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## KERALA PUBLIC SERVICE COMMISSION NOTIFICATION

No. DEI (1) 23/2019/EW
Thiruvananthapuram, Dated: 01.02.2020 The Departmental Tests notified in the Extra-ordinary Kerala Gazette No. 3101 dated 16.12 .2019 will be held from 15.02 .2020 at the available online Examination Centres in all districts in accordance with the Time-table appended to this notification. The tests will be objective type (ONLINE) except the IInd class Language Test in Malayalam/Tamil/Kannada and the Minority Language Test in Kannada and Tamil.
I. Admission Tickets can be downloaded from the candidate's profile in the PSC Website (www.keralapsc.gov.in) 10 days prior to commencement of the first test.
II. Candidates should be present for the identification before the time specified in the Admission Ticket. Candidates will not be permitted for the identification after the specified time.
III. The question papers that can be answered by referring to books in the examination hall have been indicated in the Time-table with the words "With Books". Candidates will be allowed to use only the text books prescribed in the respective subjects which are published by Government. The use of books containing notes or commentaries and guides, digest, summaries etc. is prohibited. Acts and Rules by Government amending the codes prescribed in the reference books will however be permitted in the examination hall for paper that can be answered "With Books".
The following publications are permitted for reference other than Government publications

| Papers | Name of Books | Editor/Publication |
| :---: | :---: | :---: |
| Account Test <br> (Higher) Part II - <br> Paper I (Introduction) | The constitution of India (Bare Act) (should not be a guide or treatise) | Any private publication |
| Motor Vehicles <br> Department Test I Paper | Law of Motor Vehicles in Kerala | Sri.A.Gangadharan BA, BL |
|  | Law of Motor Vehicles in Kerala | Sri. G.Suresh for AG Publications, Cochin |
|  | Law of Motor Vehicles and Motor Accident Claims | Published by Law Books Centre Ernakulam |
| Motor Vehicles <br> Department Test II Paper | Law of Taxes on Motor Vehicles | Sri. A. K. Avirah, Advocate, Ernakulam and Sri. Parameswaran Moothath, B.A.B.L. |
|  | The Kerala Motor Vehicles Taxation Act, 1976 | Sri. Sugathan, Advocate,Ernakulam |
|  | Kerala Motor Vehicle Taxation Act and Rules | Published by Law Books Centre Ernakulam |
| Panchayat Tests | Kerala Panchayat Manual (Act and Rules) | Published by the Kerala Law Times, Cochin-11 Or Cochin 31 |
| Civil Judicial Test I Paper | Code of Civil Procedure | Published by the Kerala Law Times Cochin-11 Or Cochin 31, <br> Swami Law House Ernakulam \& Law Books Centre Emakulam |
|  | Civil Rules of Practice | Law Books Centre, Ernakulam Edited by Sri. .George Johnson \& Sri Dominic Johnson. |
| Criminal Judicial Test I Paper | Code of Criminal Procedure | Published by Law Books centre, Kochi, Swami Law House, Ernakulam (allowed for January 2020 Exam.) |
| Criminal Judicial Test II Paper | Indian Penal Code |  |
| Excise Test Part - A <br> I \& \|| Papers | The Kerala Abkari Act | B.G.Harindranath, Swamy Law House, Ernakulam. |
| Revenue Test Paper I, II \& III | LAWS ON LAND | Sri.Gangadharan |
|  | LAWS ON LAND | Sri. G.Suresh |
|  | LAWS ON LAND IN KERALA | Sri.George Johnson and Sri.Dominic Johnson |
| Revenue Test <br> Paper - III | KERALA LAND REFORMS ACT | Sri.Sugathan, Advocate, Ernakulam |
|  | LAW OF LAND REFORMS IN KERALA | Sri.George Johnson and Sri.Dominic Johnson |
| Kerala Head Load Workers Rules I Paper | Paper I <br> Kerala Head Load Workers Rules (Revised Syllabus is provided along with the time table.) | Downloaded Acts and Rules prescribed under the revised syllabus attested by the Head of the department (Chief Executive) |

IV. Candidates shall not use in the examination hall private publications other than those specifically mentioned above to answer the questions that can be answered by referring to books. No photocopies of books will be allowed, except those permitted in the instructions to candidates attached to the Admission Ticket.
V. Candidates shall bring with them their own text books for answering the papers for which the use of books is allowed. No candidates will be allowed to share books with or give books to or take books from any other candidate during the course of examination.
VI. CANDIDATES SHOULD NOT BRING WATCH, ANY ELECTRONIC/ COMMUNICATION DEVICES SUCH AS MOBILE PHONE, CALCULATOR, DIGITAL DIARY, PENDRIVE, MEMORY CARD ETC. IN THE VERIFICATION HALL AND ONLINE EXAMINATION HALL.
VII. As the photograph of the candidate with name and date has been uploaded with the application, the scanned image of that photograph with the above details will be available on the Admission ticket. HENCE NO PHOTOGRAPH SHALL BE PASTED ON THE ADMISSION TICKET. THOSE WHO PRODUCE ADMISSION TICKET WITH PHOTOGRAPH PASTED ON THE SCANNED IMAGE WILL NOT BEALLOWED TO ATTEND THE EXAMINATION. CANDIDATES SHOULD ALSO PRODUCEA PHOTO AFFIXED IDENTITY CARD APPROVED BY THE COMMISSION.
If the scanned image of the photograph on the Admission Ticket is not of the specified size or not identifiable or does not bear name of candidate and date of photograph, such candidates will not be admitted to the examination.
VIII. Candidates should put their signature against the names in the signed Address list provided in the verification hall. After identification, an Access Card will be issued to the candidate, only with which the candidate can enter in to the Online Examination Hall.
IX. All candidates will be under camera surveillance
X. No change of examination centre will be allowed at any circumstances.
XI. Candidates who misbehave with the officials on duty/who commit any sort of malpractice/who resort to any unfair means/who communicate with any other candidate during the course of examination will be ousted from the examination hall and their candidature will be invalidated and legal action will be pursued against them including debarment. The answer script of such candidates are liable to be invalidated. He/she is liable to be debarred from appearing again for the Departmental Tests for such time as the Commission may decide. The matter may also be reported to the Heads of Departments and Director of Vigilance Department, for further action. The same penalty will be imposed on any candidate who attempts to canvass or influence the Examiner or a Member of the Commission or their staff in connection with the examination or on whose behalf such attempt is made by any other person.
XII. Candidates who are eligible for Travel Allowance should obtain attendance certificate from the Chief Superintendent on the day of the examination itself.
XIII. In case of postponement of examination for any reason whatsoever, the new date will be published in print and visual media and in the website of the Commission (www.keralapsc.gov.in). Individual communication will not be issued to candidates in this regard. Candidates shall produce the same Admission Ticket for the examination on the new date
XIV (A) Answer scripts of candidates are liable to be invalidated and the candidate will be debarred for a minimum period of two years from appearing for Departmental Test for violation of instructions such as (1) Failure or refusal to sign on the proper space against the name of the candidate in the Signed List. (2) Appearing for test at a centre other than the one to which the candidate is admitted without obtaining specific sanction from the Joint Secretary, Departmental Tests.
(3) Bringing unauthorized books into the examination hall irrespective of the fact whether the candidate has referred to it or not.
(4) Bringing calculators, Mobile phones, smart watches and other electronic equipments inside the examination hall irrespective of the fact whether the candidate has used it or not;
(5) Failure to produce Admission Tickets duly attested by the Head of Office for verification. In the case of candidates availing Free chance, failure to produce duly attested Admission Tickets.
(6) Producing Admission Ticket bearing no PSC emblem.
(7) Copying down answers from another candidates computer screen or allowing or aiding or conniving in copying by another.
(8). Using reference books with guide sheets, notes etc. stitched/ pasted in between folios of the reference books.
(9) Making appeals etc. abusing malignantly the institution or person which are irrelevant to the question or tests . (10) Leaving the Examination hall during the exam time
(B) If a candidate makes any unauthorized correction of the entries regarding names of centre, subjects etc. in the admission tickets or affix photograph in the Admission Tickets, the answer script of the candidate will be invalidated and he or she will be debarred from appearing for Departmental Test for a minimum period of three years.
(C) For misbehaving towards the Chief Superintendents, Additional Chief Superintendents, Assistant Superintendents or any other Inspecting Officers of the Commission or for committing any other irregularity or improper action not covered by any of the item mentioned in 'A', 'B' and 'C' above, the answer script will be invalidated and the candidate will be awarded such other punishment including debarment as deemed fit by the Commission depending upon the gravity of the irregularity or offence, as the case may be.
SPECIAL INSTRUCTIONS TO CANDIDATES REGARDING ONLINE EXAMINATION

1. After identification, candidates will be provided with an Access Card, only with which candidates can enter into the Online Examination Hall.
2. The Access Card will bear the Seat No., Reg.No. Username and Password allotted to the candidate. Since it is a confidential record for the particular examination, the candidates should keep it safely and produce it at the entrance of the Online Examination Hall. NO CANDIDATE WILL BE PERMITTED TO ENTER THE ONLINE EXAMINATION HALL WITHOUT ACCESS CARD.
3. Candidates should occupy their seats noted in the Access Card 30 minutes before the start of examination.
4. Candidates can log in to the computer using the Username and password provided in the Access Card. On clicking the text box for username and password, a virtual key board will be displayed. The candidates should enter the username and password from the virtual key board by using the mouse.
5. The answers of questions for online examination should be entered in the computer by mouse click.
6. After successful $\log$ in, the instructions for online examination will be displayed on the monitor.
7. There will be a familiarization session 15 minutes prior to the examination. At the specified time, candidates will be automatically directed to the familiarization module automatically. The candidates can attend a demo test in this module by clicking the answer options for each question.
8. At the specified time of examination, the demo test screen will disappear and the candidate will be automatically directed to the actual examination module where the candidate can attend the examination. A time will also be displayed in the examination module at the top right corner. The timer will display the remaining time of examination.
9. There will be 100 questions for each examination. One question only will be displayed at a time.
10. Each question carries four options. Candidates can mark their answer by clicking the option button. After clicking the option button, on the clicking the next button, the marked answer will be stored and next question will be displayed. By this means candidates can answer the questions.
11. There will be a strip of 100 boxes, which represent 100 questions, at the bottom of the screen. On answering a question, the corresponding box in the strip will become blue in colour, which will help the candidate to identify the answered and unanswered questions easily. By clicking a box, the corresponding question will be displayed and the candidate can record the answer or can change the answer by un-ticking the option box already ticked.
12. By clicking mark for review button, candidate can mark doubtful question for later review. The corresponding box of answered questions which are marked for review will become in orange colour and unanswered questions marked for review will become in yellow colour.
13. When the timer on the top right corner hits zero, the options marked by the candidate until then will be saved in the server automatically and the exam statistics page will be displayed and the candidates will be logged out automatically. Thereafter the candidate cannot mark or change any answer.
14. The exam statistics page will display the total number of questions, number of questions answered by the candidate and the number of questions unanswered by the candidate.
15. In case of any system failure or the candidate needs any assistance during the examination, the candidate should raise his hand to draw the attention of the invigilator. CANDIDATE SHOULD NOT COMMUNICATE WITH ANY OTHER CANDIDATE FOR CLEARING ANY DOUBT.
16. The candidate must attend at least one question, otherwise the candidature will be invalidated.
17. Each correct answer will fetch 1 mark and each wrong answer will lose $1 / 3$ mark.

