

GOVERNMENT OF JAMMU AND KASHMIR
JAMMU & KASHMIR SERVICES SELECTION BOARD
 CPO Chowk Panjtirthi, Jammu/ Zanzam Complex Rambagh Srinagar
 www.jkssb.nic.in

NOTICE

The Jammu and Kashmir Services Selection Board has advertised the various posts of Home Department vide Advertisement Notification No. 06 of 2025 dated 22.07.2025. In this regard, the syllabus for examination for these posts as mentioned below are hereby notified, as detailed in Annexures "A" to "F" to this notice.

S. No.	Notification No.	Item No.	Department	Name of the post	Syllabus Annexure
1.	06 of 2025	19	Home	Assistant Scientific Officer (Chemistry and Toxicology)	"A"
2.		20	Home	Assistant Scientific Officer (Documents)	"B"
3.		21	Home	Assistant Scientific Officer (Crime Scene)	"C"
4.		22	Home	Assistant Superintendent Jail	"D"
5.		23	Home	Computer Assistant	"E"
6.		24	Home	Laboratory Attendant	"F"

This notice is issued for the purpose of intimation to the concerned candidates only.

No. JKSSB-COE0EXAM(UT)/47/2023-03(7202120) (Reyaz Ahmad Malik) JKAS
 Dated: 30.07.2025
Controller of Examination
DIP/J-4115/25 Dt. 31-07-25 J&K Services Selection Board

Annexure "A"

Marks : 120 Marks
Time: 02 hours

Assistant Scientific Officer, Chemistry & Toxicology

- > Introduction, Definition, Principles, Scope and branches of Forensic Science.
- > Development of Forensic Science in India.
- > Crime Scene investigation: Definition of Crime Scene. Classification of Crime Scene, Indoor & Outdoor, Primary & Secondary, Macroscopic & Microscopic Crime scenes, Significance and Ethics of Crime Scenes.
- > Physical Evidence: Definition, Classification, Source, Significance and value of Physical evidence. Linkage between Crime Scene victim and Criminal. Study of Crime Scene relating to gas explosion, Fire and Arson, homicide, suicide, murder, mass disaster. Tools and techniques in Crime Scene search. Collection, Preservation, Packaging of the material at Crime Scene. Re-Construction of Crime Scene. Chain Custody and safety measures at the Scene of Crime and in Laboratory.
- > Basic Principles of Statistics: Probability, Mean, Median, Mode, Chi square, F-Test, measurement of uncertainty, Systematic and random sampling
- > Expert testimony in court of Law: Admissibility of evidence, Laws and Acts relevant to Forensic Science.
- > Narcotic Drugs and Psychotropic substances, Introduction and Classification of Control Substances, Precursor Chemicals, Narcotic Raids and Drug Laboratories- Evidence and Forensic Examination, Mandatory Provisions of NDPS Act, NDPS Drugs, Classification of Drugs, Drug Dependence and Drug Tolerance.
- > Explosive Chemistry- Introduction, Assessment, Classification and Chemistry of Explosives, Various Types of IEDs and their reconstruction, Mechanism of Explosion, Kinetics of Explosive reactions, Processing of Explosion Scene of Crimes - Role of Forensic Science, Role of Forensic Scientists in Post Blast Investigation.
- > Forensic Drug Chemistry: Introduction to Drugs, Forensic Examination of the Drugs/ Narcotics. Sample Preparation, Extraction Techniques - Chemical colour Test, Microcrystal Techniques and other instrumental techniques.
- > Petroleum Chemistry: Paraffins, iso-olefins, Olefin Hydrocarbons, Naphthenes, Cycloparaffins, Aromatic Hydrocarbons, Sulphur Compounds, Nitrogen Compounds, Oxygen Compounds, Organo-Metallic Hydrocarbons, Physical Properties of Petroleum Products, Analytical Techniques: Quantitative and Qualitative Steps in Analysis of Petroleum.
- > Fire Chemistry: Fire and Energy, Basic Chemistry, Chemistry and Behaviour of Fire, State of Matter and Behaviour of Gases, Liquids and Solids, Flammable limits.
- > Basic Biochemistry: Amino acids, Lipids, Proteins, Carbohydrates.
- > Forensic Toxicology Examination- Law relating to Poison, Introduction to Poisons, Forms of Poisons, Classification and methods of administration of poisons, Mode of action of Poisons, Diagnosis and management of Poison Cases, Factors effecting the affect of Poisons and medico legal aspects in Poison cases, Collection and Preservation of Biological evidences and circumstantial evidences in fatal and survival cases, Submission of samples to the laboratory, Specific analysis plan, isolation and extraction of Poison/ Drug by various methods using instrumental techniques.
- > Basic Principles of Pharmacology and Forensic Pharmacology.
- > Organo-metallic Chemistry.
- > Lasers Photochemistry and Spectroscopy.
- > Qualitative and Quantitative Analysis: Solvent Extraction- Advantage and Applications- pH extraction, masking agents, salting out techniques, relation between distribution ratio and distribution coefficient, advantage and application of solvent extraction, quantitative treatment of neutral chelate in extraction system, single extraction versus multiple extraction, solid phase extraction, accelerated solvent extraction, ultrasonic extraction, heat reflux extraction.
- > Chromatography: Introduction, principle procedure and applications, applications of paper chromatography, thin layer chromatography, high pressure thin layer chromatography, gas, liquid chromatography, Ion exchange chromatography, high pressure liquid chromatography, liquid chromatography-mass spectrometry, gas chromatography-mass spectrometry.
- > Chemical Periodicity, Main Group of elements and their compounds, concept of acids and bases, Hard Soft acid base concept, Non aqueous solvents.

