MPPSC Forest Services Mains Exam Syllabus

Paper-1

General Knowledge of Madhya Pradesh, National and International Level

History, Culture & Literature of Madhya Pradesh

- Important Historical events and Major dynasties of M.P.
- Contribution of Madhya Pradesh in the Independence movements.
- Art, Architecture, and culture of M.P.
- Main Tribes and Dialects of M.P.
- Main festivals, folk music, and folk art of M.P.
- Important literary figures of M.P. and their literature
- Main Tourist places of M.P.
- Important personalities of M.P.

Geography of the Madhya Pradesh

- Forest, Mountain, and Rivers of M.P. The climate of M.P.
- Natural and mineral resources of M.P.
- Energy Resources: Conventional and Non- conventional.
- Main irrigation and Power projects of M.P.

Politics and Economy of M.P

- The political system of M.P. (Governor, Cabinet, Legislative Assembly).
- Panchayati Raj in M.P.The social system of M.P.
- Demography and census of M.P.

- Economic development of M.P.
- Main industries of M.P.
- Agriculture and Agri-based industries in M.P.

Current events of International, National, and M.P.

- Important Contemporaneous events.
- Famous sports competitions; awards and sports institutions of the State and country.
- Welfare schemes of M.P. state.
- Famous personalities and Places.

Information and Communication Technology

- Electronics, computers, information, and communication technology.
- Robotics, artificial intelligence, and cyber security.
- E-Governance.
- Internet and Social networking sites.
- E-Commerce

Paper-2

Unit I –
Forest and
Forestry

Definitions, terminology, history, and background of forest, the objective of forestry, the role of forest (productive, protective, and ameliorative), the forest cover of India and M.P., influence of forest on the environment, forest types of India and M.P., reasons for declining forest, classification of forest, Trees Outside Forest (TOF), state-wise forest distribution and growing stock, silvics and silviculture, forest

regeneration, some commercially important trees (botanical name and family) examples teak, shisham, sal, babul, harra, bahera, amla, tendu, Palash, Arjun, Khair, mahua. Definitions, terminology, wood product, wood seasoning, wood preservation, plywood, particle-wood, pulp, and paper, Unit II saw milling, logging, forest measurements (tree height, Forest volume, biomass), non-wood forest products. fibers, flosses, Utilization grasses, tannin, gums, dye, resin, oleoresin, essential oils, tree-borne oil seeds, and medicinal plants. Definitions, terminology, National Forest Policies (1894, 1952, 1988). Forest Law, Indian Forest Act (1927, 2002, 2006), comparison of forest Policies, Wild Life Protection Act Unit III -(1972), and its amendments. Forest conservation Act (1980) Forest Policy and amendments, Environment Protection Act 1986. Biodiversity Act 2002, Forest Right Act 2006 for tribals, and Legislation Indian Forest Act 2019 (Amendment). Bamboo freed from forest produce, joint forest management, social forestry, agroforestry, farm forestry, Agroforestry Policy 2014, M.P. Joakvaniki Act, 2001.

Definitions, terminology, Classification of injurious agenciesman, animals, insects, plants, environments factors, forest fires and control measures, grazing and grazing management. afforestation, soil conservation, watershed management. Global warming, the role of forest in climate mitigation, carbon pool. role of forest in soil and water conservation, National parks, Census, ecosystem services, forest management, reserve forest, Biosphere reserves.

Unit V –
Tribes of
Madhya
Pradesh

Major Tribes of M.P. and its subcastes -Bhil, Gond, Baiga, etc. Special backward tribes of M.P.- Baiga, Bhariya, Sahariya. General introduction, regions and their features of languages and dialects of tribes of M.P., Major institutions and museums for tribes in M.P., Festivals, Religious beliefs, culture and traditions of tribes of M.P., Welfare Schemes of tribes, Role of tribes in forest protection.

Rate of a chemical reaction and chemical equilibrium – Preliminary knowledge of the rate of a chemical reaction. Fast and slow chemical reactions. Reversible and reversible chemical reactions. Reversible reaction and dynamic nature of equilibrium. Acids and bases. pH scale [simple numerical questions. Exothermic and endothermic reactions. Some important chemical compounds – properties and uses. Method of production manufacture [water, washing soda, baking soda bleaching powder and plaster of Paris.) preparation of building material-lime cement glass and steel. Metals – Position of metals in the periodic table and general properties. Metal, mineral ore. Difference between mineral and ore. Metallurgy-concentration, roasting, smelting, refining of ores. Metallurgy of copper and Iron, corrosion of metals. Alloys. Nonmetals – Position of nonmetals in the periodic table. Preparation properties and uses of Hydrogen

oxygen and nitrogen. Some important organic compounds –

laboratory method of preparing alcohol and acetic acid,

properties and uses some general artificial polymers,

polythene, polyvinyl chloride. Teflon soap and detergents.

