions in detail from the question No. 47 to 53. Question no. 54 is of map-filling. It is a compulsory question. (4 marks each) (20)**

(47) Write about the progress achieved in ancient India in the field of Chemistry.
(48) Write about the contribution of the ancient India in metallurgy.

(49) Write about the laws enacted for the preservation of the ancient monuments, archaeological sites and remains.

(50) Which Schemes have been started by Gujarat, to give equality to women? Explain.

(51) Write about the efforts of the government to curb corruption.

(52) Write a detailed note on the cotton textile industry.

(53) Write notes on types of agriculture.

(54) Show the following details with correct signs and symbols in the outline map of India:

(1) Red Soil
(2) Corbett National Park
(3) One State producing Jute
(4) Iron and Steel Industry - Hajira

PAPER – 3	SOCIAL SCIENCE(10)	TIME : 3 Hrs.

Total Marks 80 **Section – A** **24 Marks**

♣ **Answer the following questions as required:**

[24 objectives questions - 1 mark each] **(24)**

♣ **Match the following**

	Section (A)		**Section (B)**
(1)	Shahastralinga Lake	(A)	Rann of Kachchh"
(2)	Qutub Minar	(B)	Dholka
(3)	Malav Lake	(C)	Patan
(4)	Tana - Riri festival	(D)	Delhi
(5)	Bio reserve area	(E)	Vadnagar
		(F)	Chandraprabha

♣ **State Whether the following Statements are True or False.**

(6) The year 2002 was celebrated as Women Empowerment year.

(7) Communalism is a hindrance to the progress of individual, society and nation.

(8) Padmashri Dr Subhash Palekar has classified the system of nature into four types

(9) Labour is a non-living factor of production

(10) Those industries wherein minerals are used as raw materials are known as mineral based industries.

♣ **Fill in the blanks with correct option from those given in the brackets**

(11) _____ State has the least area under irrigation (Manipur, Mizoram, Meghalaya)"

(12) The Nagarjunsagar multi-purpose project is on _____ river (Kaveri, Krishna, Godavari)

(13) From the given below activities, _____ is not included in service sector (education, banking, fishing)

(14) The concept of 'Poverty Line' was first given by_____ , the Director of the World Health Organization. (Beaurd Aure, Henry George, Stephen More)

(15) _____ is a global problem (Communalism, Linguistics, Terrorism)

♣ **Select the correct option from those given below each question and write the Answer:**

(16) Which wildlife is extinct from Gujarat ?

(A) Ghudkhar (B) Bear

(C) Leopard (D) Tiger

(17) A school in Palanpur wants to show a biogas plant to the students of std. 10. Which nearest place will it select?

(A) Dhuvaran (B) Dantiwada

(C) Methan (D) Lasundra

(18) When was World Trade Organization (WTO) established?

(A) 1st June, 1992 (B) 10th October, 1994

(C) 1st January, 1995 (D) 31st December, 1993.

(19) Which is the organization that regulates the quality of edible items?

(A) BIS (B) CAC

(C) ISO (D) FPO.

(20) Naxalite movement in India was originated in which village of Bengal ?

(A) Uttarabari (B) Naxalbari

(C) Northbari (D) Nationalism.

Answer the following questions in short (one or two words):

(21) Among the factors affecting Indian agriculture, which one is an effective factor?

(22) Which state in India has the lowest proportion of poverty?

(23) Due to which policy of India working capacity of public sector has improved ?

(24) Which is more protected zone compared to sanctuary?

SECTION - B

♣ **Answer any nine questions out of thirteen questions given below:** **(18)**
[Question No. 25 to 37 - 2 marks each]

(25) Why do we regard rivers as "Lok Mata"?

(26) Give details about Negritos.

(27) Describe the tribal dances of Gujarat

(28) Identify and write:

(1) The dance form has come from the line 'Kathan Kare So Kathak Kahave'?

(2) The book is believed to be unique in understanding all the aspects of music.

(29) What is National Park?

(30) Write about cement industry of India.

(31) State any four remedies for the preservation of minerals.

(32) A dense network of roads has developed in India. Explain.

(33) Factors of production have alternative uses. Explain the statement.

(34) Mention the objectives of the World Trade Organization.

(35) Describe the international institutions that award quality assurance certificate.

(36) Give the full form of the following Organization:
(1) GEDA
(2) CASE
(37) What is Sustainable development?