Annexure "B"

Marks: 120
Time: 02 hours

Assistant Scientific Officer, Documents

- > Introduction to Forensic science: Definition and Scope of Forensic Science, History and development of Forensic science, Need and Principle, Police and, Forensic science laboratories/institutions in India and responsibility of Forensic Scientists. Crime scene management techniques, types of crime scenes, crime scene ethics, role of the first arriving officer, crime scene documentation, searching, collection, packaging and forwarding of physical evidences, Maintaining the chain of custody, and Reconstruction of scene of crime.
- > Expert testimony in court of law: admissibility of forensic evidence, laws and Acts relevant to forensic science.
- > The metric system: Unit of measurement-SI units. Measuring devices, Accuracy, sensitivity and precision of measuring instruments. Errors in measurement, Significant Figures.
- > Mechanics: Laws of motion, Linear and rotational motion, Friction, Elasticity, Magnetism and Electricity and its Basic properties, Holography: importance of coherence, Principle of holography and characteristics, recording and reconstruction, classification of hologram and application, non-destructive testing.
- > Laser: Production, properties of laser beams such as intensity, monochromaticity, coherence, directionality and brightness. Basic laser systems Gas Lasers: (i) Molecular gas lasers- CO2 laser & N2 (ii) ionic gas laser - Ar⁺ laser (iii) gas dynamic laser (iv) high pressure pulsed gas laser Solid State Laser: (i) Nd: YAG laser, (ii) Nd: Glass laser, comparison of performances (iii) Tunable, solid state laser: Ti: sapphire laser; Alexandrite laser Chemical Laser: HF laser, HCl laser, COIL. Excimer laser; Color centre laser; free electron laser; semiconductor diode laser, Laser Beam Propagation: Laser beam propagation, properties of Gaussian beam, resonator, stability, various types of resonators, resonator for high gain and high energy lasers, Gaussian beam focusing.
- > Basic concept of Spectroscopy: Atomic, molecular spectroscopy, imaging spectroscopy. Interaction of radiation with matter and its consequences. Reflection, absorption, transmission, scattering, emission, fluorescence, phosphorescence.
- > Fluorescence and phosphorescence spectrophotometry: Types of sources, structural factors, instrumentation, comparison of luminescence and UV-visible absorption methods. Infrared spectrophotometry: Dispersive and Fourier transform spectrophotometry (FTIR). Sample handling and preparation, quantitative analysis and interpretation of IR spectra, forensic applications.
- > Advanced microscopy: The compound microscope, comparison microscope, stereomicroscope, polarizing microscope, micro-spectrophotometer, scanning electron microscope. Detectors: photographic detectors, thermal detectors, photoelectric: detectors, PMT and semiconductor detectors.

