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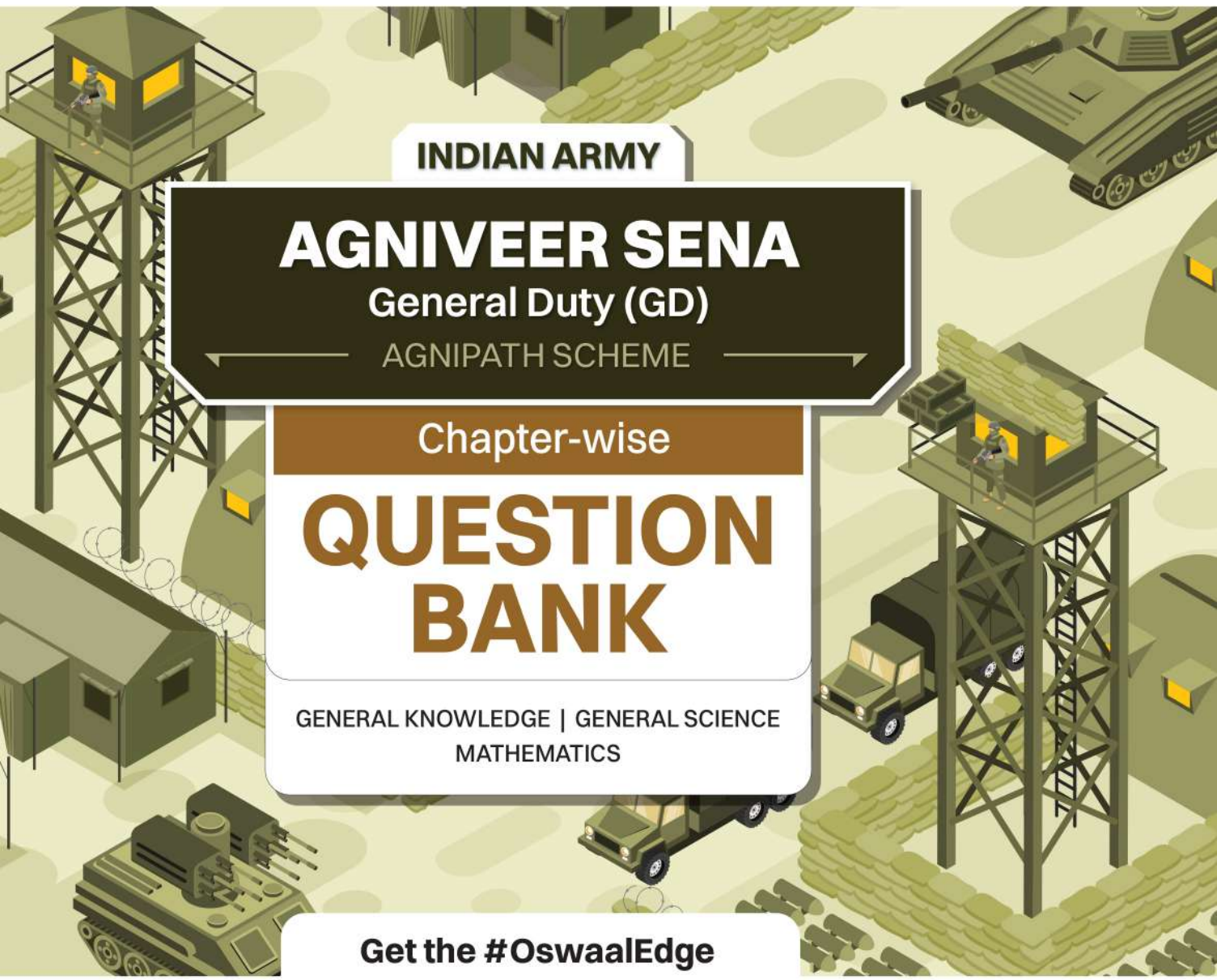

INDIAN ARMY

AGNIVEER SENA

General Duty (GD)

AGNIPATH SCHEME

Chapter-wise

QUESTION BANK

GENERAL KNOWLEDGE | GENERAL SCIENCE
MATHEMATICS

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with more than 1200 Questions

4

Cognitive Learning

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5

Examination Analysis

with Chapter-wise Weightage Analysis

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5 Examination Analysis
with Chapter-wise Weightage Analysis

1st EDITION, YEAR 2023-24

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SYLLABUS COVERED

Agniveer Sena (GD)

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Kindle Edition

PREFACE

In the realm of defense and security, where valor and unwavering commitment stand as the cornerstones of safeguarding a nation, the Agniveer Sena - General Duty (GD) examination holds a unique and revered position.

The Government had launched Agnipath scheme on June 15, 2022 to recruit both male and female aspirants into 'below the officer's rank' cadre of the three services for a period of four years as Agniveers. Candidates between the age group of 17.5 to 21 years are eligible to apply for the scheme.

In 2022, 2.5 Lacs students appeared for Agniveer Sena—General Duty (GD) exam, this presents an excellent chance for individuals with aspirations to serve the nation by joining the Armed Forces, the opportunity you get from the Indian Army is just limitless, which helps in enhancing your personality traits.

The Agniveer Sena (GD) - Chapter-Wise book has been meticulously curated to serve as an essential tool in your quest to succeed in the Apnipath Scheme and aims to make aspirants exam-ready, boost their confidence and help them achieve better results in the examination.

Some Benefits of studying from Oswaal Agniveer Sena (GD) – Chapter-wise Question bank is:

1. **Concept Clarity** with easy to grasp theory complemented with Solved Examples
2. **Extensive Practice** with more than 1200 new Questions based on latest exam pattern and Two Sample Question Papers.
3. **Crisp Revision** with Mind Maps offering bite-sized and just-in-time revision tool
4. **Expert Tips** helps you get expert knowledge, master & crack Agniveer Sena (GD) in first attempt.
5. **Exam insights** with Chapter-wise weightage Analysis, empowering students to be 100% exam ready.
6. **Quick & Easy Techniques** the book offers Shortcuts & easy to follow Tips and Tricks to help readers solve exam questions efficiently.

May your dreams take flight, and may your journey be as rewarding as it is challenging. Here's to those who dare to dream and to the Agniveer's, where the sky is not the limit but the beginning of a new adventure.

Onward, to the skies!

Be mindful. Be grateful. Be positive. Be true. Be kind

01 Three things that make you special	02 Three people you are grateful for and why	03 Three simple things you are grateful for	04 A challenging experience that made you stronger	05 Three ways to inject gratitude into a current challenge
06 Describe the last time you did something nice for someone	07 A fear you have overcome	08 Three activities you enjoy most and why	09 What made you smile today?	10 Three things you love about your family
11 What is your favorite place, and why?	12 Three things you love most about yourself	13 The last time you were overcome with joy	14 A risk you are grateful you took and why	15 Three everyday items you are grateful for
16 Three songs that bring you joy	17 What skill do you have that you are grateful for and why?	18 One luxury you are thankful for	19 Describe a rejection you are grateful for	20 Three things about your body you are grateful for
21 What are you most grateful for in your daily life?	22 Three things you are grateful for about where you live	23 Three items in your home you are grateful for	24 Say thank you to someone	25 Something in nature you are grateful for
26 A person in your past you are grateful for	27 Something at school you're grateful for	28 Describe the last time you laughed so hard you cried	29 What is your proudest accomplishment?	30 Three things you want to manifest

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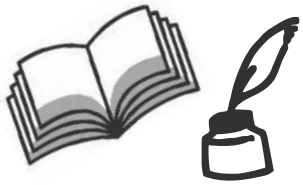
❑❑❑

POSITIVE AFFIRMATIONS

An affirmation is a positive statement or phrase that individuals repeat to themselves with the intention of fostering a positive mindset, self-confidence, or personal development. The practice involves affirming desired beliefs or qualities, often in the present tense, to reinforce a positive self-image and encourage a more optimistic outlook.

" EMBRACE YOUR UNIQUENESS, NOURISH SELF-CARE, AND PRESS FORWARD RELENTLESSLY. TO ACHIEVE FLIGHT, UNLOAD THE BAGGAGE THAT SLOWS YOUR ASCENT."

I strongly trust in my vision and work deligently towards making it a reality.



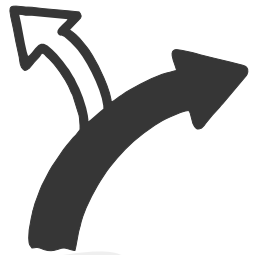
I am capable of learning and growing everyday.

I am not defined by grades & test scores. My true worth lies in my character, compassion and positive impact I have on others.

I embrace my mistakes, learn from them and use them to fuel my growth & resilience.

I celebrate my quirks, for they make me beautifully unique.

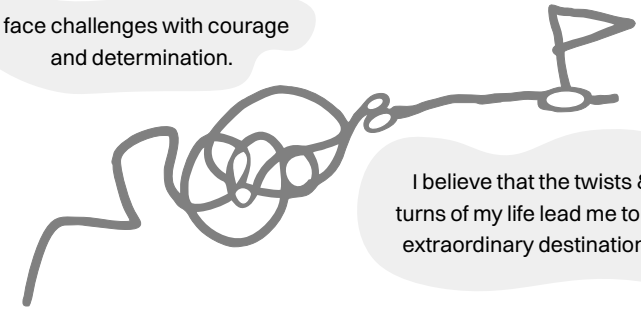
My voice matters and I believe in the power of my words to shape the world around me.