SECTION - C

♣ **Answer any six questions out of nine questions given below:** **(18)**
(Question No. 38 to 46 - 3 marks each)

(38) Give detailed information about the ancient city Lothal.
(39) Write a note on the Red Fort of Delhi.
(40) Explain the types of forests according to administration.
(41) Mention the steps to curb environmental degradation.
(42) State the meaning of unemployment and discuss its types.
(43) Describe the work done in India in the field of health improvement.
(44) State the objectives and provisions of the National Food Security Act
(45) Mention the specific facilities for the disabled students
(46) Identify the below given image and answer the following questions:

(1) Name the Architecture
(2) Who had constructed this and in which city it is Situated?
(3) In which year UNESCO included this architecture as a World heritage Monument?

SECTION - D

♣ **Answer any four questions in detail from the Question No. 47 to 53.**
(Question No. 54 is of map filling question: it is compulsory question)
Four mark each question. **[20]**

(47) Give detailed information about Takshashila University.
(48) State the contribution of ancient India to Astronomy and Astrology.

(49) What will you do as a part of maintenance cleanliness and preservation of a picnic spot in your city / village?

(50) State the impact of globalization on Indian agriculture.

(51) Describe the Oilseeds Crops of India.

(52) Explain: "Price rise is beneficial to as well as a hindrance in economic development."

(53) State the reasons for unemployment and the effects of unemployment.

(54) Show the following details with correct signs and symbols in the outline map of India:

(1) Alluvial Soil
(2) Dachigam National Park
(3) One State producing Groundnut
(4) One cotton textile industry with name.

ANSWER KEY

Sci. & Tech.

Paper – 1

1. (B) 2. (D) 3. (B) 4. (D) 5. (C) 6. (c) 7. C_nH_{2n+2} 8. Fat 9. Photosynthesis 10. Sexual reproduction 11. 10 12. Mercury 13. True 14. False 15. True 16. True 17. Auxin & Gibberellin 18. 50% 19. 2 min 20. 3.6×10^7 or 36000000 Joule 21. (c) Thyroxine 22. (a) adrenaline 23. (ii) Amoeba 24. (I) spirogyra

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Paper – 2

1. (B) 2. (B) 3. (A) 4. (c) 5. (D) 6. (C) 7. 0.02 8. 24 9. lactic acid 10. snail 11. diopter 12. solder 13. True 14. True 15. True 16. True 17. (2) pituitary gland-adrenaline 18. All tall with round seeds 19. control of pupil size 20. $v = \frac{W}{Q}$ 21. (b) Regular metabolism for body growth 22. (c) Development of male sex organ 23. (c) Deer 24. (a) Tiger

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Paper – 3

1. (D) 2. (C) 3. (A) 4. (D) 5. (D) 6. (B) 7. Chloro methane 8. Increasing 9. Acidic 10. Dominant treaits 11. magnification 12. carbon 13. False 14. False 15. False 16. True 17. Neuron or Nerve cell 18. snail 19. 120 sec 20. $R_1 = 2\Omega$, $R_2 = 2\Omega$ 21. (b) Main thinking part 22. (c) salivation 23. (b) prepare their own food 24. convert inorganic to organic

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Maths

Paper – 1 (Standard)

(1) (d) xy (2) (c) -c/d (3) (d) x^2-81 (4) (A) 10 (5) (c) no real roots (6) (d) $\frac{n+1}{2}$ (7) $2\sqrt{2}$ (8) 0 (9) 8 (10) 8 (11) 1 : $2\sqrt{2}$ (12) 23 (13) false (14) true (15) true (16) no (17) $2\pi(r+h)$ (18) 17.5 (19) 9 (20) open curve towards the bottom (parabola) (21) (c) -d/a (22) (a) -b/a (23) (b) 1 (24) (c) $\sqrt{3}$

Paper – 2 (Standard)

(1) (c) 48 (2) (b) $\frac{c}{a}$ (3) (d) no solution (4) (A) 16 (5) (D) 28 (6) (A) square (7) 10 (8) ½ (9) 0 (10) 60° (11) parallel (12) 35 (13) true (14) true (15) false (16) false (17) 2 : 3 (18) 1 (19) 35.1 (20) Euclid (21) (b) 2 (22) (c) 3 (23) (c) $\sin\theta$ (24) (a) $2\cos^2\theta - 1$

Paper – 3 (Standard)