- > Chromatography and Electrophoresis: General Principles and types of chromatographic techniques: Paper chromatography, column chromatography, thin layer chromatography, adsorption chromatography, partition chromatography, Gas chromatography, Gas-liquid chromatography, Ion exchange chromatography, Exclusion (permeation) chromatography, affinity chromatography, HPLC, HPTLC, Capillary Chromatography and Electrophoresis.
- > Statistics: Statistical evaluation of data obtained by instrumental methods. Tests of hypothesis-tests of significance of attributes, Z-test of significance and coefficient of correlation, small sample test, T-test, paired test, chi-square test, F-test for equality of variance, large sample test, normal test.
- > Forensic Document Examination: Legal aspects of forensic document examination, 293Crpc, Section 45 evidence act, definition of expert. Indian Penal Code Under sections viz, 29, 463, 405, and 420. Classification of documents, Care, handling, preservation of documents; Preliminary examination of case documents, Principle of handwriting examination; Importance of natural variations, Holographic documents, Comparison of handwriting, principle of fundamental divergence, natural variations in handwriting, nature and types of forgeries, characteristics of genuine and forged signatures, their detection, artificial and natural tremor. basic tools needed for forensic documents examination and their significance.
- > Alterations in documents: addition, deletion, obliterations, substitutions, overwriting built up documents, determination of sequence of intersecting strokes, Ink examination, chemical composition of different types of inks, destructive and non-destructive techniques involved in differentiation of ink. Writing instruments, working of fountain pen, ball pen, gel pen, writing inks, Printing inks and printing toners. Viscosity, Surface tension, Capillary rise.
- > Paper examination: Physical comparison, chemical composition, sizing & loading materials, tensile strength, comparison techniques: destructive & non-destructive, Examination of printed labels, wrappers, rubber seal impressions, Facsimile document, Photocopy and scanned documents: process of scanning, Indented writings, Charred documents: preservation and examination techniques involved.
- > Printed document examination: Printing technology, examination of type-script, classification of printers: identification of printed matter, different printing technologies, Examination of computer printouts, Concept of e-documents and digital signature.
- > Examination of security documents: Currency notes, Passport, Visa, Various identity cards, Stamp papers, travel documents. OVI ink, thermal ink, Examination of credit, debit and other plastic cards.

Annexure "C"

Marks : 120
Time :02 hours

SYLLABUS FOR THE POST OF ASSISTANT SCIENTIFIC OFFICER(S), (CRIME SCENE), IN J&K FORENSIC SCIENCE LABORATORY.