I am not the product of circumstances, I am the product of my own choices.

I face challenges with courage and determination.

I celebrate the achievements of others without diminishning my journey.



I believe that the twists & turns of my life lead me to an extraordinary destinations.

Tips to Crack Agniveer Sena - General Duty (GD) in the First Attempt

The Indian Army conducts the Agniveer Sena (GD) exam for recruitment of below officer rank cadre, The Agnipath Scheme was inducted recently and is one of the National Level Examinations in India. Cracking the Agniveer Sena (GD) exam in the first attempt, given the difficulty level, is tricky but attainable if done diligently and smartly. Here are some tips that you must follow by heart to crack the exam in the very first attempt:

1 **Think Right**

Calming yourself and thinking positive is the first and the best course of action that one is required to take. Think and believe that the exam goal is achievable if worked upon smartly.

2 **Start studying from the beginning**

All the aspirants are aware of how vast, comprehensive and detailed the syllabus of the Agniveer Sena (GD) exam is. To crack the exam in the first attempt you have to start preparing for the exam from the beginning of your 10th class. It is only then that you will be able to complete the entire syllabus. Following this approach will also allow you plenty of time to revise.

3 **Respect the syllabus and arrange the materials accordingly**

While preparing for the Agniveer Sena (GD) exam nothing can be labelled as less important. Questions can come from the most unexpected topic too. Laying down your whole syllabus in front of you will help you to decide on teh study material you require.

4 **Get the right tools and study material**

Gathering and preparing from the appropriate study material is something you cannot be ignorant towards. You can refer to Oswaal Books Agniveer Sena (GD) Chapter-wise Question Bank to enhance your preparation. This reference book is on the lines of the current syllabus and can be entrusted upon before the examination.

5 **Schedule total time for each subject**

Creating a schedule which gives due time to all the subjects is a must. Giving proper time to all the subjects daily will help you cover the syllabus on time, giving you enough time for revision.

6 **Understand the concepts**

No one can crack the Agniveer Sena (GD) exam just by mugging up all the concepts and topics. The syllabus of the exam is in-depth such that you need to understand every concept.

7 **Practice a lot of Sample Papers**

Agniveer Sena (GD) Chapter-wise Question Bank will not only help you in under standing the examination pattern, but they will also help you in figuring out the questions that come up every year and this might give you an edge over other students. You can refer to Oswaal the Agniveer Sena (GD) book as it include all the Examination with solution, Mind Maps, etc. Referring to various sample papers might also help you in comprehending the areas which require more work.

8 **Revise whenever you get time**

Make sure you revise as much as possible. The revision will help you in keeping the concepts fresh in your mind.

9 **Analysing your performance**

While you are solving papers, make sure you keep a track of time i.e. how much time does it take to solve one section or one question? Make a report of the sections and type of questions which take minimum and maximum time.

Agniveer Sena - General Duty (GD) Syllabus

GENERAL KNOWLEDGE

Abbreviations	–	National and International.
Sports	–	National and International.
Awards & Prizes	–	National awards, Gallantry awards, Nobel Prizes.
History	–	Important dates & battles in Indian and World History and land marks of Indian History, national movement.
Geography	–	Solar System Space exploration, The earth principal peaks, Deserts, Rivers, Lakes and famous waterfalls, Geographical Tallest, Biggest and Longest etc.
Terminology	–	Geographical terms, Economic terms, Astronomical terms, Legal terms and Misc terms.

UNO

Indian Armed Forces.

Indian Towns, States and Uts.

Institutions and Research Stations, International space Stations and Festivals of India and World.

Indian News Agencies and Dailies.

Continents and Sub Continents.

Inventions and Discoveries.

Environment.

The Constitution of India.

Religious communities and Principal Languages.

National and International Days.

International Organizations.

Books and Authors.

The world of Plants and animals.

Current Affairs and "Who's Who".

Note:- The above syllabus is not a comprehensive list of topics pertaining to the subject. At times questions may be asked other than the above topics but definitely within the syllabus of CBSE.

GENERAL SCIENCE

Human Body – Food and nutrition, diseases and prevention, vitamins and their uses.

Question of General Science consisting of topic related to Physics, Chemistry and Biology. based on fundamentals and day to day activities.

Medical Terms.

Scientific Terms.

Scientific and Research Institutes in India.

IO/Numeral Ability. The questions will be based on the ability of the candidates of age group ranging between 16 & 20 years.

MATHEMATICS

Arithmetic

Consisting of numbers, HCF, LCM, Decimal fraction, square roots, percentage, Average, Ratio and proportion, partnership, profit & loss, unitary method, time work and distance, simple interest.

Algebra

Basic operations and factorization, HCF and LCM, quadratic equations.

Geometry

Lines and angles, triangles quadrilaterals, parallelograms and circles

Mensuration

Area and perimeters of Squares, rectangles parallelograms and circles, volume and surface area of cube, cuboids, cone, cylinders and sphere.

Note : The above syllabus is not a comprehensive list of topics pertaining to the subject. At times questions may be asked other than the above topics but definitely within the syllabus of CBSE

Scheme - Agniveer Sena: General Duty (GD)

Ser No	Subject	Questions	Marks	Pass Marks	Remarks
(a)	General Knowledge	15	30	32	NCC 'C' Cert holders are exempted
(b)	General Science	20	40		
(c)	Maths	15	30		

MARKING SCHEME FOR AGNIVEER SENA (GD) 2024

(i) There will be negative marking in the exam. 1/4 of the marks assigned to the question will be deducted for every wrong answer.

(ii) No marks will be deducted for unattempted questions.

(iii) All attempted questions will be evaluated, even if marked for review.

❑❑❑

ELIGIBILITY CRITERIA

Nationality	**Should be an Indian Citizen**
Age Criteria	Minimum Age 17.5 years Maximum Age 21 years
Age Relaxation	An age relaxation of 2 years is provided for the benefit of candidates.
Upper Age Limit (One-time Measure)	The upper age limit is relaxed from 21 years to 23 years for Agneepath Recruitment Year 2024.
Education Criteria	
Post Name	**Qualification**
Agniveer General Duty (GD)	Class 10th Matric with 45% Marks and a Minimum 33% in Each Subject
Agniveer Technical (All Arms) **Agniveer Technical Aviation & Ammunition Examiner**	10+2 Intermediate Exam in Science Stream with Physics, Chemistry, Maths and English with Minimum 50% Marks in Aggregate and 40% in Each Subject. **OR** 10+2 /Intermediate exam pass in Science with Physics, Chemistry, Maths & English from any recognized State Education Board or Central Education Board to inclusive NIOS and ITI course of minimum one year in the required field with NSQF level 4 or above. **OR** 10th/Matric pass with 50% in aggregate and min 40% in English, Maths and Science with 02 years of Tech. Training from ITI or two/three yrs. Diploma in following streams only: - **(i)** Mechanic Motor Veh **(ii)** Mechanic Diesel **(iii)** Electronic Mech **(iv)** Technician Power Electronic Systems **(v)** Electrician **(vi)** Fitter **(vii)** Instrument Mechanic **(viii)** Draughtsman (All types) **(ix)** Surveyor **(x)** Geo Informatics Assistant **(xi)** Information and Communication Technology System Maintenance **(xii)** Information Technology **(xiii)** Mechanic Cum Operator Electric Communication System **(xiv)** Vessel Navigator **(xv)** Mechanical Engineering **(xvi)** Electrical Engineering **(xvii)** Electronics Engineering **(xviii)** Auto Mobile Engineering **(xix)** Computer Science/Computer Engineering **(xx)** Instrumentation Technology
Agniveer Clerk / Store Keeper (Technical) All Arms	10+2 Intermediate in Any Stream with Minimum 60% Marks Aggregate and Minimum 50% Marks in Each Subject
Agniveer Tradesman 10th Pass	Class 10th High School Exam Passed in Any Recognized Board in India. Minimum 33% in Each Subject
Agniveer Tradesman 8th Pass	Class 8th Eight Exam Passed in Any Recognized Board in India. Minimum 33% in Each Subject

PAY and PERKS

Indian Army Agniveer in Hand Salary

The Indian Army Agniveer in Hand Salary will vary depending on their rank and allowances. However, the basic pay for all Agniveers is Rs. 30,000 per month. In addition to their basic pay, Agniveers are also entitled to a number of allowances.

Year	Monthly Package	In-Hand Salary	Contribution to Agniveers Corpus Fund (30%)	Contribution to Corpus fund by GoI
1st Year	INR 30,000	INR 21,000	INR 9,000	INR 9,000
2nd Year	INR 33,000	INR 23,100	INR 9,000	INR 9,000
3rd Year	INR 36,500	INR 25,550	INR 10,950	INR 10,950
4th Year	INR 40,000	INR 28,000	INR 12,000	INR 12,000

Indian Army Agniveer Annual Package

The candidates post getting featured in the Indian Army Agniveer result list will be entrusted to get a monthly customised package of INR 30 thousand for the first year. This package will grow at the rate of 10% on an annual basis. With that, the annual package for the first year is going to be INR 3.6 LPA and it will go upto INR 4.8 LPA in the fourth year.