Office of the Kerala Public Service Commission,
Saju George
Secretary



| 77 | 3 | $035059$ <br> SC Development Department Test | Hand Book of the Harijan Welfare Department (with Books). | 92 | 5 | 045082 <br> Departmental Test for the Assistant Electrical Inspector in the Electrical Inspectorate - II Paper (with books) | Various provisions in the State Regulations such as Kerala Electricity Duty Act, 1963, Kerala |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 78 | 4 | 045069 <br> Department Test for the Assistant Electrical Inspectors in the Electrical Inspectorate - I Paper (with books) | Function of Electrical Inspectorate, Kerala State Electricity Board Ltd., Kerala State Electricity Regulatory Commission, Energy Management Centre and such other statutory organisations and statutory provisions as envisaged in central statutes pertaining to generation, transmission, |  |  |  | Electricity Duty Rules, 1963, Kerala Cinemas (Regulation) Act, 1958, Kerala Cinemas (Regula tion) Rules, 1988, Kerala State Electricity Licensing Board Rules, Kerala Lit and Escalators Act 2013 and the Rules made thereunder, Kerala Electricity Supply Code 2014, obligations of licensed electical contractors and consumers as envisaged in State Regulations (with books) |
|  |  |  | distribution, and use of electrical energy provided under the Electricity Act, 2003, Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010, Energy Conservation Act 2001, and Codes prescribed by the Bureau of Indian Standards General ideas regarding functioning of Central Electricity Authority, Bureau of Energy Efficiency, Central Electricity Regulatory Commission, State Regulatory Commission etc., Obligations of Licensees as envisaged in the basic statutes. (with books) | 93 | 6 | 031084 <br> Departmental Test for Employment Exchange Procedure-II Paper | Special Scheme and General Instructions (this will cover special schemes like vocational guidance Employment counseling occupational research etc.) and Chapters on <br> (i) Study and development of the employment Opportunities <br> (ii) Public Relations and publicity <br> (iii) Various general instruction and <br> (iv) Inspection and technical evaluation of employment exchange based on the following chapters in Part I and III of NESM Vol.I and II with connected EE minutes/notes/amendments and etc. issued from time to time Chapters I to IV, XIV, XV and XVII of Part I and all chapters of Part III. NESM (Vol. I with relevant portion of NESM Vol. II) |
| 79 | 5 | 031072 <br> Department Test for the Employment Exchange Procedure-I Paper | Placement work (this will cover placement work including placement of physically handicapped) and collections of employment market information |  |  |  |  |
|  |  |  | based on the following chapters in Parts I, II and IV of the National Employment Service Manual Vol. I and II (with the connected E.E Minutes/Notes/ Amendments etc. issued from time to time. Chapters V to XIII, XVI, and XVIII of Part I and all chapters of Part II and Part IV, NESM (Vol.I) with relevant portion of NESM Vol.II. (NESM 1984 edition with subsequent changes.) | 94 | 7 | 025085 <br> Kerala Co-operative Test-II Paper | Principles of Co-operation and the Co-operative Societies Act and Rules issued thereunder. The following reference books will be used by the candidate for the preparation of the Test. <br> Banking <br> (i) Banking Law and Practice - By Tannan <br> (ii) Modern Banking in India - By S.K.Muranjan Co-operation <br> (i) Co-operation - Law and Practice - By Calvert <br> (ii) Co-operation at Home and Abroad - By C.R.Fay <br> (iii) Co-operation in India (1962 Edition)- <br> By Prof.Bhagatswaroopp. <br> (iv) Theory and Practice of Co-operation in India - <br> By Prof.Kulkarani <br> Candidates should study on the Co-operative Societies Act and Rules and the Madras Co-operative Manual written by Sri.J.C.Rayaon for Co-operation. |
| 80 | 6 | 021073 <br> Forest Test (for Executive and Controlling Staff) - III Paper | Procedure-The Kerala Forest Code and Department Rules (with books) |  |  |  |  |
| 81 | 7 | 025074 <br> Kerala Co-operative Test-I Paper | Elements of Banking. |  |  |  |  |
| 82 | 8 | 024075 <br> Kerala Jail Subordinate Officers Test-I Paper | The Kerala Prisons and Correctional Services (Management) Act, 2010 Act 9 of 2010 of the Kerala Prisons and Correctional Services Management Rules 2014 |  |  |  |  |
| 83 | 9 | 015076 <br> Local Fund Audit Department Test (Higher)-III Paper | Book keeping and Accountancy | 95 | 8 | 019088 <br> Test on Manual of Office Procedure (Police) | Manual of Office Procedure (Police) |
| 84 | 10 | $026083$ <br> Canal Rules Test | Canal Rules and Regulations (Travancore \& Cochin) | 96 | 9 | 005092 <br> PWD Manual Test | The Kerala PWD Manual and Additions/ Amendments to it from time to time (with books) |
| 85 | 11 | 046087 <br> Kerala State Housing Board Act and Rules. (with books) | (i) Kerala State Housing Board Act 1971 (19 of 1971) <br> (ii) Kerala State Housing Board Establishment Regulations 1977, <br> (iii) Kerala State Housing Board Establishment Regulations (Maintenance of Accounts) Rules, 1984 (iv) Kerala State Housing Board Establishment Regulations Allotment Regulations. | 97 | 10 | 050110 <br> Departmental Test on Kerala Head Load Workers Rules (with Books) | 1. Kerala Head Load Workers Act - 1978 <br> 2.Kerala Head Load Workers (Regulation of <br> Employment and Welfare) Scheme 1983 <br> 3. Kerala Head Load Workers Rules, 1981 <br> 4. Kerala Head Load Workers (Attached Section) <br> Welfare Scheme - 1995 <br> 5. Kerala Head Load Workers (Scattered Section) <br> Welfare Scheme - 1999 <br> 6. Kerala Head Load Workers Welfare Board Staff |
| 86 87 | 12 13 | 012105 <br> Department Test for the Executive Staff of KSEBL- III Paper 011105 Department Test for the Ministerial Staff of KSEBL-III Paper | Electricity Act 2003 (without books) Companies Act 2013 \& Rules (with books) <br> Electricity Act 2003 (without books) Companies Act 2013 \& Rules (with books) |  |  |  | (Appointment, Service Conditions, Code and Conduct) Rules, 2002 <br> 7. Workmen Compensation Act, 1923 <br> 8. Various regulations and plans formulated under <br> Kerala Head Load Workers (Regulation of <br> Employment and Welfare) Scheme - 1983 <br> a) Kerala Head Load Workers (GWF) Regulations, 1987 |
| XI . 04.03.2020 (Wednesday) (08.30 a.m. to 11.30 a.m.) |  |  |  |  |  |  | b) Kerala Head Load Workers (Family Welfare) |
| 88 | 1 | 038057 <br> Animal Husbandry Department Test | Animal Husbandry Department Manual (with books) |  |  |  | Scheme, 1987 <br> c) Kerala Head Load Workers (Award of Scholarship) <br> Plan, 1989 |
| 89 | 2 | 043077 <br> Test in Weight and Measures Act and Rules | 1. The Legal Metrology Acts, 2009. <br> 2. The Legal Metrology (General Rules) 2011 <br> 3.The Legal Metrology (Numeration) Rules, 2011. <br> 4.The Legal Metrology (National Standards) Rules 2011. <br> 5. The Legal Metrology (Approval of Models) Rules 2011. <br> 6.The Legal Metrology (Packaged Commodities) <br> Rules, 2011 <br> 7. The Indian Institute of Legal Metrology Rules 2011 <br> 8. Kerala Legal Metrology (Enforcement) Rules 2012. <br> 9. Legal Metrology (Govt. approved Test Centre) <br> Rules 2013 |  |  |  | d) Kerala Head Load Workers (Super annuation Assistance) Plan, 1989 <br> e) Kerala Head Load Workers (Invalid Pension) <br> Plan, 1990 <br> f) Kerala Head Load Workers (Marriage Assis tance) Plan, 1990 <br> g) Kerala Head Load Workers (Distress Relief) <br> Plan, 1990 <br> h) Kerala Head Load Workers (Housing Fund) <br> Regulations, 1992 <br> i) Kerala Head Load Workers (House Constructions) <br> Advance Plan, 1992 <br> j) Kerala Head Load Workers (Consumer Advance) |
| 90 | 3 | 037078 <br> Labour Department Test Part III <br> 027079 | (One Paper - With Books) <br> 1. The Contract Labour (Registration and Abolition) Act, 1970. <br> 2. The Payment of Gratuity Act, 1972. <br> 3. The Kerala Payment of Subsistence Allowance Act, 1973. <br> 4. The Kerala Agricultural Workers Act, 1974. <br> 5. The Equal Remuneration Act, 1976. <br> 6. The Sales Promotion Employees (Conditions of Service) Act, 1976. <br> 7. The Kerala Casual Temporary and Badali workers (Wages) Act 1989 <br> 8. The Kerala Head Load workers Act 1978. |  |  |  | Plan, 1994 <br> k) Kerala Head Load Workers (Foreign Employ ment Assistance) Plan, 1995 <br> I) Kerala Head Load Workers (Medical Assistance) <br> Plan, 1996 <br> m) Kerala Head Load Workers (Pension \& RTB) <br> Regulations, 1997 <br> n) Kerala Head Load Workers (Calamities Relief) <br> Plan, 1998 <br> o) Kerala Head Load Workers (Medical <br> Reimbursement) Regulations, 1997 <br> p) Kerala Head Load Workers (Family Planning <br> Assistance) Plan, 1997 <br> q) Kerala Head Load Workers (Death Exgratia) <br> Plan, 1997 |
| 91 | 4 | Agricultural Income Tax and Sales Tax Test-III Paper | Book Keeping \& Accountancy |  |  |  |  |

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Apologize for
Aim at
Abound in
Amount to
Apply to
Aspire to
Agree with（someone）
Agree to（something，a proposal）
Absent from
Afraid of
Aware of
Ashamed of Accustomed to
Agreeable to
Allergic to
Answerable to
Attentive to
Averse to
Anxious about
Beg for
Blame（someone）for
Borrow from
Benefit from
Believe in
Beware of
Boast of
Belong to
Be based on
Bargain for
Bear with
Blind to
Born of

Bound for
Break into
Bring about
Bring up
Bent on
Busy with
Care for
Charge for
Compensate for
Complain of
Consist of
Convince（someone）of
Cure（someone）of
Conform to
Consent to
Contribute to
Comment on
Concentrate on
Congratulate（someone）on
（something）
Coincide with
Comply with
Come across
Compete with
Convict of
Capable of
Confident of
Conscious of
Critical of
Close to
Contrary to
Concerned with

Content with
Craving for
Delight in
Demand（something）from （someone）
Derive from
Differ from
Distinguish A from B
Draw（money）from
Despair of
Die of
Disapprove of
Dream of
Decide on
Depend on
Deal with
Deprive of
Deviate from
Diffident about
Dispose of
Distinct from
Due to
Devoid of
Emerge from
Eligible for
Eager for
Embark on
Engaged to（a person）
Engaged on（something）
Entrusted with
Envious of
Equal to
Excuse for
Familiar with
Fancy to
Fond of
Free from
Furnish with