(1) (c) 404 (2) (a) 2 (3) (c) 3 (4) (d) = (5) (b) $\frac{n(n+1)}{2}$ (6) (A) square (7) (2,0) (8) 60° (9) 2 (10) 10 (11) $2\pi r(h+r)$ (12) 36 (13) 5/9 (14) true (15) true (16) true (17) Infinite (18) 9 (19) 9 (20) 0 (21) (c) -b/a (22) (a) c/a (23) (b) $\cos^2 A$ (24) (a) $\sec^2 A$

Paper – 1 (Basic)

(1) (C) 4 (2) (C) ± 7 (3) (B) 4 (4) (A) 3 (5) (B) 45° (6) (c) 3 (7) rational (8) ¾ (9) 1 (10) secant (11) 1 (12) 20 (13) true (14) true (15) false (16) false (17) 2.4 (18) Infinitely many (19) 0.35 (20) 3 (21) (c) $2\pi rh$ (22) (a) $\frac{1}{3}\pi r^2 h$ (23) (b) $2\pi r$ (24) (c) $\frac{\pi r^2 \theta}{360}$

ANSWER KEY

Paper – 2 (Basic)

(1) (c) 9 (2) (c) no (3) (b) 14 (4) (c) $\sqrt{x^2+y^2}$ (5) (D) secθ (6) (A) 3 (7) 900 (8) 5 (9) 0.38 (10) $\sqrt{3}/2$ (11) one (12) 6.25 (13) true (14) true (15) true (16) false (17) 4 (18) point of contact (19) 6 (20) 1 (21) (b) $4\pi r^2$ (22) (c) $2\pi rh$ (23) (c) $\frac{n\theta}{180}$ (24) (a) $2\pi r$

Paper – 3 (Basic)

(1) (c) 2 (2) (c) $\pm 4\sqrt{15}$ (3) (d) n^2k (4) (b) 29 (5) (b) 0° (6) (A) 5.5 (7) 4 (8) -2 (9) 6 (10) 90° (11) 0 (12) 1 (13) true (14) true (15) false (16) true (17) $a_{21}=137$ (18) two (19) 9/5 (20) 15 (21) (c) $3\pi r^2$ (22) (a) $\pi r^2 h$ (23) (c) $\frac{n\pi\theta}{180}$ (24) (a) πd

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S.S

Paper – 1

1. 1–C 2. –A 3.–E 4.–F 5.–D 6.True 7.False 8. False 9.True 10. True
11. Communal 12. Kaveri 13. Make in India 14. Amartya sen 15. Right 16. (D)
17. (D) 18. (C) 19. (A) 20. (A) 21. Photosynthesis 22. Red panda 23.Stockhom
24. 1977

Paper – 2

1. 1–B 2. –F 3.–E 4.–C 5.–A 6.True 7.False 8. False 9.True 10. False
11. Rare 12. Tapi 13. Agriculture 14. Tripura 15. Helmet 16. (A) 17. (C) 18. (B)
19. (B) 20. (D) 21. 16 years 22. Mixed 23. State 24. Dockyard

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Paper – 3

1. 1–C 2. –D 3.–B 4.–E 5.–A 6.True 7.True 8. False 9.False 10. True
11. Mizoram 12. Krishna 13. Fishing 14. BeaurdAure 15. Terrorism 16. (D)
17. (B) 18. (C) 19. (A) 20. (B) 21. Cyclone 22. Goa 23.privatisation 24. National park

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English

Paper – 1

1. (b) 2. (a) 6.coming up 7.shining 8. alone 9.above 10.sleeping
19. (d) 20. (c) 31. beat-bit 32. then-than 33.had handed-handed
34. experienced-experiencing 39.to 40. into 41.across 42.from
44. (b) 45. (a) 46. (d) 47. (c) 48. (b)

Paper- 2

1. (c) 2. (b) 6.was 7.the 8. when 9.a 10.to 19. (a) 20. (c)
31. friends-friend 32. casual-casually 33.than-as 34. taming-tamed 39.who 40. nor
41.while 42.with 44. (b) 45. (d) 46. (a) 47. (c) 48. (a)

Paper- 3

1. (d) 2. (a) 6.smallest 7.evergreen 8. plantations 9.rainforest 10.district
19. (c) 20. (d) 31. away-along 32. among-of 33.woman-women
34. whom-who 39.the 40. how 41.for 42.on
44. (c) 45. (d) 46. (b) 47. (a) 48. (c)

Students of SOS getting admission in I.I.T.

Ladani Harsh
I.I.T. - Madras
(Aero Space Engineering)

Ajani Ankit
I.I.T. - Bombay
(Material Science & Engineering)

Bhalodi Yash
I.I.T. - Madras
(Computer Sci.-B. Tech)

SHYARA PARTH
I.I.T. - Varanasi
(Electronics Eng.)