Year	Customized Package (Monthly)	Annual Package
1st Year	30000	INR 3.6 LPA
2nd Year	33000	INR 3.96 LPA
3rd Year	36500	INR 4.38 LPA
4th Year	40000	INR 4.8 LPA

Indian Army Agniveer Salary Structure

As per the information handout, the tenure of the candidate selected in the Indian Army Agniveer job profile is going to be of four years. During this period, they shall be paid a customised monthly package that is going to be devoid of allowances. Go through the table below to know about the year-wise Indian Army Agniveer in-hand salary.

Year	Customised Package (Monthly)	In Hand Salary	Contribution to Agniveers Corpus Fund (30%)	Contribution to Corpus fund by GoI
1st Year	30000	21000	9000	9000
2nd Year	33000	23100	9000	9000
3rd Year	36500	25550	10950	10950
4th Year	40000	28000	12000	12000

Indian Army Agniveer Job Profile

Candidates who score more than the Indian Army Agniveer cut off marks shall be finally appointed as shall be asked to discharge the following duties after joining the force.

Post	Job Profile
Agniveer Clerk / Store Keeper Technical	They have to maintain an inventory of the items available in the Army Canteen.
Agniveer (General Duty)	They belong to the active army group and have to work together with the team to combat enemy.
Agniveer Tradesmen	They belong to the multi-tasking group and have to do the job as per the profile they have been posted.
Agniveer (Tech)	They are entrusted with the job of making sure that all the technical equipment is working fine.

Agniveer Sena (GD) : Chapterwise Weightage Analysis

General Knowledge

Section	Number of Questions Asked
Current Affairs	2-3
Appointment	2
Awards & Honours	1-2
History	2-3
Geography	2
Polity	2-3
Total	**15**

General Science

Section	Number of Questions Asked
Biology	5-6
Physics	3-4
Chemistry	4-5
Total	**15**

Mathematics

Section	Number of Questions Asked
Percentage	2
CI & SI	1
Profit & Loss	1-2
Time & Work	1-2
Algebra	5-6
Number System	1-2
Polygon	-
Total	**20**

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JEE (MAIN) Year-wise 22 Solved Papers(All Shifts) (For 2023 Exam)

Mathematics, Physics, Chemistry

JEE (MAIN) Chapter-wise & Topic-wise Solved papers (2019-2023) Question Bank (For 2024 Exam)

Mathematics, Physics, Chemistry

JEE(Main) RMT Cards

Physics Part - I, Physics Part - II, Chemistry Part - I Chemistry Part - II, Mathematics Part -I, Mathematics Part - II

JEE Advanced (For 2024 Exam) 22 Year-wise Solved Papers (2002-2023)

Mathematics, Physics, Chemistry

JEE Advanced 10 Mock Test Papers Paper 1 & Paper 2 (For 2023 Exam)

JEE Advanced 10 Mock Test Papers (Paper-1 & 2)

GATE 14 Year-wise (For 2024 Exam) Solved Papers (2010 to 2023)

GATE 14 Yearwise Solved Paper (General Aptitude), GATE 14 Yearwise Solved Paper (Engineering Mathematics)

GATE 14 Years' (For 2024 Exam) Chapterwise & Topicwise Solved Papers (2010 to 2023)

GATE 14 Years' Chapterwise & Topicwise Solved Papers (General Aptitude), GATE 14 Years' Chapterwise & Topicwise Solved Papers (Engineering Mathematics)

NEET 36 Years' Solved Papers (For 2024 Exam) Chapterwise & Topicwise 1988-2023

Biology, Physics, Chemistry, NEET 18 Year-wise Solved Papers

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Physics, Chemistry, Mathematics & Biology

Vedic Maths

Vedic Maths (Ashima Sekhri)

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English, Accountancy, Biology, Business Studies, Chemistry, Mathematics/Applied Mathematics, Entrepreneurship, Computer Science/Informatics Practices, Sociology, Economics, Geography, History, Physics, Political Science, Psychology, Physical Education, (Quantitative Aptitude, Logical Reasoning General Awareness),

CDS Chapter-Wise & Topic-Wise Solved Papers (2014-2023)

Elementary Mathematics, English, General Knowledge

NDA-NA Chapter-Wise & Topic-Wise Solved Papers (2014-2023)

Mathematics, General Ability Test: English, General Ability Test: General Studies

CUET Question Bank (For 2023 Exam)

Quantitative Aptitude, Logical Reasoning, General Awareness

National Talent Search Exam (NTSE)

NTSE Mock Test 15 Sample Question Papers MAT + SAT Stage 1 & Stage 2, NTSE 10 Yearwise Solved Papers 2011-2021

NRA Question Bank 10th Pass

Quantitative Aptitude, Logical Reasoning, General Awareness, General English

NRA Question Bank 12th Pass

Quantitative Aptitude, Logical Reasoning, General Awareness, General English

NRA Question Bank Graduation Pass

Quantitative Aptitude, Logical Reasoning, General Awareness, General English

Objective General English

Objective General English

Objective Quantitative Aptitude

Objective Quantitative Aptitude

CAT

CAT 15 Mock Test Papers, CAT 25 Years' Chapterwise & Topicwise Solved Papers (1990-2008) (2017-2022), CAT 10 Years' Chapterwise & Topicwise Solved Papers Question Bank (2005-2008), (2017-2022), CAT 5 Years' Yearwise Solved Papers Shift wise (2018-2022)

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UGC NET Paper-1 Year-Wise 13 Solved Papers (2015-2023) For 2024 Exam General Aptitude, UGC NET Paper-1, 15 Years' Question Bank Chapterwise & Topicwise Solved Papers (2009-2023) General Aptitude

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HYDERABAD	Sri Balaji Book Depot , 9676996199, (040) 27613300
	WEST BENGAL
KOLKATA	United Book House, 9831344622