Unit VI –
Chemistry

Unit VII – Physics

in the Sun, solar heating devices, solar cooker solar cell, wind energy, biogas, fossil fuels, ideal fuel properties of an idea! fuel. Nuclear energy, nuclear Fission, Fusion, chain reaction, nuclear reactor, use and harms of nuclear energy. General information about CREDA. Light – nature of light reflection of light, laws of reflection, reflection from the plane and curved surface, image formation by a plane convex and concave mirror, the relation between focal length and radius of curvature, determination of the focal length of a concave mirror by single pin method. [Relation between u-v-f [numerical examples. Refraction of light – laws of refraction, refraction by glass slab, critical angle, total internal reflection, use of total internal reflection in daily life, lens [converging and a diverging lens. Definition focal length optical center image formation by lens Human eye. its defects and remedies. Comparison between the photographic camera and the human eye. Simple telescope and astronomical telescope. Construction working, uses, ray diagram [no formula derivation). Electricity and its effects – electric intensity, potential, potential difference, electric current Ohm's law. Resistance specific resistance, influencing factors, the combination of resistance and related numerical examples thermal effect of current its use, calculation of power its ranT -P-i-ents. Che.ioa, e.eCs or electric cont construction. 'f Magnetic M effect " ' of current - Magnetic

Source of Energy – Conventional and new sources of

energy, source of solar energy, causes of the origin of energy

effect of current. Oersted experiment, electromagnetic accumulator cell induction' electric motor, the working principle and use of a generator, general studies of alternating current and direct current electric discharge,n gases, discharge tube, cathode rays. X-rays and their properties. Magnetism – Magnet and its types artificial magnet, methods of preparing magnets, molecular theory of magnetism, demagnetization, magnetic keepers, magnetic lines offer and their properties. Plotting the lines offeree Terrestrial magnetism, magnetic storm, magnetic meridian geographical meridian, relation between VH1 and^

[amoeba] and multicellular animal grasshopper. Human digestive system and digestive process. Photosynthesis, the main steps of the process, are light reactions and dark reactions. Factors influencing Photosynthesis. Experiments related to photosynthesis. Respiration – Definition, respiratory organs of animals breathing and respiration. Types of respiration. Aerobic and anaerobic respiration, respiratory system of human being and mechanism of respiration [general information], respiratory quotient [RQ] of carbohydrate, fat, and protein. Transport of mineral and water in plants and animals [In the context of a human being] Composition and function of blood, structure, and working of heart, structure, and function of blood vessels [preliminary

Animal nutrition – Types of nutrition. Autotrophic Nutrition,

Heterotrophic Nutrition. Holozoic, Parasitic Saprophytic

'symbiotic. Insectivorous, is an important term for the

nutrition process. Digestion in unicellular ceil animals

Unit VIII – Biology

Osmoregulation. Diseases related to kidney Control and coordination – coordination in plants and animal Phytohormones. The nervous system of human beings. Structure and function of the human brain and spinal cord,

knowledge] coagulation of blood, blood group, blood

transfusion, blood bank, the function of the lymph system,

diseases related to the heart. Excretion – excretion in plants

and excretory products. Excretion in animal and excretory

organs Excretion system of man and excretion process

[general information] artificial kidney dialysis.

reflex action, endocrine glands hormone, and their function.

Reproduction and growth – a type of reproduction Asexual reproduction fission, budding, regeneration, vegetative reproduction, layering, cutting, grafting. Parthenogenesis, sexual reproduction in plants, the structure of flower and reproduction process [general information] pollination fertilization. Human reproductive system and reproduction process. Heredity and evolution – heredity and variation, basis of heredity chromosome and DNA [preliminary information] gene sex determination preliminary knowledge of organic evolution [Oparin's theory only]

Unit IX –
Environment

definition, species, and genetic diversity. Blo-geographic classification of India. Importance of Biodiversity – Constructive and Destructive application. Importance of social, moral, and alternative vision. Global. National and Local level Blo-diversity. India is a wide diversity nation, Hotspots of Biodiversity, threats to biodiversity. Residential damage, damage to wildlife, humans, and wild animals struggle. India's threatened (endangered) and local species. Conservation of biodiversity. Topological and Nontopological conservation. Environmental pollution – Reason effect and conservation – Air pollution, water pollution, see pollution, soil pollution, sound/noise pollution, thermal pollution, nuclear pollution. Solid waste management- Urban and

Biodiversity and its conservation – General introduction –

Industrial solid waste management: reason, effect, and control. Human role in pollution control. Disaster

Management. Floods, Earthquake. Cyclones and Landslide.

Human Population and Environment, Population growth.

Variation in the population in various countries. Population explosion and Family Welfare Programme. Environment and Human health

GRAWAL 10 ART BI

Arithmetic:

Average profit and loss, simple and compound interest. Area Time, work and Labour, Time and distance; Square Root. Percentage, Ratio, and Proportion, use of log table, volumes of rectangular surface and solids. Algebra: Fundamental laws and first four rules additions, Subtraction, multiplication, division, simple formula and their use factors, H.C.F.L.C.M. by factors, fractions, simple equations, factors of easy trinomial expressions of the second degree.

Unit X –
Elementary
Mathematics
and General
Mental Ability

Geometry:

Line and angles, parallels, triangles, congruence inequalities, parallelograms, applications of parallels, bisectors, perpendicular, etc. Construction of angles, construction of triangles, construction of quadrilaterals, theorems of areas of triangles, and parallelograms. Areas of quadrilaterals, theorem of Pythagoras and its converse, reduction of quadrilaterals to an equivalent triangle, reduction of a rectilinear figure to a triangle or rectangle of equal areas, construction of a rectangle of the given area and having one side of the given length, miscellaneous construction, loci, Intersection of loci, exercises on loci.

Trigonometry:

Circular measure. Definitions of trigonometric ratios, simple problems on heights and distance.

General Mental Ability:

Numerical ability, reasoning, coding, data analysis and interpretation, analogy.

GRAWAL 1 CART B