Gaze at
Glance at
Gifted with
Grateful for
Guilty of
Ignorant of
Invest in
Indulge in
Indebted to
Inferior to
Inform of
Insist on
Insure against
Jealous of
Hope for
Hint at
Hostile to
Knock at
Keen on
Long for
Listen to
Live on
Laugh at
Lost to
Married to
Operate on
Object to
Pay for
Prevent（someone）from
Prohibit（someone）from
Peep at
Proud of
Peculiar to
Patient with
Pleased with
Popular with
Part with
Passion for

Prefer to
Preside over
Qualified for
Recover from
Rebel against
Revel in
React to
Reply to
Resort to
Respond to
Ready for
Refer to
Relieve of
Relief from
Rely on
Search for
Suffer from
Smile at
Suspect of
Submit to
Succumb to
Surrender to
Sympathize with
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## FROM PREVIOUS CVIL SERVICE PRELIMNARY EXAMS

* The Chairman of public sector banks are selected by the Banks Board Bureau. The Department of Personal and Training deals with appointment to posts of Chairman, Managing Director and full time Director/Member of various public sectors undertakings.
* The Petroleum and Natural Gas Regulatory Board (PNGRB) was established under 'The Petroleum and Natural Gas Regulatory Board Act, 2006 to protect the interests of consumers and organizations engaged in petroleum, petroleum products and natural gas sector. The appeals against the decisions of the Board go before the AppellateTribunal established under section 110 of the Electricity Act 2003
* LTE Stands for 'Long Term Evolution' and VoLTE stands for Voice over Long Term Evolution'. LTE is a mobile network and transmits only data; while VoLTE is software and transmits both voice and data. LTE is a term used for the particular type of 4 G network that delivers the fastest mobile interne experience. The VoLTE enables one to make calls over the LTE network, it allows phone's dialer to place call through internet and sends voice and data over the network.
* World Bank's 'Ease of Doing Business Index' ranks countries on the basis of Distance to Frontier (DTF) a score that shows the gap of an economy to the global best practice. It covers 10 indicators or sub-indexes which span the lifecycle of a business- Starting a business, Dealing with construction permits, Getting electricity, Registering property, Getting credit, Protecting minority investors, Paying taxes, Trading across Borders, Enforcing contracts and Resolving insolvency.
* The e-waste (Management and Handling) Rules 2011 recognizes producer's liability for recycling and reducing ewaste in the country. It introduced 'extended producer responsibility that is the responsibility of producers of electronic equipment towards effective channelization of ewaste to the registered recyclers.
* The Compensatory Afforestation Fund Management and Planning Authority (CAMPA) is set up both central and state levels for expeditious and transparent utilization of funds released for forest land diverted for non-forest purpose. Compensatory Afforestation means afforestation done in lieu of diversion of forest land for non-forest use. For this purpose, funds are collected from the company to whom the forest land is diverted
* The Purchasing Power Parity (PPP) is the exchange rate that follows one to buy the same amount of goods and services in every country. It is a theoretical rate as it is used by no country and is only used by the govt. agencies to compare the output of countries that use different exchange rates. It basically describes what would a thing cost, if it was sold in the U.S Dollars. The World Bank calculates the PPP for each country, depicting a map that shows the PPP ratio compared to the United States.
* Among the agricultural commodities imported by India, vegetable oils account for the highest imports in terms of value in the last five years.
* The money multiplier in an economy increases with increase in the banking habit of the population.
* As per the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, bamboo is a minor forest produce. The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 allows ownership of minor forest produce to forest dwellers.
* Article 21 of the constitution of India safeguards one's right to marry the person of one's choice.
* The Environment protection Act, 1986 empowers the Govt of India to lay down the standards for emission or discharge of environmental pollutants from various sources.
* In the context of digital technologies for entertainment, Augmented Reality (AR) allows individuals to be present in the world and improves the experience using the camera of smart phone or pc. Virtual Reality (VR) closes the world, and transposes an individual, providing complete immersion experience.
* The word 'Denisovan' refers to an early human species.
* A digital signature is an electronic record that identifies the certifying authority issuing it. It is used to serve as a proof
of identity of an individual to access information or server on internet. It is an electronic method of signing an electronic document and ensuring that the original content is unchanged.
* In the context of WearableTechnology, wearable devices are used for location identification of a person, sleep monitoring of a person, assisting the hearing impaired person etc.
* 'RNA' interface (RNA i) technology is used in developing gene silencing therapies, therapies for the treatment of cancer and to produce crop plants that are resistant to viral pathogens.
* Reasons for the occurrence of multi-drug resistance in microbial pathogens in India are (a) genetic predisposition of some people (b) taking incorrect doses of antibiotics to cure diseases.
* Cas9 protein are molecular scissors used in targeted gene editing
* Hepatitis B Virus is transmitted much like HIV globally; the number of people infected with Hepatitis B and C viruses is several times more than those infected with HIV. Some of those infected with Hepatitis B and C viruses do not show the symptoms for many years.
* The major aim of land reforms in India was providing agricultural land to all the landless
* The Global Competitiveness Report is published by the World Economic Forum.
* The Charter Act of 1813 ended the trade monopoly of the East India Company in India except for trade in tea and trade with China. It asserted the sovereignty of the British crown over the Indian territories held by the company.
* Swadeshi movement contributed to the revival of the indigenous artisan crafts and industries. The National Council of Education was established as a part of Swadeshi Movement.
* The leader of All IndiaAnti-Untouchability League is Mahatma Gandhi; All India Kisan Sabha - Swami Sahajanand Saraswathi, Self-Respect Movement - E.V Ramaswamy Naicker.
* Chanhudaro, Kot Diji, Desalpur are Harappan sites
* In Kanganahalli sculpture inscriptions is Ranyo Ashoka (king Ashoka) mentioned along with the stone portrait of Ashoka.
* Deification of the Buddha, treading the path of Bodhisattvas, image worship and rituals are the features of Mahayana Buddhism
* Social capital is the willingness of people to help each other. It replaces money through which people buy the same help. The social capacity of any country is measured through the level of trust and harmony among the people.
* The Service Area Approach (SAA), a part of the Lead Bank scheme was introduced by the Reserve Bank of India (RBI) in April 1989 for the planned and orderly development of rural and semi-urban areas. The approach was applicable to all scheduled commercial banks including Regional Rural Banks (RRBs). Under the SAA, each bank branch in rural and semi-urban area needed to serve 15 to 25 villages.
* India's External Debt is the total debt the country owes to foreign creditors such as private banks, foreign governments, and international financial institutions like IMF and World Bank. The debtors can be the central or state govts, corporations or citizens of India as well. India's external debt is held in several currencies, the largest share is of US dollar.
* The assets of the commercial bank in India are cash in hand, investments, loans, advances, bills discounted and purchased, while the liabilities are capital and reserves, deposits, borrowings and other liabilities.
* Decline in the value of a country's currency is known as currency crisis that negatively affects the economy by creating instabilities in currency exchange rates. The foreign currency earnings of India's Information Technology (IT) sector and remittances from Indians abroad together can reduce the risk of a currency crisis in India.
* Sarkaria Commission was setup in 1983 to examine the relationship between state and central govts. The 'Sarkaria Commission' recommended that the Governor should be eminent person from outside the state and should be


## detached figure without intense political links

* Participatory Notes (P-Notes) are instruments issued by registered foreign institutional investors to overseas investors, who wish to invest in Indian markets without registering themselves directly in India to save on time. However overseas investors still need to go through a proper due diligence process.
* Forced labour (Vishti) in India during the Gupta period was considered a source of income for the state, a sort of tax paid by the people.
* Plants such as tobacco, cocoa and rubber are the group of plants domesticated in the 'New world' and introduced into the 'old world'
* Asiatic lion is naturally found in India only
* The famous place Pandharpur is located near Chandrabhanga river; Tiruchirappalli is near Cauvery river.
* In a given year in India, official poverty lines are higher in some states than in others because price levels very from state to state.
* In the context of reducing Global Warming some scientists suggest the use of cirrus cloud thinning technique and the injection of sulphate aerosol into stratosphere.
* The terms 'Pyrolysis' and 'Plasma gasification' are mentioned in the context of waste-to- energy technologies
* Neyyar, Peppara and Shendurney Wildlife Sancturies and Kalakad Mundanthurai Tiger Reserve are in Agasthyamala Biosphere Reserve.
* Some species of turtles, fish and marine mammals are herbivores. Some species of snakes are viviparous
* Blue Finned Mahser are naturally found in Cauvery River and Rusty-spotted cat are found in Eastern Ghats.
* There is a great concern about the 'micro beads' that are released into environment because they are considered harmful to marine ecosystems.
* Building 'Kalyaana mandapas' was a notable feature in the temple construction in the kingdom of Vijayanagara.
* In the revenue administration of Delhi sultanate, the in charge of revenue collection was known as Amil.
* Mahatma Gandhi was instrumental in the abolition of the system of 'indentured labour'. Consequent upon the breaking of salt law by Indian people the Indian National Congress was declared illegal by the colonial rulers.
* With reference to Indian National Movement sir Tej Bahadur Sapru was the president of All India Liberal Federation; K.C Neogy-Member, Constituent Assembly; P C JoshiGeneral Secretary Communist party of India
* Mian Tansen composed Dhrupadas on Hindu gods and goddesses. Tansen composed songs on his patrons. He invented many Ragas.
* Mughal Emperor Jahangir shifted emphasis from illustrated manuscripts to album and individual portrait.
* Valley of Flowers National Park lies completely in the temperate alpine zone.
* Atal Innovation Mission is set up under the NITI Aayog.
$\div$ on 21 st June, the sun doesnot set below the horizon at the Arctic Circle.
* Agricultural soils release nitrogen oxides into environment. Cattle release ammonia into environment. Poultry industry releases reactive nitrogen compounds into environment.
* Clouds reflect back the Earth's radiation that is why dewdrops not formed on a cloudy night.
* The details of the process of impeachment of the Judges of the Supreme court of India are given in the Judges (Inquiry) Act, 1968. If the motion for the impeachment of a judge is taken up for voting, the law requires the motion to be backed by each of House of the Parliament and supported by a majority of total membership of that House and by not less than two-thirds of total members of that House Present and Voting.
* The 9th Schedule was introduced in the constitution of India during the Primeministership of Jawaharlal Nehru.
* Coal sector was nationalized by the Government of India under Indira Gandhi.
* The parliament (prevention of Disqualifications Act, 1959 exempts several posts from disqulification on the grounds of 'Office of Profit'. The above mentioned Act was amended five times.
* Under Fifth Schedule of the Constitution of India the transfer of tribal land to private parties for mining be declared null and void
* There was a growing awareness in our country about the importance of Himalayan nettle (Girardinia diversifolia) because it is found to be a sustainable source of textile fibre.
* Satellite images/remote sensing data are used for the masurement/estimation of 1. Chlorophyll conent in the Vegetation of a specific location 2. Greenhouse gas emission from rice paddies of a specific location 3. Land surface temperatures of a specific location.
* Global warning might trigger the release of methane gas from methane hydrate. Large deposits of methane hydrate are found in Arctic Tundra and under the seafloor. Methane in atmo sphere oxides to carbondioxide after a decade or two.
* Due to the burning of crop/biomass residue carbon monoxide, methane, ozone, and sulphur oxide are released into atmosphere.
* The Bordering country of Adriatic sea is Albania, Caspian sea is Kazakhstan and Red sea is Syria.
* Bandarpunch glacier is related to river Yamuna, Bara Shigri glacier-Chenab, Siachen Glacier-river Nubra.
* In India, the use of carbofuran, methyl parathion, phorate and triazophos is viewed with apprehension because these chemicals are used as pesticides in agriculture.
* Saint Tyagaraja, also known as Tyagayya in Telugu, was one of the greatest composers of Carnatic music, a form of Indian classical music. Tyagaraja and his contemporaries Syama Sastri and Muthuswami Dikshitar were regarded as the Trinity of Modern Karnatic music. His songs feature himself usually either in an appeal to his deity of worshipprimarily the Avatar Rama. He has also composed Kirthis in Praise of Krishna, Shiva, Shakti, Genesha, Muruga, Saraswati and Hanuman.
* Annamacharya was a $15^{\text {th }}$ century Hindu Saint and is the earliest known Indian musician to compose songs called Sankirtanas in praise of the God Venkateswara a form of Vishnu
* Terminal High Altitude Area Defense (THAAD), formerly Theater High Altitude Area Defense, is an American AntiBallistic Missile Defense System designed to shoot down short, medium and intermediate-range-ballistic missiles.
* Bani Thani is an Indian miniature painting painted by Nihal Chand from the Marwar school of Kishangarh. It Portrays a woman who is elegant and graceful. The paintings subject Bani Thani as a singer and poet in Kishangarh in the time of king Sawant Singh.
* The Governor is the head of a state just like the President is the head of the republic. The Governor is the nominal head of a state while the Chief Minister is the executive head. All executive actions of the state are taken in the name of the Governor. He/She is also entitled to certain benefits and allowances, which shall not be diminished during his office term of 5 years. Article 361 of the constitution of India states that 'No criminal proceedings whatsoever shall be instituted or continued against the President or the Governor of a state, in any court during his term of office.
* The relationship between Law and Liberty is that if there are no laws, there is no liberty.
* The Speaker of the Legislative Assembly shall vacate his/ her office. 1. He/she ceases to be a member of the assembly 2 . He/she resigns by writing to the deputy speaker