Our Distributors

	ANDHRA PRADESH
VISAKHAPATHAM	JBD Educational, 9246632691, 9246633693, Sri Rajeshwari Book Link, 9848036014
VIJAYAWADA	Akshaya Books Corner, 9666155555
	ANDAMAN & NICOBAR ISLAND
PORTBLAIR	Krishna Book Centre, 9474205570, Kumar Book Depot, 9932082455, Kumar Book Depot, 9932082455, Sree aditya Book Centre, 8332972720, 7013300914
	ASSAM
GUWAHATI	Book Emporium, 9675972993, 6000763186, Ashok Publication, 7896141127, Kayaan Enterprises, (0361) 2630443, Orchid Book house, 9864624209, Newco, 9864178188
	BIHAR
PATNA	Nova Publisher & Distributors, (0612) 2666404, Shri Durga Pustak Mandir, 9334477386, Sharda Pustak Bhandar, 9334259293, Vikas Book Depot, 9504780402, Alka Book Agency, 9835655005, Metro Book(E&C), Ishu Pustak Bhandar, 8294576789, Gyan Ganga Limited, 6203900312, Ishu Pustak Bhandar, (E & C), 9334186300/8294576789
MUZAFFARPUR	Pustak Bhandar, 7870834225
	CHATTISGARH
AMBIKAPUR	Saini Brothers, 9425582561, M.P Department Stores, 9425254264
BOKARO	Bokaro Student Friends Pvt. Ltd, Bokaro, 7277931285
BHILAI	Anil Book Depot, 9425234260
DURG	Bhagwati Bhawani Book Depot, 0788-2327620, 9827473100
KORBA	Kitab Ghar, Korba (E & C), 9425226528
RAIPUR	Shri Ramdev Traders, 9981761797, Gupta Pustak Mandir, 7974220323, Anil Publication, 9691618258/7999078802
RAIGARH	Sindhu Book Deopt, 9981935763
	DELHI
DELHI	Mittal Books, (011) 23288887, 9899037390, Singhania Book & Stationer, 9212028238, AoneBooks, New Delhi, 8800497047, Radhey Book Depot, 9818314141, Batheja Super Store, 9871833924, Lov Dev & Sons, Delhi (E & C), 9811182352, Zombozone, 9871274082, LDS Marketing, 9811182352/9999353491
	GUJARAT
AHMEDABAD	Patel Book, 9898184248, 9824386112, 9825900335, Zaveri Agency, 9979897312, 9979890330, Hardik Book Agency, (ISC) 079-24110043, 9904659821
BHAVNAGAR	Samir Book Stall, Bhavnagar (ISC) 9586305305
DAHOD	Collegian Book Corner, 9925501981
VAPI	Goutam Book Sellers, 9081790813
VALSAD	Mahavir Stationers, 9429474177
NAVSARI	College Store, (ISC) NO CALL 02637-258642, 9825099121
SURAT	Shopping Point, 9824108663
VADODARA	Umakant Book Sellers & Stationer, 9624920709
	HARYANA
ROHTAK	Manish Traders, 9812556687, Swami Kitab Ghar, 9355611088, Babu Ram Pradeep Kumar, 9813214692
REWARI	Sanjay book depot, 9255447231
BALLABGARH	Kashi Ram Kishan lal, 9289504004, 8920567245
HISAR	Natraj Book Distributors, 7988917452
BHUNA	Khurana Book Store, 9896572520
	JAMMU
	Sahitya Sangam, 9419190177
	JHARKHAND
BOKARO	Bokaro Student Friends, (0654) 2233094, 7360021503, Bharati Bhawan Agencies, 9431740797
RANCHI	Crown Book Distributor & Publishers, (0651) 2213735, 9431173904, Pustak Mandir, 9431115138,
DUMKA	Vidyarthi Pustak Bhandar, 9431310228
	KARNATAKA
HUBLI	Renuka Book Distributor, (0836) 2244124, Vidyamandir Book Distributors, 9980773976
BANGLORE	Krishna book house, 9739847334, Hema Book Stores, 9986767000, Sapna Book House Pvt. Ltd., 9980513242, Hema Book World, (Chamrajpet) (ISC) 080-40905110, 9945731121
BELLERI	Chatinya book centre, 9886064731
	KERALA
ERNAKULAM	Academic Book House, (0484) 2376613, H & C Store, 9864196344, Surya Book House, 9847124217, 9847238314
KOTTAYAM	Book Centre, (0481) 2566992
TRIVANDRUM	Academic Book House, (0471) 2333349, 9447063349, Ponni Book Stall, 9037591721
CALICUT	Aman Book Stall, (0495) 2721282,
	MADHYA PRADESH
CHHINDWARA	Pustak Bhawan, (E & C), 8982150100
GWALIOR	Agarwal Book Depot, 9425116210
INDORE	Bhaiya Industries, 9893326853, Sushil Prakashan,(0731) 2503333, 2535892, 9425322330, Bhaiya Store, 9425318103, Arun Prakashan, 9424890785, Bhaiya Book Centre, 9424081874, Seva Suppliers, 9826451052
JABALPUR	Vinay Pustak Sadan, 8962362667, Anand Books and Stationers, 9425323508
SAGAR	Princi Book Depot, Sagar, 9977277011
KATNI	Shri Mahavir Agency, 9425363412
UJJAIN	Shreenath Book Depot, 9827544045
BHOPAL	Gupta Brother, 9644482444
	MAHARASHTRA
PUNE	Natraj Book Depot, (020) 24485054, 9890054092, Vikas Book House, 9921331187, Pravin Sales, 9890683475, New Saraswati Granth Bhandar, 9422323859, Akshar Books & Stationary, 7385089789, Vardhaman Educational, 9860574354, Yash Book Centre, 9890156763, Pragati Book Centre, (ISC), 9850039311, Praveen Sales, Pragati Book Centre, Pune (E & C), 9850039311
AURANGABAD	Shree Sainath Agencies, 7350294089, Maya Book Centre, (ISC), 9372360150
MUMBAI	Vidyarthi Sales Agencies, 9819776110, New Student Agencies, 7045065799, Shivam Books & Stationery, 8619805332
JALGAON	Sharma Book Depot & Stat. (ISC), 9421393040
LATUR	Yash Book House, 9637936999, Shri Ganesh Pustakalay, 9730172188
KOLHAPUR	Granth the Book World, 9922295522
NAGPUR	Laxmi Pustakalay and Stationers, (0712) 2727354, Vijay Book Depot, 9860122094
NANDED	Renuka Book distributor, 9765406133, Novelty Book Depot, 9657690220, Karamveer Book Depot, 9923966466, Arun Book & Stationers, 9423110953 Abhang Pustakalaya, 9823470756/9175940756
NASHIK	Rahul Book Centre, 9970849681, New India Book House, 9623123458
DHULE	Navjeevan Book Stall, 7020525561
YAVATMAL	Shri Ganesh Pustkalaya, 9423131275
VASAI	Prime Book Centre, Vasai, 9890293662
	ODISHA
CUTTACK	A. K. Mishra Agencies, 9437025991, 9437081319
BHUBANESHWAR	M/s Pragnya, 8847888616, 9437943777, Padmalaya, 9437026922, Bidyashree, 9937017070, Books Godown, 7894281110
BARIPADA	Trimurti Book World, 9437034735
KEONJHAR	Students corner, 7008435418
	PUNJAB
AMBALA	Bharat Book Depot, 7988455354
PATIALA	Goel Sons, 9463619978, Adarsh Enterprises, 9814347613
JALANDHAR	Cheap Book Store, 9872223458, 9878258592, City Book Shop, 9417440753, Subhash Book Depot, 9876453625, Paramvir Enterprises, 9878626248
FEROZPUR	Sita Ram book Depot, 9463039199, 7696141911
LUDHIANA	Amit Book, 9815807871, Gupta Brothers, 9888200206, Bhatia Book Centre, 9815277131
CHANDIGARH	Mohindra Book Depot, 9814920226
	RAJASTHAN
AJMER	Laxmi General Store, Ajmer, 0145- 2428942 9460652197
KOTA	Vardhman Book Depot, 9571365020, 8003221190 Raj Traders, 9309232829
BHILWARA	Nakoda Book Depot, (01482) 243653, 9214983594, Alankar Book Depot, 9414707462
JAIPUR	Ravi Enterprises, 9829060694, Saraswati Book House, (0141) 2610823, 9829811155, Goyal Book Distt., 9460983939, 9414782130
UDAIPUR	Sunil Book Store, 9828682260
JODHPUR	Second Hand Book Stall, 9460004745
	TRIPURA
AGARTALA	Book Corner, 8794894165, 8984657146, Book Emporium, 9089230412
	TAMIL NADU
COIMBATORE	Majestic Book House, (0422) 2384333, CBSC Book Shop, 9585979752
CHENNAI	Arraba Book Traders, (044) 25387868, 9841459105, M.R. Book Store (044) 25364596, Kalaimagal Store, (044) 5544072, 9940619404, Vijaya Stores, 9381037417, Bookmark It-Books & Stat. Store, 7305151653, M.K. Store, 9840030099, Tiger Books Pvt. Ltd., 9710447000, New Mylai Stationers, 9841313062, Prince Book House, Chennai, 0444-2053926, 9952068491, S K Publishers & Distributors, 9789865544, Dharma Book Shop, 8667227171
PUDUCHERRY	Sri Lakshmi Book Seller, 7871555145
SALEM	Pattu book centre, 9894816280
TRICHY	P.R.Sons Book Seller, 9443370597, Rasi Publication, 9894816280
THENI	Maya Book Centre, 9443929274
MADURAI	Selvi Book Shoppe, 9843057435, Jayam Book Centre, 9894658036
VELLORE	G.K book centre and collections, 9894517994
	TELANGANA
HYDERABAD	Sri Balaji Book Depot, (040) 27613300, 9866355473, Shah Book House, 9849564564
	Vishal Book Distributors, 9246333166, Himalaya Book World, 7032578527

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Exclusive School Books Suppliers

	UTTARAKHAND
DEHRADUN	Inder Book Agencies, 9634045280, Amar Book Depot , 8130491477, Goyal Book Store, 9897318047, New National Book House, 9897830283/9720590054
MUSSORIE	Ram Saran Dass Chanda kiran, 0135-2632785, 9761344588
	UTTAR PRADESH
AGRA	Sparsh Book Agency, 9412257817, Om Pustak Mandir, (0562) 2464014, 9319117771, Sanjay Publication, 8126699922 Arti book centre, 8630128856, Panchsheel Books, 9412257962, Bhagwati Book Store, (E & C), 9149081912
ALLAHABAD	Mehrotra Book Agency, (0532) 2266865, 9415636890
AZAMGARH	Sasta Sahitya Bhandar, 9450029674
ALIGARH	K.B.C.L. Agarwal, 9897124960, Shaligram Agencies, 9412317800, New Vimal Books, 9997398868, T.I.C Book centre, 9808039570
BULANDSHAHAR	Rastogi Book Depot, 9837053462/9368978202
BALRAMPUR	Universal Book Center, 8933826726
BAREILLY	Siksha Prakashan, 9837829284
HARDOI	Mittal Pustak Kendra, 9838201466
DEORIA	Kanodia Book Depot, 9415277835
VARANASI	Gupta Books, 8707225564, Bookman & Company,9935194495/7668899901
MATHURA	Sapra Traders, 9410076716, Vijay Book House , 9897254292
FARRUKHABAD	Anurag Book Agencies, 8844007575
NAJIBABAD	Gupta News Agency, 8868932500, Gupta News Agency, (E & C), 8868932500
DHAMPUR	Ramkumar Mahaveer Prasad, 9411942550
GORAKHPUR	Central Book House, 9935454590, Friends & Co., 9450277154, Dinesh book depot, 9125818274, Friends & Co., 9450277154
JHANSI	Bhanu Book Depot, 9415031340
KANPUR	Radha News Agency, 8957247427, Raj Book Dist., 9235616506, H K Book Distributors, 9935146730, H K Book Distributors, 9506033137/9935146730
LUCKNOW	Vyapar Sadan, 7607102462, Om Book Depot, 7705871398, Azad Book Depot Pvt. Ltd., 7317000250, Book Sadan, 9839487327, Rama Book Depot(Retail), 7355078254, Ashirwad Book Depot, 9235501197, Book.com, 7458922755, Universal Books, 9450302161, Sheetla Book Agency, 9235832418, Vidyarthi Kendra Publisher & Distributor Pvt Ltd, (Gold), 9554967415, Tripathi Book House, 9415425943
MEERUT	Ideal Book Depot, (0121) 4059252, 9837066307
NOIDA	Prozo (Global Edu4 Share Pvt. Ltd), 9318395520, Goyal Books Overseas Pvt.Ltd., 1204655555 9873387003
PRAYAGRAJ	Kanhaiya Pustak Bhawan, 9415317109
MAWANA	Subhash Book Depot, 9760262264
	WEST BENGAL
KOLKATA	Oriental Publishers & Distributor (033) 40628367, Katha 'O' Kahini, (033) 22196313, 22419071, Saha Book House, (033), 22193671, 9333416484, United Book House, 9831344622, Bijay Pustak Bhandar, 8961260603, Shawan Books Distributors, 8336820363, Krishna Book House, 9123083874
RENUKOOT	Om Stationers, 7007326732
COOCH BEHAR	S.B. Book Distributor, Cooch behar, 9002670771
KHARAGPUR	Subhani Book Store, 9046891334
SILIGURI	Agarwal Book House, 9832038727, Modern Book Agency, 8145578772
DINAJPUR	Krishna Book House, 7031748945
MURSHIDABAD	New Book House, 8944876176