Gondaliya Kartik
I.I.T. - Madras
(Computer Sci.-M. Tech)

Gondaliya Bhavantik
I.I.T. - Banaras
(Ind. Management-M. Tech)

Nandoriya Ajay
I.I.T. Rank - 5836
A.I.E.E.E. Rank - 7823

Chudasama Dhaval
I.I.T. Rank - 449
I.I.T. - Khadakpur

Monpara Geeta
I.I.T. Rank - 2414
I.I.T. - Bombay

JEE-MAIN — TOPPERS

The Only Institution Of Gujarat, Which Has A Splendid Record Of Success In Competitive Exams Like I.I.T. and A.I.E.E.E. (JEE-MAIN)

JEE-MAIN 2024

PATEL DARSHAN
PR 99.10

THAKKAR SHUBHAM
PR 99.01

Ashwar Harshil
PR 98.80

97 Students Qualified for JEE-ADVANCED

The students Getting	90	PR or more	46	Students
The students Getting	85	PR or more	67	Students
The students Getting	80	PR or more	90	Students

JEE-MAIN 2023

Baidiyavadra Jayesh
PR 93.73

BAVARIYA DIYA
PR 92.14

Soni Het
PR 91.93

39 Students Qualified for JEE-ADVANCED

The students Getting	90	PR or more	05	Students
The students Getting	85	PR or more	20	Students
The students Getting	80	PR or more	31	Students

JEE-MAIN 2022

Vekariya Raj
PR 98.96

Somajiyani Vaidik
PR 98.50

Mali Ajay
PR 97.80

29 Students Qualified for JEE-ADVANCED

The students Getting	90	PR or more	11	Students
The students Getting	85	PR or more	20	Students
The students Getting	80	PR or more	25	Students

GUJ-CET – 2015-20

The SOS Achieved the highest result in **GUJ-CET** in Gujarat

2015

Tenth in the Board

1 Ramoliya Dhruvil
116.25 / 120
PR 99.90

Tenth in the Board

2 Dangar Neha
116.25 / 120
PR 99.90

3 Vakatar Dharshi
115 / 120
PR 99.81

71 Students Obtained
90 PR or more in GUJ-CET

2016

Second in the Board

1 Ram Kishan
117.50 / 120
PR 99.98

Sixth in the Board

2 Kathrotiya Harshal
116.25 / 120
PR 99.94

Sixth in the Board

3 Chauhan Sanket
116.25 / 120
PR 99.94

73 Students Obtained
90 PR or more in GUJ-CET

2017

First in the Board

1 Ladani Harsh
113.75 / 120
PR 99.99

2 Ambaliya Khoda
104 / 120
PR 99.88

3 Kachhadiya Smit
101.25 / 120
PR 99.80

130 Students Obtained
90 PR or more in GUJ-CET

2018

Sixth in the Board

1 Gojiya Rahul
112.5 / 120
PR 99.94

2 Jasani Setu
108.75 / 120
PR 99.85

3 Sakhiya Niddhi
105 / 120
PR 99.69

108 Students Obtained
90 PR or more in GUJ-CET

2019

Ninth in the Board

1 Joshi Soham
109.00 / 120
PR 99.91

2 Kugasiya Hemang
106.25 / 120
PR 99.79

3 Dudhagara Rakshit
104.00 / 120
PR 99.66

145 Students Obtained
90 PR or more in GUJ-CET

2020

Seventh in the Board

1 Valrani Priyanshu
111.50 / 120
PR 99.93

Sixth in the Board

2 Karud Rajak
110.00 / 120
PR 99.94

3 Dhaneja Pujan
107.50 / 120
PR 99.85

105 Students Obtained
90 PR or more in GUJ-CET

GUJ-CET – TOPPERS

The SOS Achieved the highest result in **GUJ-CET** in Gujarat

GUJ-CET 2024

Third in the Board

THAKKAR SHUBHAM

EM

PR
99.97

Marks
118.75 / 120

The students Getting	99	PR or more	014	Students
The students Getting	98	PR or more	026	Students
The students Getting	95	PR or more	058	Students
The students Getting	90	PR or more	105	Students

GUJ-CET 2023

Gosai Rushik

PR
99.77

Marks
111.50 / 120

The students Getting	98	PR or more	016	Students
The students Getting	95	PR or more	046	Students
The students Getting	90	PR or more	089	Students
The students Getting	85	PR or more	130	Students