3. He/she is removed by a resolution passed by a majority of all the present members of the assembly. Such resolution can be brought only after giving 14 days advance notice. The Speaker doesnot vacate his office on the dissolution of the Assembly. He continues holding office, until immediately before the first meeting of the Assembly after dissolution.

* In the Federation established by the Govt of India Act of 1935, Residuary powers were given to the Governor General.
* Digital India is a campaign launched by the Govt of India to ensure that Government services are made available to citizens electronically by improved online infrastructure and by increasing internet connectivity or by making the country digitally empowered in the field of technology. It consists of three core components (a) development of secure and stable digital infrastructure (b) delivering government services digitally and (c) Universal digital literacy.
* Association of South East Asian Nations (ASEAN) was formed on 8 August 1967 with its headquarters at Jakarta, Indonessia. The members of ASEAN include Indonesia, Thailand, Vietnam, Singapore, Malaysia, Philippines, Myanmar (Burma), Cambodia, Laos, Brunei. Free Trade Partners of ASEAN include-Austria, New Zealand, India, Korea, Japan, China.
* The Presidential electoral college is made up of elected members of the Rajya Sabha, elected members of the LokSabha, elected members of each state Vidhan Sabha and elected members of Union territory Delhi and Puducherry.
* The value of votes cast by elected members of the state legislative assemblies and both house of parliament are determined by the provisions of article 55 (2) of the constitution of India. The value of the vote of each MLA of each state is different. It is determined by the average constituency size and 1971 census. The value of an MLA of UP is highest ie 208. The value of the vote of each MP of Loksabha and Rajyasabha is equal ie 708.
* Ministry of Commerce has implemented the National Programme for Organic Production (NPOP) Since 2001. India organic is a certification mark for organically farmed food products manufactured in India. The certificate is issued by testing centres accredited by the Agricultural and Processed Food Products Export Development Authority (APEDA). Sikkim has become India's first fully organic state by converting around 75,000 hectares of agricultural land into sustainable cultivation. A number of other states in India like Mizoram, Arunachal Pradesh and Kerala are now trying to become organic.
* A number of food items have been exempted from any of the tax stabs. Fresh meat, fish, chicken, eggs, milk, butter milk, curd, natural honey, fresh fruits and vegetables, flour, besan, bread, all kinds of salt, Jaggery and hulled cereal grains have been kept out of the taxation system. Bindi, Sindoor, Kajal, Palmyra, human hair and bangles also do not attract any tax under GST. Drawing or colouring books alongside stamps, judicial papers, printed books, newspapers also fall under this category. Other items in the exempted list include jute and handloom, Bones and horn cores, hoof meal, horn meal, bone grist, bone meal, etc.
* PSLV is the third generation launch vehicle of India. It is


## INDIA'S RANKING IN THE DIFFERENT INDEXES IN 2019

| Index Name | Published by | Indian Rank/Topper |
| :--- | :--- | :--- |
| 1. Global Competitiveness Index 2019 | World Economic Forum (WEF) | $68^{\text {th }} /$ Singapore |
| 2. Gender Gap Index | World Economic Forum (WEF) | $112^{\text {nd } / \text { Iceland }}$ |
| 3. Global Innovation Index | Cornell University, INSEAD and the UN World <br> Intellectual Property Organisation (WIPO) | 52 / Switzerland |
| 4. Global Peace Index | Institute for Economics and Peace | $141^{\text {st } / \text { Iceland }}$ |
| 5. Safe Cities Index | Economist Intelligence Unit | Mumbai : 45 $/$ Tokyo |
| 6. World Inequality Index | Oxfam, Independent Charitable Organisations | $147^{\text {th } / ~ D e n m a r k ~}$ |
| 7. World Press Freedom Index | Reporters without Borders | $140^{\text {th } / \text { Norway }}$ |
| 8. Corruption Perception Index | Transparency International | $80 /$ Denmark and Newzealand |
| 9. Global Terrorism Index | Institute for Economics and Peace | $7 /$ Afghanistan <br> (Most impacted by terrorism) |
| 10.Human Development Index | United Nations Development Programme | 129 / Norway |
| 11.U.N. World Happiness Report | UN sustainable Development Solutions Network | 140 th / Finland |
| 12. Niti Aayog Health Index 2019 | Niti Aayog | Kerala on Top |
| 13.Global Hunger Index | Irish aid agency concern in partnership with <br> Welthungerhlife | 102 / Belarus (17 Countries on top) |

he first Indian launch vehicle equipped with liquid stages. GSLV's primary payloads are INSAT class of communication satellites. GSLV Mark III is a three stage vehicle with two solid motorstrap-ons (S200), a liquid propellant core stage (L110) and a cryogenic stage (C25). GSLV-MK III is capable of launching 4 ton class of satellites to Geosynchronous Transfer Orbit (GTO).

* Pakhui Wildlife Sanctuary is located in the State of Arunachal Pradesh. It was declared a sanctuary in 1977, and was earlier part of the Khellong Forest Division. It has been declared a Tiger Reserve in 2002.
* International Labour Organisation's Conventions 138 and 182 are related to Child Labour.
* Bharat Interface for Money ( BH IM) is a payment app that lets you make simple, easy and quick transactions using Unified Payments Interface (UPI). You can make direct bank payments to anyone on UPI using their UPI ID or scanning their QR with the BHIM app. You can also request money through the app from a UPI ID.
* India enacted the Geographical Indications of Goods (Registration and Protection) Act 1999 in order to comply with the obligations to WTO
* Food Safety and Standards Authority of India (FSS AI) is an autonomous body established under the Ministry of Health, Family Welfare and Government of India. The FSSAI has been established under the Food Safety and Standards Act, 2006 which is a consolidating statute related to food safety and regulation in India. It is responsible for protecting and promoting Public Health through the Regulation and supervision of food safety. The Food Safety and Standard Act replaced 8 older acts. 1. Prevention of Food Adulteration Act 1954 2. Fruit Products Order 1955 3. Meat Products Order 1973 4. Vegetable Oil Products (control) Order 1947 5. Edible Oil Packaging (Regulation) Order 1988 6. Solvent Extracted Oil, De-oiled Meal and Edible Flour (Control) order 1967. 7. Milk and Milk Products Order 1992.
* In 1781 Warren Hastings founded the Madarasa Aliya or Calcutta Madarassa. Government Sanskrit College was the first college in Banaras. Established in 1791, it was a Landmark college in India from where several notable teacher's emerged. In 1958 it merged with Sampurnanand Sanskrit University. Fort William college was an academy and learning centre of Oriental studies established by Lord Wellesley, then Governor General of British India.
* Carbon fertilization denotes increased plant growth due to increased concentration of carbondioxide in the atmosphere.
* Solar Energy Corporation of India's works include Solar Thermal installations for water /air heating and industrial process, solar thermal pilot power plants, implementation of Grid connected Solar Roof- Top scheme, Development and dissemination of low cost solar lanterns, Grid connected Solar Power Plants, Solar Mini/Micro Grids, Research and Development including Solar resource assessment.
* Jean - Baptiste Tavernier was a 17th century French Gem Merchant and traveller elaborately discussed about diamonds and diamond mines of India.
* The "Hind Mazdoor Sabha" was founded in Howrah in West Bengal on 29 December 1948 by socialists, Forward Bloc followers and Independent Unionists. It was founded by Baswon Singh, Ashok Mehta, R S Ruikar, Manibenkara, Shibnath Banerjee, R A Khedgikar, T S Ramanujan, V S Mathur, G G Mehta. R S Ruikar was elected President and Ashok Mehta , General Secretary. HMS absorbed the Royist Indian Federation of Labour and the Hind Mazdoor Panchayat, which was formed in 1948 by socialists leaving the increasingly communist dominated AITUC
* The Champaran Peasant Movement was launched in 1917 -18. Its objective was to create awakening among the peasants against the European Planters. These planters resorted to illegal and inhuman methods of Indigo cultivation at a cost which by no canons of justice could be called an adequate remuneration for the labour done by the peasants.
* "Sthanakvasi" is a sect of Svetambara Jainism founded by a merchant named Lavaji in 1653 AD. It believes that idol worship is not essential in the path of soul purification and the attainment of Nirvana /Moksha
* The Buland Darwaza at Fatehpur Sikri is the Most iconic architectural accomplishment of Akbar's reign. It incorporates all the essential features of Akbar's architectural traditions : Red sandstone, Stone carvings, relief by inserting white marble etc... The construction of Buland Darwaza was inspired by Timurid architecture. Along with Humayun's tomb, its monumentality reflects its Central Asian Origins.
* According to Buddhist tradition, Maitreya is a bodhisattva who will appear on Earth in future, achieve complete enlightenment and teach the pure Dharma. According to scriptures, Maitreya will be a successor to the present Buddha, Gautama Buddha (also known as Sakyamuni Buddha)
* The subsidiary Alliance system was "Non Intervention Policy" used by Lord Wellesley who was the Governo General to establish British Empire in India. According to this system every ruler in India had to accept to pay a subsidy to the British for the maintenance of British army. In return, British would protect them from their enemies which gave British enormous expansion.
* The Indian general election of 1951-52 elected the first Lok Sabha, the INC winning 364 of the 489 seats and $45 \%$ of the total votes polled First Lok Sabha of Independen India did not had a recognised 'Leader of opposition" due to lack of any opposition party having $10 \%$ seats. First time Lok Sabha got recognised "Leader of Opposition" in 1969
in the form of Ram Subhag Singh from INC (O)
* The National Green Tribunal has been established on 18.10. 2010 under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources. The Central Pollution Contro Board (CPCB) of India is a statutory organisation unde the Ministry of Environment, Forest and Climate Change (MoE, FCC) It was established in 1974 under the Water (Prevention and Control of Pollution) Act 1974
* "Merchant Discount Rate" is the rate charged to a merchant for payment processing services on debit and credit card transactions. The merchant must setup this service and agree to the rate prior to accepting debit and credit cards as payment.
* Lala Lajpat Rai was the most prolific writer among his contemporary nationalist leaders of India. He wrote biographies of Mazzini, Garibaldi, Shivaji, Dayanand and Shri Krishna
besides other important works in English, Hindi and Urdu
'Rule of Law Index' is released by the World Justice Project (WJP), an American Independent, multi-disciplinary organisation with the stated mission of working to advance the rule of law around the world
* National Financial Switch (NFS) is the largest network of shared Automated Teller Machines (ATMs) in India. It was designed, developed and deployed by the Institute for Development and Research in Banking Technology (IDRBT) in 2004, with the goal of interconnecting the ATMs in the country and facilitating convenience banking. It is run by National Payments Corporation of India (NPCI). National Payments Corporation of India is an umbrella organisation for all retail payments in India. It was setup with the guidance and support of the RBI and Indian Banks Association.