Entrance & Competition Distributors

	BIHAR
PATNA	Metro Books Corner, 9431647013, Alka Book Agency, 9835655005, Vikas Book Depot, 9504780402
	CHATTISGARH
KORBA	Kitab Ghar, 9425226528, Shri Ramdev Traders, 9981761797
	DELHI
DELHI	Singhania Book & Stationer, 9212028238, Radhey Book depot, 9818314141, The Book Shop, 9310262701, Mittal Books, 9899037390, Lov Dev & Sons, 9999353491
NEW DELHI	Anupam Sales, 9560504617, A ONE BOOKS, 8800497047
	HARYANA
AMBALA	Bharat Book Depot, 7988455354
	JHARKHAND
BOKARO	Bokaro Student Friends Pvt. Ltd, 7360021503
	MADHYA PRADESH
INDORE	Bhaiya Industries, 9109120101
CHHINDWARA	Pustak Bhawan, 9827255997
	MAHARASHTRA
NAGPUR	Laxmi Pustakalay and Stationers, (0712) 2727354
PUNE	Pragati Book Centre, 9850039311
MUMBAI	New Student Agencies LLP, 7045065799
	ODISHA
BARIPADA	Trimurti Book World, 9437034735
CUTTAK	A.K.Mishra Agencies, 9437025991
BHUBANESHWAR	M/s Pragnya, 9437943777
	PUNJAB
JALANDHAR	Cheap Book Store, 9872223458, 9878258592
	RAJASTHAN
KOTA	Vardhman Book Depot, 9571365020, Raj Traders, 9309232829
JAIPUR	Goyal Book Distributors, 9414782130
	UTTAR PRADESH
AGRA	BHAGWATI BOOK STORE, 9149081912, Sparsh Book Agency, 9412257817, Sanjay Publication, 8126699922
ALIGARH	New Vimal Books, 9997398868
ALLAHABAD	Mehrotra Book Agency, (532) 2266865, 9415636890
GORAKHPUR	Central Book House, 9935454590
KANPUR	Raj Book Dist, 9235616506
LUCKNOW	Azad Book Depot PVT LTD, 7317000250, Rama Book Depot(Retail), 7355078254 Ashirwad Book Depot , 9235501197, Book Sadan, 8318643277, Book.com , 7458922755, Sheetla Book Agency, 9235832418
PRAYAGRAJ	Format Center, 9335115561, Garg Brothers Trading & Services Pvt. Ltd., 7388100499
	UTTAR PRADESH
DEHRADUN	Inder Book Agancies, 9634045280
	WEST BENGAL
KOLKATA	Bijay Pustak Bhandar Pvt. Ltd., 8961260603, Saha Book House, 9674827254 United Book House, 9831344622, Techno World, 9830168159

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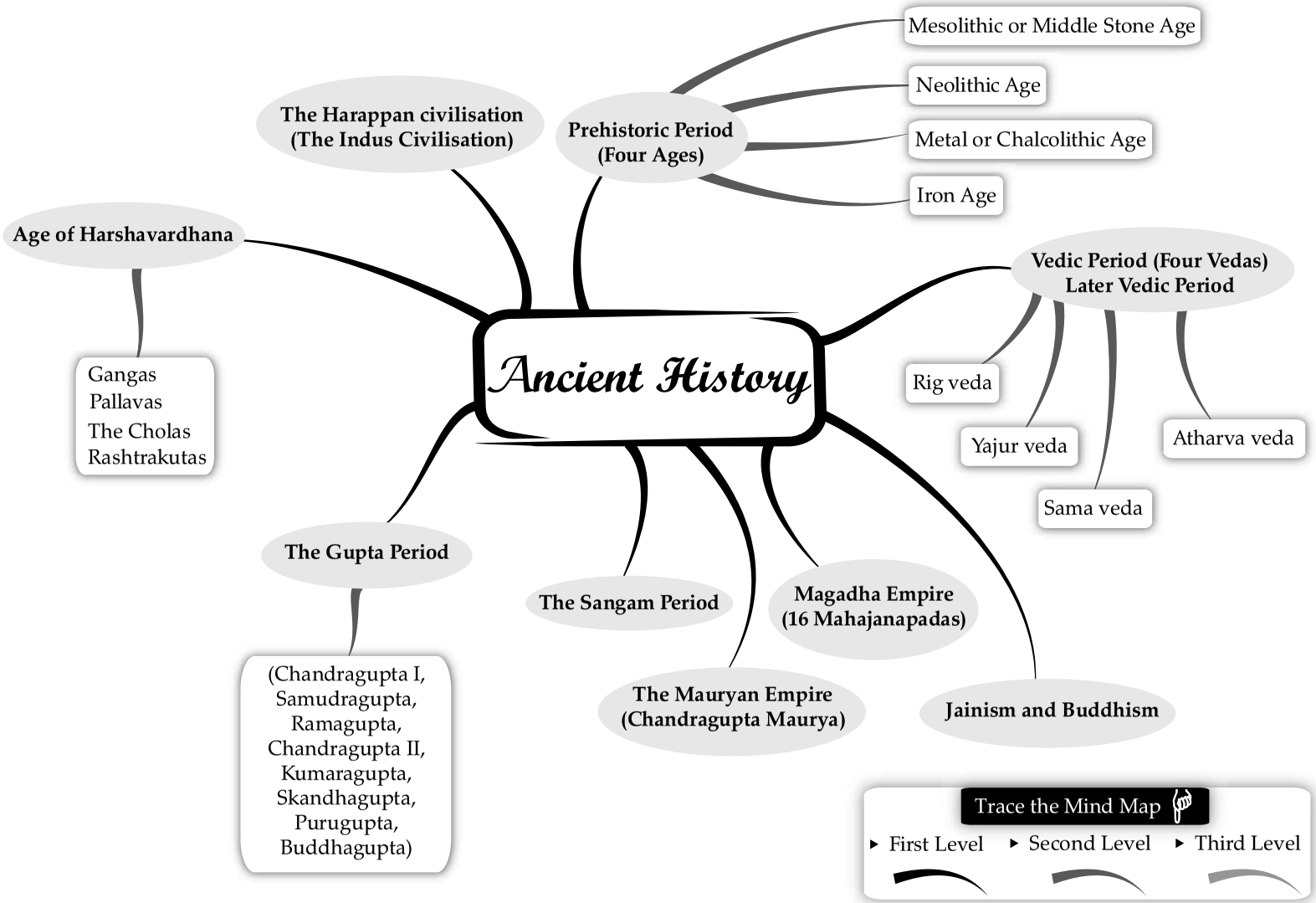

Ancient History
Prehistoric Period (Four Ages)
Mesolithic or Middle Stone Age
Neolithic Age
Metal or Chalcolithic Age
Iron Age
The Harappan civilisation (The Indus Civilisation)
Age of Harshavardhana
Gangas
Pallavas
The Cholas
Rashtrakutas
Vedic Period (Four Vedas) Later Vedic Period
Rig veda
Yajur veda
Sama veda
Atharva veda
The Gupta Period
(Chandragupta I, Samudragupta, Ramagupta, Chandragupta II, Kumaragupta, Skandhagupta, Purugupta, Buddhagupta)
The Sangam Period
Magadha Empire (16 Mahajanapadas)
The Mauryan Empire (Chandragupta Maurya)
Jainism and Buddhism
Trace the Mind Map
First Level
Second Level
Third Level