1. Definition, history, development and scope of forensic science in India. Basic Principles of Forensic Science and its significance, organization and functioning of forensic science laboratories. Ethics in Forensic Sciences.
2. Crime: Definition, theories of causation of crime: Pre-classical and neo classical, constitutional, geographical, economic, psychological, sociological, multiple causation, approach. General factors of crime, forms of punishment in brief.
3. Crime scene investigation: Definition of crime scene, classification of crime scenes, indoor and outdoor, primary and secondary, macroscopic and microscopic crime scenes, significance of crime scene and ethics of crime scene investigation. Crime scene reconstruction and its types.
4. Physical evidence: Definition, importance, classification, sources, significance and value of physical evidence. Types of crime scene evidence (Direct, circumstantial, physical, chemical, biological, digital, documents), Class and individual characteristics, identification and individualization of physical evidence, Locard's exchange principle, Linkage between crime scene, victim and criminal.
5. Crime Scene procedure and Documentation: Role of first responding officer, Initial crime scene response, Plan of Action, Note taking, Crime scene search for physical evidences, crime scene photography, types of cameras, types of media, admissibility of photographs, Videography of the crime scene.
6. Collection and preservation of Physical evidence: Fingerprints, Impression Evidence, Hair and fiber evidence, other trace evidence (Glass, Paint and Soil), Firearms and tool marks, Biological evidence (Blood, body fluids and tissue), Accelerants and flammable fluids, explosive materials, questioned document, drug evidence and bite mark evidence.
7. Crime Scene Search and preservation: Crime Scene search (Collection, preservation, packaging, labelling, sealing and transportation of Physical evidence), sketching the crime scene, Photography and maintaining Chain of custody.
8. Expert Testimony in court of Law, Admissibility of evidence, Laws and acts relevant to forensic science.
9. Forensic Chemistry and toxicology: Introduction, nature and Scope, Distillation and fractionation of petroleum products, Analysis of alcoholic and non alcoholic beverages. Introduction to explosives and explosive substances and their classification. Definition of Poison, Classification of Poison, Types of poisoning, signs and symptoms of poisoning. Routes of administration, action and symptoms of Narcotic drugs and psychotropic substances, different method of extraction of poisons and drugs. Screening tests commonly engaged in chemical analysis of drug samples. Spectrometric analysis. Introduction, procedure and application of various chromatographic techniques (Paper Chromatography, TLC, GC, GCMS, HPLC).
10. Fingerprints, Documents and other impressions: Fingerprint, Types of fingerprints, Different classifications, location and preservation of fingerprints, development of latent prints by physical and chemical methods. Documents: Definition of questioned documents, types of documents, care, handling, marking, packaging and preservation of documents, types of forgeries, basic tools needed for forensic documents examination and their use, photomicrography and microphotography. Foot and shoe prints, methods of their preservation and examination, tyre marks and track marks and their examination.
11. Forensic Biology, serology and DNA: Evaluation of blood and blood stain. Identification of semen, seminal stains and spermatozoa. Visual observation test, Physical Tests, UV Tests, Microscopic test, Chemical tests and enzymatic tests. Hair anatomy and examination of hairs from animal and human origin. Determination of species origin of blood and blood stains, blood spatter analysis. Blood grouping types and their importance in Forensic analysis. Types of DNA and their role in human identification, DNA extraction methods, determining quality and quantity of DNA samples, PCR and DNA fingerprinting/profiling methods such as RFLP and STR.
12. Forensic Physics: Density, Refractive Index, Birefringence. Examination of Soil, Dust, Paint, Glass, Fiber, tool marks, Restoration of erased/obliterated marks, examination of wires/cables, counterfeit coins.
13. General idea about Firearms and ammunition: Types of firearms, various components of firearms, different systems and their functions, improvised/country made/ imitative firearms. Types of ammunition, classification and constructional features of different types of fire arms and cartridges. Primer and its types. Safety aspects of handling firearms.
14. Introduction to computer and cyber forensic: Software, Hardware, Classification, computer input output devices, Windows, basic computer terminologies, internet, networking, storage, mobile phone forensic, computer ethics and application program. Introduction to cyber forensic, storage fundamentals, file system concepts, data recovery, Operating systems. Cyber Crime, types, relevant sections of IT Act.
15. Wildlife Forensics: Threats to the natural resources and wild species inhabiting globally, Overview of IUCN Red Data Book, CITES, Wildlife (Protection) Act, 1972 of India and other related acts, Different Methods of Poaching, Conventional methods of species identification, Morphological identification and examination of wildlife parts and products: Application of DNA technologies used in Wildlife Forensics and Conservation Genetics.
16. Quality Control and Quality Assurance in Forensic Laboratory: Introduction to Quality Management; Total Quality Management (TQM) Principles and their application in forensic laboratories; Accreditation in Forensic Science Laboratories; ISO standards and their role in accreditation, The process of accreditation and its impact on forensic science practice. Traceability and Validation: Methods for the validation of new analytical procedures, measurement of uncertainty in forensic measurements. Equipment Maintenance and Calibration in forensic laboratory. Proficiency Testing Programmes, Internal Audit and External Audit.
17. Acts and Legal Frameworks Related to Forensic Analysis: The Bharatiya Nyaya (Second) Sanhita, Bharatiya Nagarik Suraksha Sanhita and the Bharatiya Sakshaya Act, The Criminal Procedure (Identification) Act.