## MEDIEVAL INDIAN HISTORY

- Historian Abdul Hamid Lahori was in the court of Shahjahan
- Shahjahan had completed the annexation of Ahmednagar
- Hawkins was the first Englishman to visit Jahangir's court
- The full name of Jahangir was Nuruddin Md. Jahangir Jahangir had ended a long drawn out struggle with Mewar Mahabat Khan revolted against Jahangir and captured Jahangir and his wife Nurjahan at Lahore.
- Jahangir promulgated twelve edicts for the general welfare and better govt to mark his coronation. He composed verses in persian and sang Hindi lyrics
- The Persian ruler who besieged Qandhar in Jahangir's reign was Shah Abbas.
- During Mughal King Shahjahan's reign there was a large scale famine in Gujarat and Deccan.
- Hindi poet Chintamani, poet laureate Jagannath Pandit and Asaf Khan-the wazir adorned Shahjahan's court.
- Aurangazeb adopted the titles Alamgir, Padshah and Ghaz
- Ramayana was translated into persian at Akbar's court by Badayuni.
- Khwaza Abdus Samad was the master of imperial mint at Delhi during the reign of Akbar.
- Aurangazeb's statement "I came alone and I am going alone I have not done well to the country and the people and of the future there is no hope".
- Shaista Khan had succeeded Mir Jumla as Governor of Bengal in the reign of Aurangazeb.
- In the war of succession Roshanara had supported Aurangazeb.
- Aurangazeb discontinued the practice of inscribing the Kalima on the coins
- Guru Nanak founded the faith on a ritual-free, simple "Sat shri Akal" or the worship of God and truth.
- Kabir was the disciple of Ramananda and the most liberal among medieval Indian reformers.
- Ramananda worshipped Ram and Sita but preached the oneness of God and the doctrine of Bhakti for everyone He dismissed the caste system and untouchability, simplified rules of worship and made rigidity of the Varnashrama tradition milder.
- Bhakti Movement originated as a reaction against caste division, untouchability and ritualism in India. Devotion was the pivotal point in the Bhakti cult in uniting human soul with God.
- Surdas was the disciple of Vallabhacharya
- Ramanuja preaches Visishtadvaita
- Sankara had given the doctrine of Advaita or Monism
- Pallavas, Pandyas and Chola dynasties under the Saivaite Nayanmars and VaishnavaiteAlwars Preached the Bhakti cult.
- Nirguna is the concept of a formless God.
- Gaudiya Sampradaya is an intensely emotional form of Hinduism that flourished from $16^{\text {th }}$ century mainly in Bengal and Eastern Orissa
- Bhakti is derived from the root bhaj which means "divide"
- Sri Ramanuja Acharya was an Indian Philosopher and is recognized as the most important saint of sri Vaishnavism
- Chaitanya Mahaprabhu, an ascetic Hindu monk and socia reformer in $16^{\text {th }}$ century was from Bengal.
- Divya Prabandha is the name of the collection of hymns of Alvar Saints".
- The Compositions of Kabir include Bijak, Sakhi Granth, Kabir

Granthawali and Anurag Sagar

- Vishvambhara Mishra was the original name of Chaitanya Mahaprabhu.
- Kabir was the disciple of Ramananda.
- Saint and reformer of Bengal named chaitanya popularized the Krishna cult.
- Gnandeva wrote a commentary of Bhagvat Gita called Gnaneswari
- The Bhakti Saint Narasi popularised Vaishnava Cult in Gujarat.
- Bhakti Saint Tulsidas created Vinaya-patrika and Kavitavali.
- Krishnadasa Kaviraja wrote the biography of Chaitanya
- Rudra Sampradaya School was founded by Vallabhacharya
- Nimbarka wrote Vedanta-Parijatasourabha, a commentary on the Brahma Sutra in simple language. He also wrote Dasa sloki which deals with three realities Brahma, soul and matter.
- Chaitanya wrote Shiksha Ashtak which was called as the cream of the Shastras
- The Bhakti cult Saivaite Nayanmars and Vaishnavaite Alwars Prached under the Pallavas, Pandyas and Cholas
- Babur (1526-1530 AD) 1. Founder of Mughal Empire. 2 Introduced gun powder in India. 3. Defeated Ibrahim Lod in the First Battle of Panipat (1526 AD). 4. Defeated Rana sanga at the Battle of Khanwa (1527 AD). 5. Defeated Medini Rai of Chanderi at the Battle of Chanderi (1528AD). 6. Wrote Tuzuk-1-Babri in Turkish.
- Humayum (1526-1556 AD)-1. Made Dinpanah at Delhi as second capital. 2. Fought two battles with Sher shah suriBattle of Chausa (1539 AD) Battle of Kanauj (1540 AD) and was defeated. 3. Died due to fall from his library buildings stairs in 1556 AD. 4. His half-sister Gulbadan Begum wrote Humayun-Nama.
- Akbar (1566-1565 AD) 1. Introduced Mansabdari system to organise the nobility and army. 2. Constructed Buland Darwaza. 3. Ralph Fitch was the ${ }^{\text {st }}$ Englishman to visit Akbar's court in 1585. 4. Abolished Jaziya; believed in sulh-i-kul (peace to all). 5. Built Ibadat Khana (Hall of Prayer) at Fatehpur Sikri. 6. Issued "Degree of Infallibility" in 1579 (7) Formulated religious order Din-i-llahi (1582AD) (8) Nine Gems of his court (a) Birbal (Mahesh Das) (b) Tansen (Tanna Mishra) (c) Faizi (d) Maharaja Man Singh (e) Fakir Aziao din (f) Mirza Aziz Koka (g) Todar Mal (h) Abdur Rahim Khan-i-Khanaa (i) Abul Fazl.
- Jahangir (1605-1627 AD)-1. Executed fifth Sikh Guru, Guru Arjun Dev. 2. Established Zanjir-i-Adal at Agra Fort for the seeker of royal justice. 3. Captain Hawkins and Sir Thomas Roe visited in his court. 4. Abdul Hassan, Ustad Mansur and Bishandas were the famous painters of his court
- Shahjahan (1628-1658 AD)-1. Two Frenchmen, Bernier and Tavernier and Italian adventurer Manucci visited his court 2. Built Moti Masjid and Taj Mahal at Agra, Juma Masjid and Redfort at Delhi. 3. Annexed Ahmadnagar while Bijapur and Golkonda accepted his lordship.
- Aurangazeb (1658-1707 AD) 1. Great scholar of Islamic theology and Jurisprudence. He appointed a board of Ulema to compile authoritative passages from the standard of Hanafi Fiqh (Fatawa-ul-Alamgir) for the guidance of quazis known as 'Fatawat'- i - Alamgiri' which was completed in 1672. (2) Important historical works during his reign

Mutakhab-ul-Lubab by Khafi-Khan; Alamgir Namah by Mirza Muhammad Kazim, Masir-i-Alamgiri by Muhammad Saqi, Fatuhat-i-Alamgiri by Iswar Das (3) Exceuted ninth Sikh Guru, Guru Tegh Bahadur in 1675 AD (4) called as Darvesh or a Zinda Fakir (5) Forbade Sathi pratha (6) Built Biwi ka Makbara on the tomb of his queen Rabaud-Durani at Aurangabad; Moti Masjid in Red Fort at Delhi, Jami or Badshahi mosque at Lahore