Medieval History
Early Medieval Indian Period
Medieval India
Delhi Sultanate
Bhakti Movement
Vijayanagar and Bahmani kingdom
The Mughal Empire
Later Mughals
Marathas
Peshwas
Sikh Gurus
Trace the Mind Map
First Level
Second Level
Third Level

Modern History

Chief National Activities

- INC
- Partition of Bengal
- Swadeshi Movement
- Muslim League
- Demand for Swaraj
- Surat Session
- Morley Minto Reforms
- Ghadar Party
- Home Rule Movement
- Lucknow Pact
- August Declaration
- Rowlatt Act
- Jallianwala Bagh Massacre
- Khilafat Movement
- Non-Cooperation Movement
- Chauri-Chaura Movement
- Dandi March
- Swaraj Party
- Simon Commission
- First Round Table Conf.
- Second Round Table Conf.
- Third Round Table Conf.
- The Nehru Report
- Lahore Session
- Poona Pact
- Formation of Constituent Assembly
- INA
- Partition and Independence

The Revolt of 1857

Advent of Europeans

- Portuguese
- Dutch
- English
- Danes
- French

Governor-Generals of Bengal

- Warren Hastings
- Lord Cornwallis
- Sir John Shore
- George Barlow
- Lord Minto I
- Lord Hastings
- Lord Amherst

Viceroys of India

- Lord Canning
- Lord Elgin
- Lord John Lawrence
- Lord Mayo
- Lord Northbrook
- Lord Lytton
- Lord Ripon
- Lord Dufferin
- Lord Lansdowne
- Lord Elgin II
- Lord Curzon
- Lord Minto II
- Lord Hardinge II
- Lord Chelmsford
- Lord Reading
- Lord Irwin
- Lord Willingdon
- Lord Linlithgow
- Lord Wavell
- Lord Mountbatten

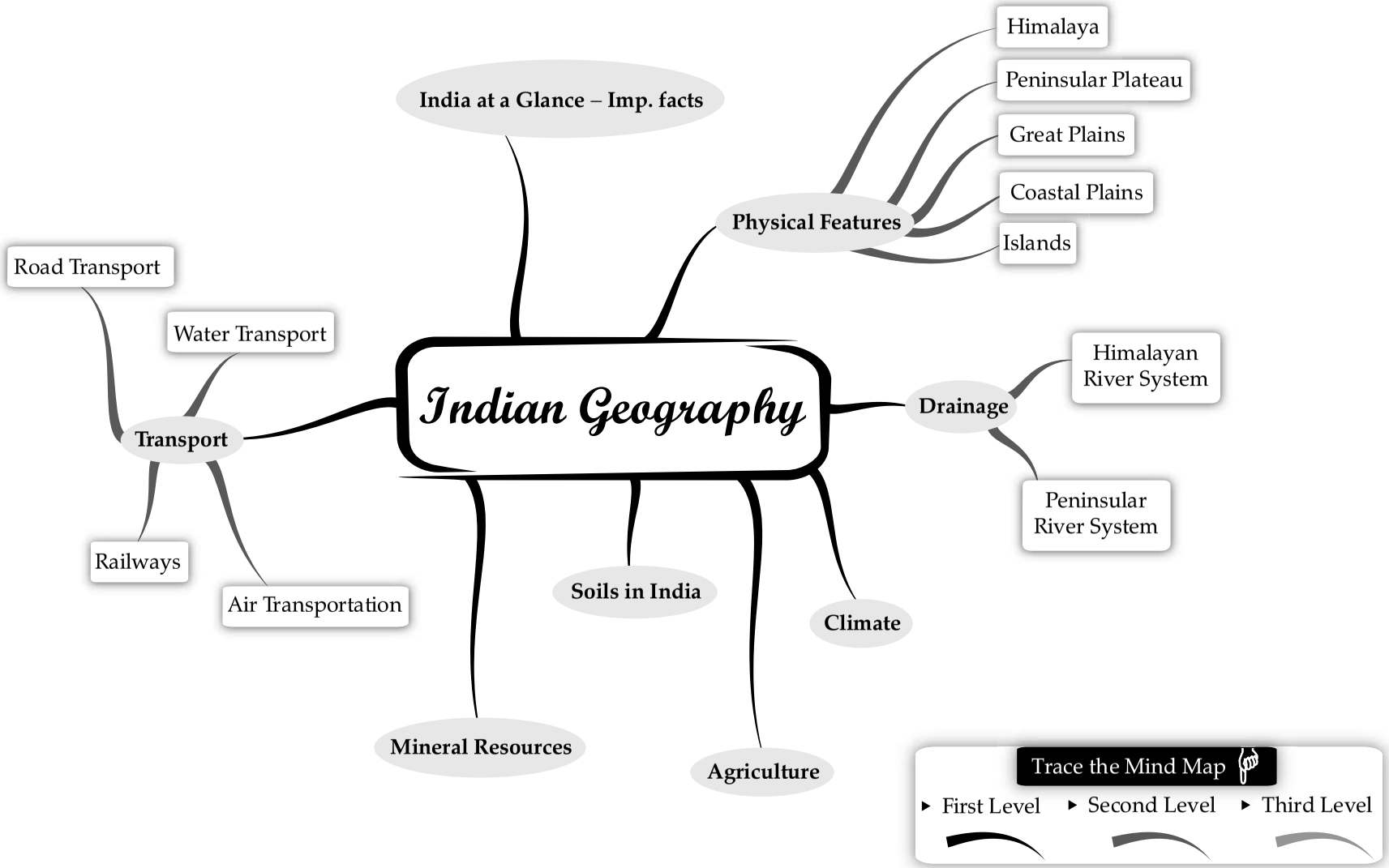
Governor-Generals of India

- Lord William Bentinck
- Lord Metcalfe
- Lord Auckland
- Lord Ellenborough
- Lord Hardinge
- Lord Dalhousie
- Lord Canning