GUJ-CET 2022

Gadhadara Kishan

PR
99.83

Marks
111.25 / 120

The students Getting	98	PR or more	013	Students
The students Getting	95	PR or more	043	Students
The students Getting	90	PR or more	088	Students
The students Getting	85	PR or more	128	Students

GUJ-CET 2021

Mandali Priyanshu

PR
99.78

Marks
111.25 / 120

The students Getting	99	PR or more	008	Students
The students Getting	98	PR or more	016	Students
The students Getting	95	PR or more	039	Students
The students Getting	90	PR or more	080	Students

NEET – TOPPERS

Leading in NEET... SOS

NEET - 2024

NO DUMMY STUDENTS

Only preparation at school Without Any Coaching

Bhatiya Vasu

Marks **700**

Out of 89 students preparing - **NEET...**

Obtaining	600	Marks or more	13	Students
Obtaining	550	Marks or more	27	Students
Obtaining	500	Marks or more	37	Students
Obtaining	400	Marks or more	68	Students

NEET - 2023

Gojiya Ravi

Marks **610**

Out of 77 students preparing - **NEET...**

Obtaining	600	Marks or more	03	Students
Obtaining	550	Marks or more	10	Students
Obtaining	500	Marks or more	19	Students
Obtaining	400	Marks or more	33	Students

NEET - 2022

Kunjadiya Uttam

Marks **655**

Out of 92 students preparing - **NEET...**

Obtaining	600	Marks or more	06	Students
Obtaining	550	Marks or more	11	Students
Obtaining	500	Marks or more	17	Students
Obtaining	400	Marks or more	31	Students

NEET - 2021

Mandali Priyanshu

Marks **665**

Out of 102 students preparing - **NEET...**

Obtaining	600	Marks or more	02	Students
Obtaining	550	Marks or more	05	Students
Obtaining	500	Marks or more	14	Students
Obtaining	400	Marks or more	30	Students

Students of SOS getting admission in reputed institutes

03 Students **Getting Admission in AIIMS**

09 Students **Getting Admission in IIT**

774+ Students **Getting Admission in MBBS**

4592+ Students **Getting Admission in ENGINEERING**

Why is the SOS School in 11th Science ?

- The only institute focusing exclusively on science stream.
- The organizers are the teachers through whom lectures of all the subjects (Physics, Chemistry, Biology, Maths) are taught. Generally in other schools' owners don't teach but do only management while in our school students get benefits of both the teachers and the administrators.
- Administrators are in direct contact with students as they are teachers, so that the students get a direct solution to the study as well as other questions that arise during the study.
- Many students have got admission in the reputed medical institutes like AIIMS as well as IIT getting highest marks through our subject experts' guide.
- 774+ SOS Students have got admission in MBBS, 4592+ Students in ENGINEERING and many other in PARAMEDICAL.
- Many students who have studied in SOS have settled in the country and abroad and getting higher salary standard.
- The same team of the teachers at both the school - The School of Science (SOS) at Rajkot and Khambhala (Rajkot).
- Healthy competition among students through class work, mega test and phase route test creating stress free environment.
- Guidance and parental contact as per the personal progress report of the students observed every month.

Every Information of Student's Result Will Be Given To Parents By SMS & Progress Report by mobile app

SOS - Khambhala

SOS - Rajkot

Admission Open in Std. 1 to 10

Registration Open in Std. 11 (Science)

Students who get admission in Science will be given the SOS School's own online application free called "The School of Science-SOS", in which lectures of our teachers of Std. 11th and 12th (Science) can be seen sitting at home. Students will be able to revise and understand many topics or chapters that are not understood or seem difficult in the class, through the SOS Application will be able to revise the entire course as per their desire. The annual fee for this application is Rs.15,000/- but students seeking admission in SOS will be given application, school bag and Std.11th-12th materials and it's education free of charge. In addition, Students who attend our entrance test will also be given scholarship according to merit.

L.K.G. to Std. 10 (Gujarati Medium)	Std. 6 to 10 (English Medium)	Std. 11-12 Science (Gujarati-English Medium)

- Boys Hostel : for Std. 6 to 12
- Girls Hostel : for Std. 11-12 Science

Head Office : Behind K.K.V. Hall, Kalawad Road, Rajkot. Ph. : 0281-2588300, 97231 02173, 85111 17275.

Branch : Jamnagar Road, Nr. Nyara Village, Khambhala. Ph. : 96876 64164, 93774 56780.

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