- Bahadur Shah I (1707-1712 AD) 1. Popularly known as Shah Alam I and called Shahi-i- Bekhabar by Khafi Khan due to his appeasement parties by grants of titles and rewards. 2. Ascended himself on the throne in 1707 after killing his two brothers and defeating Kam Baksh in the battle of Jajau. He was the last Mughal who enjoyed all the authority in real term. 3. Granted the right to collect sardesh Mukhi of Deccan but not Chauth to the Marathas.
- Jahandar Shah (1712-1713 AD). 1. Gave the title of 'Mirza Raja' to Jai Singh of Malwa and 'Maha Raja' to Ajit Singh of Marwar. 2. Encouraged ljara system (the revenue farming/ contract farming and abolished Jazia). 3. First Mughal ruler who killed by Sayyid brothers -Abdullah Khan and Hussain Ali (were the Hindhustani party leaders) in captivity.
- Farrukhsiyar (1713-1719 AD). 1. Known as 'Sahid - iMazlum' and son of Azim-us-Shah. 2. Assigned the duty of Deccan's governor to Chin Qulich Khan who was better known 'Nizam-Ul-Mulk' later who laid the foundation of independent state of Hyderabad. 3. Peshwa Balaji Vishwanath visited in his court to take grant for collecting Chauth and Sardesh Mukhi on Maratha land.
- Muhammad Shah (1719-1748 AD). 1. His name was Roshan Akhtar. Also called Rangila. 2. Maratha under Baji Rao for the first in Mughal history raided in Delhi. 3. Nadirshah of Persia invaded with the help of Sadat Khan who defeated Mughal army at the battle of Karnal
- Ahmad Shah (1748-1754 AD). 1. Ahmed Shah Abdali, the former general of Nadir Shah who invaded India five times during reign. 2. He was overthrown by his wazir Imad-UlMalik and placed Alamgir II as ruler.
- Alamgir (1754-1759 AD). 1. Called `Azizuddin'. 2. During his reigh, the Battle of Plassey took place. 3. He was overthrown by his Wazir Imad-ul-Malik and Placed Shah Alam II as ruler.
- Shah Alam II (1759-1806 AD). 1. Popularly known as `Ali Gauhar' who was defeated in the Battle of Buxar in 1764 $A D .2$. During his reign, the third Battle of Panipat took place. 3. Till 1772 he gave all his Diwani rights of Bihar, Bengal and Orissa but after 1772 with the help of Mahaji Scindia, he gets back all his Diwani rights. 4. First Mughal ruler who becomes East Indian Company Pensioner.
- Akbar II (1806-1837 AD). 1. First Mughal ruler who was under the British protection. 2. During his tenure, Mughal Empire Shrinks to Redfort only.
- Bahadur Shah II (1837-1857AD) 1. He was the son of Akar Il and Rajput Princess Lal Bai and also was the last ruler of the Mughal Empire. 2. During his reign, 1857 revolt took place; he was behaved to Rangoon as captive where he was died in 1862. He was very good Urdu poet and his pen name was Zafar
* Bull was the most depicted animal of the Indus Valley Civilization. The Metal Iron was not known during Indus Valley Civilization.
* Alamgirpur is the Chalcolithic site that comes under Ganges system.
* Satavahini dynasty originated from South of Vindhya.
* Ujain was the capital of Avanti.
* Kalinga was situated between Mahanadi \& Godavari.
* Vishnu Sharma wrote Panchathantra.
* Nirukta is related to Etymology.
* Junagarh inscriptions is found in Purest Sanskrit.
* James Prinsep deciphered Ashokan Inscription.
* Mauryan King Bindusara hold the title of `Amitraghata'
* Vishakhadatta wrote Mudrarakshasa.
* Udayin was the founder of Pataliputra
* Anga Sahitya, Upang Sahitya, Kalpasutra are the holy books of Jainism.
* Vardhaman Mahavira attained enlightenment at Jrimbhik Gram.
* The symbol Horse shows renunciation.
* Compilation of holy books was completed at the Buddhist council of Rajgir.
* Ashoka was the patron king of Pataliputra Buddhist council
* Kalilasha Temple of Ellora was built by Krishna I
* Hieun Tsang wrote Si-Yu-Ki.
* Bagh Painting of Gupta Empire was found in the Indian state of Madhyapradesh
* Desavatara temple of Nagra style is located at Jhansi (Lalitpur)
* The book Hora shastra is based on Astrology.
* Panchasidhantika, written by Varahamihir is based on Astronomy.
* Shudrak wrote Mrichhakatika.
* Kumaragupta established Nalanda Mahavira.
* Samudragupta is known as Napoleon of India.
* Kanishka ruled from Purushpur.
* Mathura was the capital of Surasena Mahajanapada.
* The earliest specimen of Kavya style is found in Kathiawar.
* At Lothal, the Indus Valley site the Dockyard was found.
* The accounts of Kalinga war are depicted by Rock Edict XIII
* 'Prithivyah Pratham Veer' was the title of Samudra Gupta.
* The city of Nagalpura was founded by Krishnadevaraya.
* Dharmapala was the founder of Vikramshila Vihar.
* The temple of Lakshman, Chaturbhuja, Kandariya Mahadev were constructed by Chandela dynasty.
* The books Nagananda, Ratnavali and Priyadarshika were written by Harshavardhan.
* Ajanta painting is made from Fresco Style.
$\%$ In Jain literature the Tirthankar, Rishabhnath is also known as Prajapati, Aadibrahma and Aadinath. Rishabhnath is called Aadibrahma because he was the first to tell Moksha Marg.
* Rigveda is a collection of 1028 hymns written in Vedic Sanskrit.
* Upanishad deals with concepts about origin of Universe death and birth, material and spiritual world.
* Bana wrote Harshacharita which is a biography of King Harsha and Kadambari.
* Dandin wrote Daskumarcharita (the tale of 10 prince)
* Thiruvalluvar wrote the Kural, which deals with many aspects of life and religion.
* Tolkappiyam, a work of Tamil Grammar is said to be the earliest extent work of Tamil Literature
* The Sangam literature Naaladiyar was composed by Jain monks and the theme is the transient nature of life and youth
* Arthasashtra an Ancient Indian Literature was a treatise on the Science of governance.
* Milinda Panha, the great Buddhist work consisting of dialogues between the Indo-Greek King Menander and the Buddhist Philosopher Nagasena.
* Buddhist literature Sutta Patika consists of dialogues between the Buddha and his followers.
* Puranas describe the Nandas expedition over all their rival monarchs that make them powerful rulers of North India.
* Megasthenes has given the treatise on the rule of the Padyan Kingdom by Pandala a daughter of Herakles
* Hitopadesha contains short stories that have the priceless
treasure of morality and knowledge
* The play Mudrarakshasha written by Vishakhadatta, nar rates the ascent of the king Chandraguptha Maurya.
* The book Panchsidhantika written by Varahamihira.
* The poet Vasumitra adorned the court of Kanishka.
* Sandhyakara Nandi wrote 'Ramacharita'.
* The play Mrichhakatika is set in the ancient city of Ujjayini during the reign of King Palaka.
* The book Gaudavaho is based on the exploits of Yasovarman of Kanauj.
* The book by writer Arrian gives the detailed information about the invasion of India by Alexander.
* The Sculpture of Dancing girl (Bronze) and the Bust of bearded man are found in Mohenjo-Daro.
* The Sculpture of incomplete male torso (Grey Stone) and small male torso (red limestone) are found in Harappa.
* The Capital of Cholas - Tanjavur, Hoysalas Dwarasamudra, Pandyas-Madurai, Rashtrakutas-Malkhed
* Budhagupta, the Gupta ruler faced the invasion of Hunas
* The capital of Satavahana dynasty-Kalinga, Cheta dynastyBagat, Kushan dynasty-Peshawar, Koshala dynastyMagadha.
* The famous dialogue between Nachiketa and Yama is mentioned in the Kathopanishad.
* The Veda which is partly a prose work is Yajurveda.
* The main focus of the Rigvedic culture was punjab and Delhi region.
* Ajanta Painting Portray Budhist elements
* Indica by Megasthenese mentioned division of Mauryan society into seven classes.
* In the account of Megasthenese we come across a detailed account of the municipal administration of the Mauryas.
* In Jainism perfect knowledge is referred to as Kaivalya.
* Megasthenese was succeeded as ambassador by Deimachos.
* Bimbisara was the founder of Haryanka dynasty.
* The capital of the Mahajanapada-Champa was Anga
* Sravasti was the capital of Kosala.
* Harihara Raya II of Sangama dynasty ruled the Vijayanagara Empire during the period 1377-1404.
* Indus Valley Civilization belongs to the Bronze age (Chalcolithic age). This Civilization extents to the west up to Sutkagendor in Baluchistan, Alamgirpur (UP) in the east, Daimabad (Maharashtra) in South and Manda (Jammu Kashmir) in the north.
* Indus Civilization was dominated by the peasants and merchants and thus also called as agro-commercial Civilization.
* It is also called as Harappan Civilization because site was first discovered through excavation in 1921 under the Supervision of Daya Ram Sahni.
* Indus Valley Civilization dated around 2500-1750 BC on the basis of radiocarbon dating.
* Town planning was the most distinctive feature of Indus Valley Civilization. Towns were divided into two part Citadel (occupied by ruling class) and Lower Town (Inhabited by common people)
* Dhaulavira is the only site of the civilization where city was divided into three parts.
* Chanhudaro was the only city without a Citadel.
* Systemetic town planning was based on grid system; burnt bricks were used to construct houses well managed drainage system; fortified citadel; highly urbanised; absence of iron implements.
* Indus people were the first who produces cotton, which Greek termed as Sindom (derived from sindh)
* They produced wheat and barley on large scale. The other crops grown were pulses, cereals, cotton, dates, melons pea, seasum and mustard.
* Humpless bull or Unicorn was the most important animal.
* Trade was well developed, but the mode of payment was Barter System.
* People of the Civilization has developed their own kind of weighing and measurement system which was the multiple of 16 .
* Dead Bodies were buried or cremated in North South Orientation.
* The greatest artistic of the Harappan culture was the seals made of steatite. Harappan script is Pictographic. The script was written from right to left in the first line and left to right in the second line. This style is called Boustrophedon.
* Origin of the 'Swastika' symbol can be traced to the Indus Valley Civilization. There was Prevalence of Mother Goddess (Maitridevi or Shakti) known through figurines. The chief Male deity was the 'Pashupati Mehadeva' ie lord of Animals (Proto-Shiva) represented in seals as sitting in Yogic posture; he is surrounded by four animals (elephants, tiger, rhino and buffalo) and two deer appear at his feet.
* Occupations practiced were spinning, weaving, boat making, goldsmiths, making pottery and seal making
* During the Vedic age the metals used were copper, Iron and Bronze.
* Tax levied in the Vedic period was Bali and Bhaga. Gold coins called Nishka were used for transaction.
* Regarding marriage life monogamy was practiced in Vedic period but in royal families Polygamy was common. There was no traces of Sati or Child marriage. Examples of widow remarriage was seen in Rigveda.
* Rigveda compiled around 1500-1000 BC. Literal meaning of the term 'rig' is 'to praise'. Rigveda is a collection of hymns. Volumes are called Mandal. Mandal III contains the Gayatri Mantra which was compiled in the praise of Sun God Savitri. Mandal IX contains hymns called Purusha Sukta from where varna system is discussed. Rishi who were experts in Rigveda were called hotra or hotri. Rigveda has many things in common with zend Avesta, which is the oldest text in the Iranian language.
* Samaveda deals with collection of songs and most of the songs were taken from the hymns of Rigveda.
* Udagatri was the experts of Samaveda.
* Yajurveda is a collection of sacrificial formulae. It describes the rituals to be followed at the time of recitation of mantra. Adhvaryu was the experts of the knowledege of Yajurveda. It Contains both prose and poetry. It is divided into two parts Krishna Yajurveda and Shukla Yajurveda.
* Atharvaveda is a collection of charms and spells. It contains magical hymns to get relief from diseases. Ayurveda has its origin from Atharvaveda.
* The Brahmanas contains details about the meanings of Vedic hymns, their applications, and stories of their origins. Aitareya or Kaushitaki Brahmanas were allotted to the Rigveda for detailing. Tandya and Jaiminiya Brahmanas to Samveda for detailing. Taittireeya and Shatpatha Brahmanas to Yajurveda for detailing. Gopath Brahmanas to the Atharvaveda for detailing.
* The Aranyakas means forest. The Aranyakas are like a bridge between vedas cum Brahmanas and Upanishads.
* Upanishads, the last phase of Vedic literature deals with Metaphysics, ie Philosophy. It is also called Vedanta. Literal meaning of Upanishads is 'to sit near the feet of'. Upanishads contain subject matter about soul, brahmana rebirth and theory of Karma. It emphasizes the path of knowledge. Conversation of Yama and Nachiketa is the subject matter of Katha Upanishad.
* Vedangas are known as Limbs of Vedas. They are compiled during Sutra period. Hence it is called Sutra literature. Vedangas are six in number.
(a) Shiksha-Phonetics of Science of Pronunciation
(b) Kalpa-Rituals and ceremonies
(c) Vyakarana-Grammar
(d) Nirukta-Etymology (Origin of words)
(e) Chhanda-Metrics, rules of poetic composition (f) Jyotisha-Astronomy
* The term Shudra was mentioned first time in the Tenth Mandala of the RigVeda.
* 14 major Rock Edicts of Ashokan depicts the principles of Dhamma.
* Rock Edict 13 of Ashoka deals with Kalinga war.
* The Janapadas were the major kingdoms of Vedic India. There were 16 Mahajanapadas during 600 BC to 325 BC.
* Important Mahajanapadas and their capitals are:- (a) Anga-

Champa, (b) Magadha-Earlier Rajgriha, later pataliputra (c|) Malla-Kusinara and Pawa, (d) Vajji- Vaishali (d) KosalaSravasti, (f) Kashi-Varansi (g) Chedi-Shuktimati (h) Kuru Indraprastha (i) Vatsa-Kaushambi (j) Panchala-Ahichhatra and Kampilya. (k) Matsya-Viratanagara (I) Sursena-Mathura (m) Avanti-Ujjaini and Mahishmati (n) Ashmaka-Potana (o) Kamboja-Rajapura in Modern Kashmir (p) GandharaTaxila.