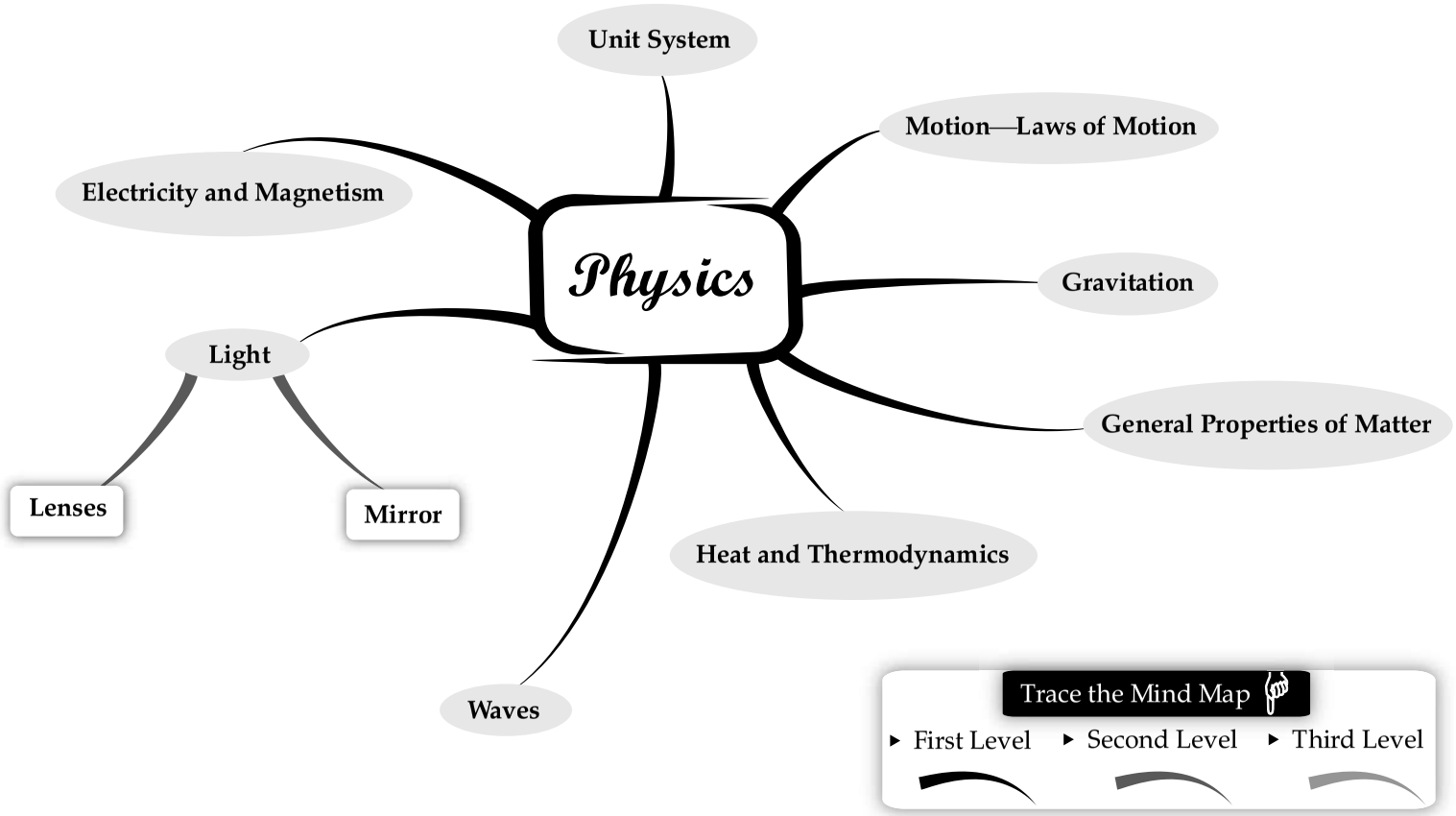
Trace the Mind Map

▸ First Level ▸ Second Level ▸ Third Level

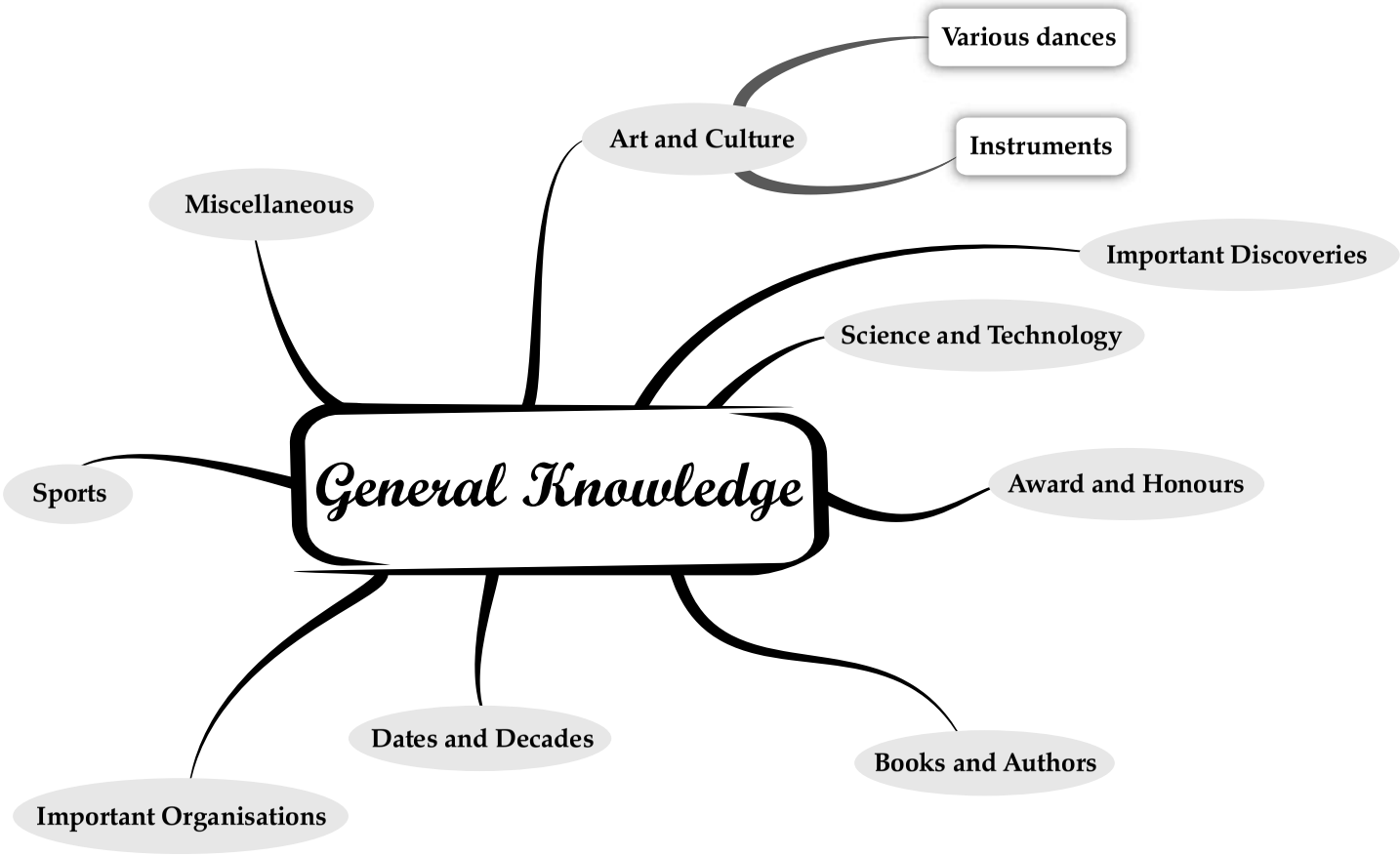
World Geography
Universe-facts about universe
Asteroids
Meteors
Classification of Planets
Solar System
Sun
Latitude
Longitude
Earth at Glance
Earth
Structure of Earth's Interior—Layers of Earth
Theories of Plates of Earth
Earthquakes
Volcanism
Rocks
Deforms
Atmosphere
Jetstream
Ocean
Continents
Trace the Mind Map
First Level
Second Level
Third Level


Indian Geography
India at a Glance – Imp. facts
Physical Features
Himalaya
Peninsular Plateau
Great Plains
Coastal Plains
Islands
Drainage
Himalayan River System
Peninsular River System
Transport
Road Transport
Water Transport
Railways
Air Transportation
Soils in India
Climate
Mineral Resources
Agriculture
Trace the Mind Map
First Level
Second Level
Third Level

Biology
Living World
The Cell
Human System
Central Nervous System
Ecology
Pollution
Biotechnology
Trace the Mind Map
First Level
Second Level
Third Level

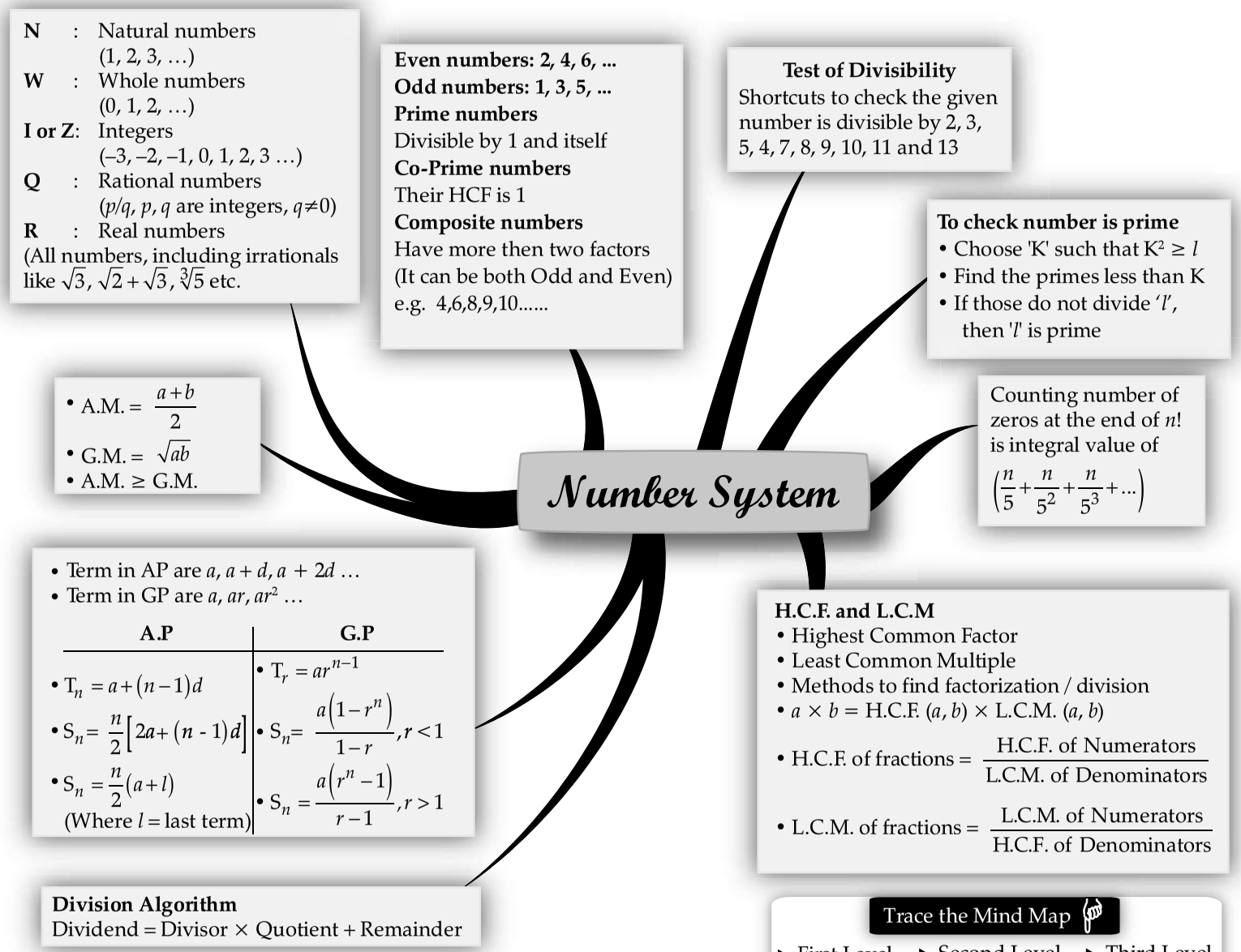

Physics
Unit System
Motion—Laws of Motion
Gravitation
General Properties of Matter
Heat and Thermodynamics
Waves
Light
Lenses
Mirror
Electricity and Magnetism
Trace the Mind Map
First Level
Second Level
Third Level