Annexure "D"

Syllabus for the post of Assistant Superintendent Jails, Home Department

The written examination for the post of Assistant Superintendent, Jails shall comprise of 100 objective type, multiple choice questions. Each question shall carry 2 marks. There will be negative marking of 0.5 marks for each wrong answer.

Duration: 120 minutes

S.No.	Subject	No. of Question	Marks
A.	General Intelligence & Reasoning	20	40
B.	General Awareness	20	40
C.	Quantitative Aptitude	15	30
D.	English	15	30
E.	Mathematical Abilities	15	30
F.	Computer Proficiency	15	30
Total		100	200

A. General Intelligence & Reasoning: (20 Questions, 40 Marks)

This component would include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc.

The topics are Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-coding, Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/ pattern- folding & un-folding, Figural Pattern-folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence.

B. General Awareness: (20 Questions, 40 Marks)

Questions in this component will be aimed at testing the candidates' general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions pertaining to History, Culture, Geography, Economics General Policy (related to India with special reference to J&K), Sports, Science, Scientific Research, People in News, Current Affairs etc

C. Quantitative Aptitude: (15 Questions, 30 Marks)

The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be computation of whole numbers, decimals, fractions and relationships between numbers, Percentage, Ratio & Proportion, Square roots, Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Alligation, Time and distance, Time & Work.

D. English Comprehension: (15 Questions, 30 Marks)

Vocabulary, grammar, sentence structure, synonyms, antonyms and their correct usage; Spot the Error, Fill in the Blanks, Synonyms/ Homonyms, Antonyms, Spellings/ Detecting mis-spelt words, Idioms & Phrases, One word substitution, Improvement of Sentences, Active/ Passive Voice of Verbs, Conversion into Direct/ Indirect narration, Shuffling of Sentence parts, Shuffling of Sentences in a passage, Cloze Passage, Comprehension Passage. To test comprehension, three or more paragraphs will be given and questions based on those will be asked. At least one paragraph should be a simple one based on a book or a story and the other two paragraphs should be on current affairs, based on a report or an editorial.

E. Mathematical Abilities: (15 Questions, 30 Marks)

Algebra: Basic algebraic identities of School Algebra and Elementary surds (simple problems) and Graphs of Linear Equations.

Geometry: Familiarity with elementary geometric figures and facts: Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles.

Mensuration: Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square Base.

Trigonometry: Trigonometry, Trigonometric ratios, Complementary angles, Height and distances (simple problems only)

Statistics and probability: Use of Tables and Graphs: Histogram, Frequency polygon, Bar-diagram, Pie-chart; Measures of central tendency: mean, median, mode, standard deviation; calculation of simple probabilities.

F. Computer Proficiency: (15 Questions, 30 Marks)

Computer Basics: Organization of a computer, Central Processing Unit (CPU), input/output devices, computer memory, memory organization, back up devices, PORTs, Windows Explorer. Keyboard shortcuts.

Software: Windows Operating system including basics of Microsoft Office like MS word, MS Excel and Power Point etc.

Working with Internet and e-mails: Web Browsing & Searching, Downloading & Uploading, Managing an E-mail Account, e Banking.

Basics of networking and cyber security: Networking devices and protocols, Network and information security threats (like hacking, virus, worms, Trojan etc.) and preventive measures.

Note: The questions in Parts A, B, & D will be of a level commensurate with the essential qualification viz. Graduation and questions in Part-C, E & F will be of a level commensurate with the qualification for the post.