* Bimbisara, Ajatashatru and Udayin were the important kings in Haryanaka dynasty. Naga-Dasak was the last ruler of Hayanka dynasty.
* Ashoka's 'mother's name was Subhadrangi. His wife's name was Devi or Vedisa who was Princess of Ujjaini. His other two wives were Asandhimitra and Karuvaki. Mahendra, Tivara, Kunala and Tulaka were prominent among Ashoka's sons. Two of his daughters Sangamitra and Charumati were known.
* It was during Kanishka's reign that Buddhism was divided into Mahayana and Hinayana. He was the founder of the Shaka Era of AD78. Charaka and Sushruta were in the court of Kanishka. Kanishka was a patron of Budhism and he called the $4^{\text {th }}$ Budhist council in the Kundalavana of Kashmir in 78 AD. The council was chaired by Vasumitra and during this council the collection of Buddhist texts tookplace and the commentaries were engraved on copper sheets The scholars who resided in Kanishka's court were Vasumitra, Asvaghosha, Nagarjun, Charaka and Parsva.
* Kanishka had fought against king Han Ho-ti who was the king of Han dynasty of China. Kanishka defeatd Chinese King in the second attempt.
* Pala dynasty was founded by Gopalan in 750 AD. Gopala is credited with constructing a monastery at the Odantapuri in Bihar.
* Dharmapala succeeded Gopala. Dharmapala founded the Vikramshila University, located at Kahalgaon in Bhagalpur, Bihar
* Mahipala was known as the second founder of Pala dynasty.
* The dynasty of Gurjar Prathiharas was founded by Harichandra in $6^{\text {th }}$ century AD. Nagabhatta-I was the first important ruler of this dynasty. Valtsaraja succeeded

Nagabhatta I. Nagabhatta II succeeded Valtsaraja around 805 AD.

* Nagabhatta II is best known for rebuilding the Somanath Temple in 815 AD. The Temple was destroyed by Arab Armies of Junayad in 725 AD.
* Mihirbhoja, another important King of the Prathihara dynasty assumed the title of 'Adivaraha' and built the Tali Mandir at Gwalior.
* The Rashtrakutas had Kannada Origin and their mother tongue was Kannada.
* The Rashtrakuta dynasty was founded by Dantidurga in $8^{\text {th }}$ century AD.
* The Rashtrakuta King Krishna I built the rock cut monolithic Kailasa temple at Ellora.
* Rashtrakuta King Amoghavarsha I followed Jainism. He wrote Kavirajamarga in Kannada language. He was the architect of the Rashtrakutas capital Malkhed or Manyakheda.
* The capital of Sunga dynasty was Vidisha (MP) and the capital of Kanva dynasty was Pataliputra.
* Sunga dynasty was established by Pushyamitra Sunga in 185 BC. He was a Brahmin commander-in-chief of last Mauryan ruler called Brihadratha.
* Pushyamitra Sunga was a staunch supporter of Orthodox Hinduism. He was succeeded by his son Agnimitra who was a male protagonist in Kalidasa's drama Malavikagnimitra.
* Bharhut stupa, a famous monument was made during sunga period.
* Devabhuti was the last ruler of Sunga dynasty.
* Kanva dynasty was founded by Vasudeva, who was Devabhuti's minister.
* Information about Chedi dynasty was obtained from Hathigumpha inscription located near Bhubaneshwar, Orissa.
* Hathigumpha Inscription was engraved by kharavela, the 3rd ruler of Chedi dynasty who was a follower of Jainism.
* The Chedi dynasty of Kalinga is also known as 'Mahameghavahana Family', which means 'Lord of the Great clouds' who uses the clouds as his vehicle. It may mean that the Kings were as powerful as Indra.
* The Mahrauli Inscription showed the conquest of Chandra Gupta I.
* Samundragupta got the name of Indian Napoleon due to his military achievements. His conquest was shown by Allahabad Pillar inscription.
* Chandra Gupta II, the son of Samundragupta was called Vikramaditya. Rudrasimha last emperor of Sakas was defeated by him and got his name as Vikramaditya and his Ashwamedha horse name Sakari means King of Sakas.
* The Huns attacked the Gupta Empire at the time of Skandagupta.
Titles accepted by Gupta King were:-
I. Srigupta, Ghatotkacha-Maharaja.
II. Chandra Gupta I-Maharaja Dhiraja
III. Samundragupta -1. Kaviraja 2. Ashmedha Prakraman Vikram 3. Param Bhagavat (Nalanda copper plate) 4. Sarva-raj-och-chetta ie uprooter of all kings (on coins only ruler with this title) 5. Allahabad pillar Inscription mention the title 'Dharma Prachar Bandu' that is he was upholder of Brahmanical religion.
IV. Chandra Gupta II-1. Vikramadiya

2. Sakari Devagupta / Devashri / Devraja
3. Narendra Chandra Sinh Vikram
4. Param Bhagavata
V. Kumaragupta-Mahendraditya
VI. Skandagupta-Vikramaditya, Kramaditya, Param Bhagavat, Shakropama, Devraja.

* Types of Taxes levied during Gupta period were (1) Kalpita/ Upkilpta-Sales Tax and Purchase Tax (2) Halivakar/ Halidanda-Tax on ploughing (d) Bali-An additional oppressive tax on people (4) Prataya-Toll Tax (5) Bhog-King's share of produce. (6) Bhoga - General Tribute (7) Bhatta - Police Tax (8) Chat-Security Tax (9) Charasana-grazing tax (10) Hiranya-Tax on special produce taken in cash (11) Udakabagh-water Tax (12) Uprikar-Tax collected from all subjects (13) Taradaya-Tax on navigation (14) Rajju-Tax for measurement of land (15) Sarvarishti-Forced Tax (16) Bedakbhog-Irrigation Tax (17) Uparnik-Tax taken from border area.


# MODERN INDIAN HISTORY 

* Lord William Bentick abolished Sati, Lord Ellenborough deals with the abolition of Slavery, Lord Minto II - Swadeshi Movement.
* Amir Khusro is known as the Parrot of India, Chenqiz Khan - Scourge of God, Sardar Patel - Iron Man of India.
$\star$ Keshav Chandra Sen started the Indian Reforms Association.
$\star$ As per Government of India Act 1858, 15 members were appointed to assist the secretary of state for India
* It was on August 2nd 1858, the Government of India Act 1858 was passed by the Parliament of the United Kingdom.
$\star$ Victoria was the Monarch of Britain at the time of commencement of the Government of India Act 1858.
$\star$ After the commencement of the Government of India Act 1858, British Governor General of India was known as Viceroy of the State.
$\star$ The British Parliament was the supreme body in the Britain at the time of commencement of the Government of India Act -1858.
* It was Lala Lajpat Rai who gave the safety valve theory for Indian National Congress and said that it was brain child of Lord Dufferin.
$\star$ V D Savarkar was the author of the Book, the Indian War of Independence, 1857.
$\star$ The first meeting/ session of INC was held at Bombay.
$\star$ British Prime Minister Ramsay Mc Donald headed the first Round Table Conference in London (1930).
$\star$ The second Round Table Conference failed due to priority to be given to communal question.
* Dinabandhu Mitra is the author of the book 'Nil Darpan'.
$\star$ Lord Irwin is related with the "Deepavali Declaration".
$\star$ Nizam of Hyderabad was the first Indian native ruler to accept the system of subsidiary Alliance.
$\star$ Acharya Narendra Dev was associated with the formation
of the Congress Socialist Party.
* Lord Irwin was the Governor General of India during the Civil Disobedience Movement.
夫 Khan Bahadur Khan was the leader of the revolt of 1857 at Bareilly Kunwar Singh in Bihar and Bakht Khan in Delhi.
* In the Nagpur Session in 1920 there was change in the Constitution of the Congress, Madras session of 1927 Independent Resolution passed for the first time at the instance of Jawaharlal Nehru, Calcutta Session 1928 - Return of Gandhi to active Politics after 6 years.
* Annie Beasant started the Central Hindu School.
* The Bhils defied British Authority for 50 years from 1818. Their revolt was finally ended by the British through military operations as well as conciliatory measures.
* The Charter Act of 1793 renewed the charter of the company for 20 more years. The Act regulated the finances of the company and prohibited the Commander-in-Chief from being a member of the Governor General's Council.
$\star$ The motive of Lord Wellesley to introduce the System of Subsidiary Alliance was to prevent the French influence in the Indian States.
« 'India' is the journal published in Britain by the committee of the Indian National Congress.
$\star$ In the battle of Chausa Sher Shah defeated Humayun
* 'Widow Remarriage Act' is associated with Ishwar Chandra Vidyasagar.
* Swaraj Party is associated with C R Das, Ghadar Party Lala Hardayal, Anushilan Samithi - Sri Aurobindo Ghosh and Abhinav Bharat Society - V D Savarkar
غ Champaran and Kheda Satyagrahas were led by M. K. Gandhi.
* The organisation 'Tattvabodhini Sabha' was founded by Devendranath Tagore, Prarthana Samaj - Atmaram Pandurang, Arya Samaj - Swami Dayananda Saraswathi, Central Hindu School at Benaras - Annie Besant.
* Shivaji appointed eight ministers called 'Ashtapradhan' who assist him in administrative affairs. Peshwa was the most important ministers who looked after the finance and general administration. Senapati were one of the leading Marathas Chiefs which was basically post of honour. The Majumdar was accountant. The Wakenavis is one who looks after the intelligence, Post and household affairs. The Surnavis or Chitnis assist the king with his correspondence. The Dabir was the master of ceremonies and helps the king in his dealing with Foreign Affairs.
* The Nyayadish and Pandit Rao were in charge of Justice and Charitable Grants. He levies tax on the land which was one fourth of the land revenue ie Chauth.
$\star$ Minto - Morley Reform was another name of Indian Council Act of 1909 AD which was instituted to Placate the moderates and appeasement to the disseminate Muslims from National Movement by granting them separate electorate.
* Shariatullah started the 'Faraizi' movement of Bengal which took up initiative to the cause of the peasants.
$\star$ The Mohammedan Literacy society of Calcutta founded in 1863 by Nawab Abdul Latif aimed at the spread of modern education and removing social abuses.
* The Wahabi Movement also known as 'Walliullah Movement' was started in response to Western influences influenced by the teachings of Shah Walliullah who was regarded as the first Indian Muslim Leader. The entire movement was moving around the legacy of Islam - Quaran and Hadis.
^ Ahamadiya Movement was started by Mirza Gulam Ahamed in 1889 in order to spread Western education among Indian Muslims
ڤ The Deoband School was started against the Liberal Movement by the Orthodox Muslim Ulema to teach the real essence of Islam on the basis of Quran and Hadis, and also to preach the concept of Jihad against the foreign rule.