Chemistry
Physical and Chemical Changes
Matter
Boiling Point
Melting Point
Atom, Molecules and Element
Isobars
Isotopes
Some Important Compounds
Acids, Bases and Salts
Renewable and non-renewable resources
Fuels
Flames
Coal
Fire Extinguishers
Trace the Mind Map
First Level
Second Level
Third Level



Trace the Mind Map

- First Level
- Second Level
- Third Level


N : Natural numbers (1, 2, 3, …)
W : Whole numbers (0, 1, 2, …)
I or Z: Integers (–3, –2, –1, 0, 1, 2, 3 …)
Q : Rational numbers (p/q, p, q are integers, $q \neq 0$)
R : Real numbers
(All numbers, including irrationals like $\sqrt{3}$, $\sqrt{2}+\sqrt{3}$, $\sqrt[3]{5}$ etc.
Even numbers: 2, 4, 6, ...
Odd numbers: 1, 3, 5, ...
Prime numbers
Divisible by 1 and itself
Co-Prime numbers
Their HCF is 1
Composite numbers
Have more then two factors
(It can be both Odd and Even)
e.g. 4,6,8,9,10.....
Test of Divisibility
Shortcuts to check the given number is divisible by 2, 3, 5, 4, 7, 8, 9, 10, 11 and 13
To check number is prime
• Choose 'K' such that $K^2 \geq l$
• Find the primes less than K
• If those do not divide 'l', then 'l' is prime
• A.M. = $\frac{a+b}{2}$
• G.M. = $\sqrt{ab}$
• A.M. ≥ G.M.
Counting number of zeros at the end of $n!$ is integral value of $\left(\frac{n}{5}+\frac{n}{5^2}+\frac{n}{5^3}+...\right)$
Number System
• Term in AP are $a, a+d, a+2d$ …
• Term in GP are a, ar, ar^2 …
A.P
• $T_n = a+(n-1)d$
• $S_n = \frac{n}{2}\left[2a+(n-1)d\right]$
• $S_n = \frac{n}{2}(a+l)$ (Where l = last term)
G.P
• $T_r = ar^{n-1}$
• $S_n = \frac{a(1-r^n)}{1-r}, r<1$
• $S_n = \frac{a(r^n-1)}{r-1}, r>1$
H.C.F. and L.C.M
• Highest Common Factor
• Least Common Multiple
• Methods to find factorization / division
• $a \times b$ = H.C.F. (a, b) × L.C.M. (a, b)
• H.C.F. of fractions = $\frac{\text{H.C.F. of Numerators}}{\text{L.C.M. of Denominators}}$
• L.C.M. of fractions = $\frac{\text{L.C.M. of Numerators}}{\text{H.C.F. of Denominators}}$
Division Algorithm
Dividend = Divisor × Quotient + Remainder
Trace the Mind Map
First Level
Second Level
Third Level

Simplification

V BODMAS Rule

V means Vinculum or bar. (The bar you see on the top of the values $\bar{x}$)
B means Brackets - ( ) {} [ ]
O means of [i.e., Powers and square roots etc.]
D means Division [÷]
M means Multiplication [×]
A means Addition [+]
S means Subtraction [–]

Modulus: $|a| = \begin{cases} a, & a \geq 0 \\ -a, & a < 0 \end{cases}$

Square Root and Cube Root

$l = k^2$
l is square of k
k is square root of l

Methods of finding

- Prime factorization method
- Division method

$l = k^3$
l is cube of k
k is cube root of l

Method of finding

- Prime factorization method

Rules of Indices

- $a^m \times a^n = a^{m+n}$
- $\frac{a^m}{a^n} = a^{m-n}$

Fractions

$\frac{a}{b}$; $a, b \in I$
and $b \neq o$

Types of Fractions

- Proper fractions, improper fractions, like fractions unlike fractions, mixed fraction, continuous fraction

Rules of Surds

- $\sqrt[n]{a} = a^{\frac{1}{n}}$
- $\left(\sqrt[m]{p}\right)^m = p$

Some Root Value

- $\sqrt{2} = 1.414$
- $\sqrt{3} = 1.732$
- $\sqrt{5+\sqrt{11+\sqrt{19+\sqrt{29+\sqrt{49}}}}} = 3$

Decimals

- Recurring decimals
- Non - recurring decimals.
- Decimal fractions

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Average and Problems on Ages

Average (Arithmetic Mean)

- Average of $1^2, 2^2, 3^2, 4^2, 5^2 \ldots n^2 = \dfrac{(n+1)(2n+1)}{6}$
- Average of $1^3, 2^3, 3^3 \ldots\ldots n^3 = \dfrac{n(n+1)^2}{4}$

The Average of first n consecutive even Natural numbers i.e. 2, 4, 6, …. $2n = n+1$

The Average of first n consecutive odd natural numbers i.e. 1, 3, 5, …..$(2n-1) = n$

- If the current age is x, then the age after n years will be $(x + n)$ years.
- If the current age is x, then the age years before will be $(x - n)$ years.
- If the age is given in the form of a ratio, for example, $p : q$, then the ages shall be considered as px and qx, repectively.
- If the current age is x, then n times the current age will be $(x \times n)$ years.
- If the current age to be x, then $\dfrac{1}{n}$ of the age will be equal to $\left(\dfrac{x}{n}\right)$ years.

k number of observations with $n_1, n_\alpha, \ldots n_k$ numbers having $A_1, A_2, \ldots\ldots A_k$ averages respectively.
Then, Combined average
$= \dfrac{n_1A_1 + n_\alpha A_\alpha + \ldots\ldots + n_kA_k}{n_1 + n_\alpha + \ldots\ldots + n_k}$

$A = \dfrac{\text{Sum of Observations}}{\text{Total number of Observations}}$

Average of first n terms $= \dfrac{n+1}{2}$

Problems on Ages

If the average of n_1 number is a_1 and the average of n_2 numbers is a_2, then the average of total numbers n_1 and n_2,

$$\text{Average} = \frac{n_1a_1 + n_2a_2}{n_1 + n_2}$$

Puzzle type Questions Based on Ages of a Person

Solving using known Mathematical tools

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Percentage, Profit-Loss and Discount

If a man sells two similar objects, one at a loss of $x\%$ and another at a gain of $x\%$, then he always incurs loss in this transaction and loss% is $\frac{x^2}{100}\%$

- If x is reduced to x_0, then Reduction $\% = \frac{x - x_0}{x} \times 100$
- If x is increased to x_1, then, Increment $x_1\ \% = \frac{x_1 - x}{x} \times 100$

Value after n years $= P\left(1 - \frac{R}{100}\right)^n$

Depreciation

'Per' hundred denoted by %

Fraction to % $\frac{3}{4} \times 100 = 75\%$

Population after n years $= P\left(1 + \frac{R}{100}\right)^n$

- Cost Price (C.P)
- Selling Price (S.P)
- Marked Price (M.P)
- Profit-Loss (P-L)

Profit / Loss

% to fraction $50\% = \frac{50}{100}$

- Profit $= S.P - C.P$
- Loss $= C.P - S.P$
- Profit % $= \frac{P}{C.P} \times 100\%$
- Loss % $= \frac{L}{C.P} \times 100\%$
- Gain/Loss% $= \left[\frac{x - y}{y}\right] \times 100$
- S.P $= \left[\frac{100 \pm \left(\frac{\text{gain}}{\text{loss}}\right)}{100}\right] \times C.P$

Where $x = S.P$, $y = C.P$

- If an object is sold on $r\%$ loss,

then, $S.P = \frac{[100 - \text{Loss}\%]}{100} \times C.P$

or $C.P = \frac{100}{[100 - \text{Loss}\%]} \times S.P$

Discount $=$ Marked Price $-$ Selling Price

Discount % $= \frac{\text{discount}}{\text{Marked price}} \times 100$

Discount

If an article is sold at D% discount, then

$S.P = MP\left(\frac{100 - D}{100}\right)$ or $MP = \frac{S.P \times 100}{100 - D}$

More/less Percentage

- A is R % more than B, then B is less than A by $\left(\frac{R}{R + 100} \times 100\right)\%$
- A is R% less than B, then B is more than A by $\left(\frac{R}{100 - R} \times 100\right)\%$

- If a% and b% are two succeissive losses then (negative sign shown loss and positive sign shows profit). Total loss $\% = [-a - b + \frac{ab}{100}]$
- If $a\%$ profit and $b\%$ loss occur, simultaneously then overall loss or profit % is $[a - b - \frac{ab}{100}]\%$
- If $a\%$ loss and $b\%$ profit occur then, total $\frac{\text{loss}}{\text{profit}}$ is $\left[-a + b - \frac{ab}{100}\right]\%$

(–ve sign for loss, +ve sign for profit)

Single discount $= \left(x + y - \frac{xy}{100}\right)\%$

where x and y are two successive discounts.

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