Annexure "E"

Syllabus for the post Computer Assistant, Home Department

Marks: 120 Time: 02.00 Hrs.

S. No.	Subjects/ Topic	Marks assigned
1.	GENERAL AWARENESS with special reference of J&K UT	36
2.	GENERAL ENGLISH & COMPREHENSION	24
3.	GENERAL INTELLIGENCE & REASONING	24
4.	QUANTITATIVE APTITUDE	24
5.	BASIC KNOWLEDGE OF COMPUTERS	12
TOTAL		120

1. GENERAL AWARENESS with special reference of J&K UT
 - (i) Current Events of National and International importance
 - (ii) Political & Physical divisions of World & India
 - (iii) Climate & Crops in India
 - (iv) Transport & Communication.
 - (v) Demography- Census, its feature and Vital Statistics.
 - (vi) Important Rivers & Lakes in India.
 - (vii) Indian Economy.
 - (viii) Indian Culture & Heritage.
 - (ix) Indian History with special reference to Freedom Movement.
 - (x) Indian Constitution- Basic features- Preamble, Fundamental Rights, Fundamental Duties, Directive Principles of State Policy (xi) Science & Technology.
 - (xii) Environment, Ecology & Bio-diversity.
 - (xiii) Taxation in India- Direct & Indirect Tax - CBDT, GST etc.
 - (xiv) J&K UT
 - a) History
 - b) Economy
 - c) Geography- (Weather, Climate, Crops, Rivers, Lakes, Flora, Fauna.)
 - d) Heritage & Culture
 - e) Important Tourist Destinations
 - (xv) J&K Reorganisation Act, 2019.
2. GENERAL ENGLISH & COMPREHENSION
 - (i) Tenses
 - (ii) Narration
 - (iii) Modals
 - (iv) Articles
 - (v) Reading Comprehension
 - (vi) Fill in the blanks with Phrases, Pronouns, homonyms/ homophones etc
 - (vii) Clauses
 - (viii) Synonyms and antonyms
 - (ix) Pairs of words and their use in meaningful sentences.
 - (x) Rearranging of jumbled sentences.
 - (xi) Idioms and phrases.
 - (xii) Uses of Prepositions.
 - (xiii) Active & Passive Voice
 - (xiv) Error Spotting
 - (xv) Sentence Correction
 - (xvi) Spellings Correction
3. GENERAL INTELLIGENCE & REASONING
 - (i) Number series, Letter series, Semantic Series, Speed, Distance and Time, Statements and conclusions, Logical Reasoning, Mental Reasoning, Word Building, Numerical Operations, Semantic Analogy, Symbolic/ Number Analogy, Figural Analogy, Semantic Classification, Symbolic/ Number Classification, Figural Classification, Problem Solving.
 - (ii) Symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/ pattern- folding & un- folding, Figural Pattern- folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters.
4. QUANTITATIVE APTITUDE

The scope of the test will be computation of

 - (i) Whole numbers, decimals, fractions and relationships between numbers, Profit and Loss, Discount, Partnership Business, Mixture and Alligation, Time and distance, Time & Work, Percentage, Ratio & Proportion, Square roots, Averages, Interest, Basic algebraic.
 - (ii) Graphs of Linear Equations, Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Heights and Distances, Histogram, Frequency polygon, Bar diagram & Pie chart, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square base, Trigonometric ratio, Degree and Radian Measures, Standard Identities, Complementary angles.
5. KNOWLEDGE OF COMPUTERS
 - (i) Basic Applications of Computer and its component.
 - (ii) Fundamentals of computer sciences.
 - (iii) Hardware & Software, Concept of Open-Source Technologies.
 - (iv) Input & output Devices.
 - (v) Knowledge of MS Word, MS Excel, MS Access, MS PowerPoint, PDF Internet and E-mail.
 - (vi) Concept of Computer Virus and Latest Anti-Virus.
 - (vii) Role of Information Technology in Governance.