## றアセேดัั ๓ึி

1．The minerals that maintain cation－anion balance in plant cells are
（A） Cl and K
（B） K and Fe
（C） Cl and Mg
（D） Ca and Mg

2．Which out of the following does not belong to Brown algae？ （A）Ectocarpus，Dictyota（B）Gelidium，Batrachospermum （C）Laminaria，Fucus（D）Sargausm，Ectocarpus
3．Select from the following extinct species，the one was present in Australia．
（A）Dodo
（B）Quagga
（C）Steller＇s Sea cow
（D）Thylacine

4．Surgical removal of gall bladder in human would lead to （A）Problem in digestion of fat
（B）Increase acidity in intestine
（C）Jaundice
（D）Decrease acidity of stomach
5．Which one of the following is a chordate but not a vertebrate？
（A）Sea mouse
（B）Sea lion
（C）Sea squirt
（D）Sea cow

6．The tendency of population to remain in genetic equilib－ rium may be disturbed by
（A）random mating
（B）lack of migration
（C）lack of mutation
（D）natural selection

7．Who among the following was the first to hunt with stone weapons but essentially ate fruits？
（A）Homo Habilis
（B）Homo Erectus
（C）Australopithecians
（D）Homo Sapiens

8．Name the enzyme that is responsible for activation of Amino acid during translation
（A）Peptidyl transferase（B）Transpeptidase
（C）Aminoacyl t－RNA synthetase（D）Translocase
9．During sewage treatment，biogases are produced which include
（A）Methane，Oxygen and Hydrogen Sulphide
（B）Hydrogen Sulphide，Methane and Sulphur dioxide
（C）Hydrogen Sulphide，Nitrogen and Methane
（D）Methane，Hydrogen Sulphide and Carbon dioxide
10．In Cellular respiration，which of the follwing processes occur only inside the Mitochondria and not in the cytoplasm？
（A）Glycolysis and Pentose Phosphate pathway
（B）Glycolysis and Citric acid cycle
（C）Citric acid cycle and oxidative phosphorylation （D）Glycolysis and Oxidative phosphorylation
11．The＿＿＿productivity result in the accumulation of plant biomass，which serves as the food of herbivores and de－ composers．
（A）Gross Primary
（B）Net Primary
（C）Secondary
（D）Tertiary

12．Which of the following is a wrongly matched pair about organ－ isms and their common reproductive mechanism？
（A）Yeast－fragmentation（B）Bacteria－binary fission
（C）Hydra－budding
（D）Fungi－asexual spores
13．DNA finger printing，widely used for detecting crimes and solving parental disputes，is referred as
（A）Analysis of profiles of DNA samples
（B）Analysis of DNA samples using a printing device
（C）Technique used for molecular analysis of different samples of DNA
（D）Technique used for Identification of fingerprints of indi－ viduals．
14．Adam＇s apple in human refers to
（A）Arytenoid cartilage of Larynx
（B）Cricoid cartilage of Larynx
（C）Thyroid cartilage of Larynx
（D）Corniculate cartilage of Larynx
15．Why do we pass more urine in wet and cold season？
（A）Impairment of water absorption by neurones
（B）Kidney becomes more active
（C）ADH secretion is increased
（D）Sweating is much decreased
16．In human ancestors the one believed to be made cave paintings are
$\begin{array}{ll}\text {（A）Neanderthal Man } & \text {（B）Peking Man } \\ \text {（C）Java Man } & \text {（D）Cro magnon Man }\end{array}$
17．Which one of the following is wrongly matched？
（A）Ribozyme－Proteinaceous in nature
（B）Apoenzyme－Protein part of Enzyme
（C）Co－enzyme－Loosely attached organic cofactor of holoenzyme
（D）Co－factor－Non protein in part of holoenzyme
18．Biological Oxygen Demand（BOD）is a measure of （A）Industrial wastes poured into water bodies
（B）Extent to which water in polluted with organic matter
（C）Amount of Carbon monoxide inseperably combined with haemoglobin
（D）Amount of Oxygen needed by green plants during night
19．Many cells function properly and divide mitotically even though they do not have
（A）Plasma membrane
（B）Cytoskeleton
（C）Mitochondria
（D）Plastids
20．A Plant having 12 chromosomes in mature gamete cell， will have $\qquad$ chromosomes in its root cells
（A） 6
（B） 12
（C） 24
（D） 48
21．Upon examination of a fungal specimen，observed that the mycelium is aseptate and coenocytic and asexual reproduction by zoospores or by aplanospores．The fun－ gal specimen most likely belongs to
（A）Basidiomycetes
（B）Phycomycetes
（C）Ascomycetes
（D）Deuteromycetes

22．It is proteinaceous layer in a Monocotyledonous seed and the outer covering of endosperm which separates it from embryo．Identify the part
（A）Scutellum
（B）Tegumen
（C）Hyaline layer
（D）Aleurone layer

23．If for some reason，the brush bordered cells of intestinal mucosa are non－functional，which of the following is likely to occur
（A）Emulsification of fat does not occur
（B）Alkalinisation of chyme is affected
（C）Faeces is rich in dipeptides and disaccharides
（D）Faeces is rich in proteoses and peptones
24．Which is the common precursor carbohydrate molecule for the biosynthesis of starch and sucrose
（A）Sucrose phosphate（B）Triose phosphate
（C）Fructose 6 phosphate
（D）Fructose 1，6 diphosphate
25．Which organism of the following is used for the produc－ tion of single cell protein？
（A）Lycoperdon
（B）Candida utilis
（C）Spirulina
（D）Fusarium graminearum

26．Identify the wrongly matched pair
（A）Structural protein－Cellulose，Collagen
（B）Regulatory protein－Glucagon，Insulin
（C）Enzymatic protein－Pepsin，Phospholipases
（D）Trans cellular transport－GLUT
27．Which one of the following statement about genetic drift is not true ？
（A）Selection of allele is random
（B）It occurs purely by chance
（C）Fixation of allele is quick in small population
（D）Genetic bottle neck phenomenon is the outcome
28．What is the outcome when Auxin is increased in Auxin／ Cytokinin ratio of tissue culture medium ？
（A）Adventitious roots will form
（B）Shoot formation accelerated
（C）No root formation
（D）No development in culture tube
29．Besides the Phyla Annelida and Arthropoda，metamer－ ism is exhibited by
（A）Mollusca
（B）Cestoda
（C）Chordata
（D）Porifera

30．Which statement is not correct regarding Malaria
（A）Malaria fever is caused by Plasmodium
（B）This disease is transmitted by male mosquito bite
（C）Gambusia fish is useful to prevent Malaria
（D）Sickle cell anaemia patients are resistant to Malaria

## Answers

1（A）2（B）3（D）4（A）5（C）6（C）7（C）8（C）9（D） $10(\mathrm{C}) 11(\mathrm{~B}) 12(\mathrm{~A}) 13(\mathrm{~A}) 14(\mathrm{C}) 15(\mathrm{D}) 16(\mathrm{D}) 17(\mathrm{~A}) 18(\mathrm{~B})$ 19（D）20（C） 21 （B）22（D）23（C）24（B）25（C）26（A）27（B） 28（A）29（C） 30 （B）

## CEOCRAPHY

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1．Geyser is a periodic jet of hot water and steam．The water at great depths is heated by the surrounding hot rocks and a jet of water is thrown out followed by steam at regular intervals． The old faithful in the Yelowstone National Park in USA which erupts every 65 minutes is an example．
2．Earthquakes：Shaking up the earth＇s crust is called an earth－ quake．Intensity of earthquake is measured in Ritcher scale and the instrument used to record earthquake waves is called seismograph．The point of origin of an earthquake in the inte－ rior of the earth is called focus and the point immediately above the focus is called the Epicentre．
3．Karst Topography：The regions where the action of ground water is prominent forms Karst Topography．These are usually limestone region．The major depositional landforms of Karst Topography include Stalactites and stalagmites．
4．Isthmus：A narrow strip of land joining two land masses． Eg：The isthmus of Panama joining North and South America．
5．The Kharif and Rabicrops of India：Kharif crops：Kharif crops are summercrops．They are sown before the rainy sea－ son from May to July and harvested after the rains in Septem－ ber and October．Eg：Rice and Millets．Rabi Crops：Rabi Crops are winter crops sown in the beginning of the winter season from October to December and harvested before the Summer season from February to April．Eg：Wheat，Barley and Oilseeds． The crops grown in the short periods after the harvest of Kharif and Rabi crops are called Zaid Crops．Eg：Green Vegetable
6．Anemometer：The velocity of wind is measured with the help of Anemometer．Beufort scale is used to classify winds based on their velocity．
7 Orgraphic Procipitation ：is a type of rainfall occurs when moist air rises at the windward side of a mountain and cools rapidly．In such instance the leeward（opposite）side of the mountain experiences descendance of hot air and remains as rain shadow area
8．Oceanography：is the study of various aspects of the ocean． The water covers about $71 \%$ of the earth＇s surface and is termed hydrosphere．The world ocean（oceans and seas to－ gether）contain more than $79 \%$ of the total water on earth sur－ faces．
9．Lithosphere：refers to the solid part of the earth crust com－ posed of rocks．Igneous rocks are primary rocks formed from the solidification of magma when it comes out of the earth＇s surface．Sedimentary rocks are formed by the deposition of sediments of other rocks by water，rivers etc．Metamorphic rocks are formed by a process called metamorphism where due to excessive heat or pressure or both igneous or sedi－ mentary rocks become hard and compact．Rocks are also formed from the remains of plants and animals which are called Organic rocks．Eg：Chalk，Coal．
10．Fold Mountains and block Mountains：Fold Mountains are formed as a result of the folding of the earth crust due to com－ pression．Eg：The Himalayas，The Alps，The Rockes and Andes Block Mountains on the other hand are formed when the crust undergoes faulting due to tension．Eg：The Basin Ranges of USA，The Black Forest Mountains of Europe．The steep sided valleys of the block mountains are called Rift valleys．Eg：The Red sea，the Dead sea and the Narmada valley．
11．Longitude and time：Time of a place is calculated on the basis of longitudes or meridians which are imaginary lines running perpendicular to the equator of the earth．The time difference between one degree of longitude is 4 minutes and hence the earth being a sphere，ie， $360^{\circ}$ degrees，the time taken for one rotation will be $24 \mathrm{hrs} .0^{0}$ meridian is called Greenwich line and $180^{\circ}$ meridian is known as International Date Line，the time difference between them being 12 hrs． The world time is based on Greenwich line（GMT）and the time of India is based on Indian Standard Meridian， $82^{1} / 2^{\circ} \mathrm{E}$ ． The time goes ahead of moving east of GMT and is behind when moving towards west of GMT．The difference between GMT $\left(0^{\circ}\right)$ and IST $\left(821^{1} 2^{\circ}\right.$ E）becomes $82^{1} 2^{0} \times 4$ minutes $=330$ minutes
ie， 5 hrs and 30 minutes ahead of GMT．


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