**21. परीक्षा की स्कीम एवं पाठ्यक्रमः—**

### 1. संविदा कनिष्ठ तकनीकी सहायकः—

| क्रम संख्या | विषय | अधिकतम अंक | समय |
|---|---|---|---|
| 1 | सामान्य ज्ञान (राजस्थान के संदर्भ में) | 24 | |
| 2 | दैनिक विज्ञान | 24 | |
| 3 | गणित | 26 | |
| 4 | कम्प्यूटर के मूल सिद्धान्त | 26 | |
| 5 | Bulding Technology, Construction Technology and Construction Management | 30 | |
| 6 | Fluid Mechanics | 30 | |
| 7 | Survying, Estimating, Costing & Field Engineering | 30 | |
| 8 | Irrigation & Water Resources | 30 | |
| 9 | Theory of Stuctures and Strength of Materials | 30 | 3.00 घण्टे |
| 10 | Soil Menchanics and Foundations Engineering | 30 | |
| 11 | Design of R.C. Concrete and Masonry Structures and Structural Analysis, Design of Steel Structures | 30 | |
| 12 | Auto Cad Civil Engineering Drawing | 30 | |
| 13 | Soil and Water Conservation | 30 | |
| 14 | Farm Power and Machinery | 10 | |
| 15 | Agriculture Processing | 10 | |
| 16 | Renewable Energy Sources | 10 | |
| 17 | योग | 400 | |

**नोटः—**

1. प्रश्न पत्र में बहुविकल्पीय प्रकार के 200 प्रश्न होगें तथा सभी प्रश्नों के अंक समान होगें।
2. परीक्षा में न्यूनतम निर्धारित उत्तीर्णांक 40 प्रतिशत है। अनु.जाति एवं अनु.जनजाति के अभ्यर्थियों के लिए न्यूनतम निर्धारित उत्तीर्णांक 35 प्रतिशत है। इससे कम अंक प्राप्त करने वाले अभ्यर्थी नियुक्ति के लिए पात्र नहीं होगें।
3. किसी प्रश्न के गलत उत्तर के लिए परीक्षार्थी के प्राप्तांकों में से उस प्रश्न के पूर्णांक का एक—तिहाई(1/3) अंक काटा जावेगा।

# पाठ्यक्रम (Syllabus)

## भाग–अ

## सामान्य ज्ञान

| राजस्थान का इतिहास, कला, संस्कृति, साहित्य, परम्परा एवं विरासत |
|---|
| 1. राजस्थान के इतिहास के प्रमुख स्रोत |
| 2. राजस्थान की प्रमुख प्रागैतिहासिक सभ्यतायें |
| 3. राजस्थान के प्रमुख राजवंश एवं उनकी उपलब्धियां |
| 4. मुगल– राजपूत संबंध |
| 5. स्थापत्य कला की प्रमुख विशेषताऐं |
| 6. महत्वपूर्ण किले, स्मारक एवं संरचनाऐं |
| 7. राजस्थान के धार्मिक आंदोलन एवं लोक देवी–देवता |
| 8. राजस्थान की प्रमुख चित्रकलाऐं, शैलियां एवं हस्तशिल्प |
| 9. राजस्थानी भाषा एवं साहित्य की प्रमुख कृतियां, क्षेत्रीय बोलियां |
| 10. मेले, त्यौहार, लोक संगीत, लोक नृत्य, वाद्ययंत्र एवं आभूषण |
| 11. राजस्थानी संस्कृति, परम्पराएं एवं विरासत |
| 12. महत्वपूर्ण ऐतिहासिक पर्यटन स्थल |
| 13. राजस्थान के प्रमुख व्यक्तित्व |
| 14. राजस्थान की रियासतें एवं ब्रिटिश संधिया, 1857 का जन– आंदोलन |
| 15. कृषक एवं जन– जाति आंदोलन, प्रजामंडल आंदोलन |
| 16. राजस्थान का एकीकरण |
| 17. राजस्थान का राजनीतिक जनजागरण एवं विकास– महिलाओं के विशेष संदर्भ में |
| **राजस्थान का भूगोल** |
| 1. स्थिति एवं विस्तार |
| 2. मुख्य भौतिक विभागः– मरूस्थलीय प्रदेश, अरावली पर्वतीय प्रदेश, मैदानी प्रदेश, पठारी प्रदेश |
| 3. अपवाह तंत्र |
| 4. जलवायु |
| 5. मृदा |
| 6. प्राकृतिक वनस्पति |
| 7. वन एवं वन्य जीव संरक्षण |
| 8. पर्यावरणीय एवं पारिस्थितिकीय मुद्दे |
| 9. मरूस्थलीकरण |
| 10. कृषि– जलवायु प्रदेश एवं प्रमुख फसलें |

11. पशुधन
12. बहुउद्देशीय परियोजनाऐं
13. सिंचाई परियोजनाऐं
14. जल संरक्षण
15. परिवहन
16. खनिज सम्पदाऐं

## राजस्थान की राजनीतिक एवं प्रशासनिक व्यवस्था

1  भारत का संविधान, राज्यपाल, मुख्यमंत्री, राज्य विधानसभा, उच्च न्यायालय, राजस्थान लोक सेवा आयोग, जिला प्रशासन, राज्य मानवाधिकार आयोग, लोकायुक्त, राज्य निर्वाचन आयोग, राज्य सूचना आयोग।

2  लोक नीति, विधिक अधिकार एवं नागरिक अधिकार–पत्र

## राजस्थान की अर्थव्यवस्था

1  अर्थव्यवस्था का वृहत परिदृश्य।

2  कृषि, उद्योग व सेवा क्षेत्र के प्रमुख मुद्दे।

3  संवृद्धि, विकास एवं आयोजना।

4  आधारभूत–संरचना एवं संसाधन।

5  प्रमुख विकास परियोजनाऐं।

## समसामयिक घटनाएँ

1  राजस्थान राज्यस्तरीय, राष्ट्रीय एवं अंतर्राष्ट्रीय महत्व की प्रमुख समसामयिक घटनाएँ एवं मुद्दे।

2  वर्तमान में चर्चित व्यक्ति एवं स्थान।

3  खेल एवं खेलकूद गतिविधियाँ।

## नरेगा अधिनियम तथा ग्रामीण विकास एवं पंचायतीराज की योजनाऐं

महात्मा गांधी नरेगा अधिनियम एवं ग्रामीण विकास एवं पंचायती राज विभाग राजस्थान के तहत संचालित योजनाओं का सामान्य ज्ञान

## दैनिक विज्ञान (Every Day Science)

1  Physical and chemical reactions, oxidation and reduction reactions, metals and non – metals. Hydro – carbons, Chloro – Fluro Carbon (CFC) Compressed Natural Gas (CNG), Soap and Detergent Pesticides, Reflection of light and its laws, examples of refraction, types of Lenses, Defects of vision and their corrections.

2  Electric current, Unit of electric current, Electric cell, Electric generator, Electric connection arrangement in house. Working of house
Uses of space science, Remote Sensing Technique and its uses. Info

Technology.

3   Environment – Components (Atmosphere, Lithosphere and Hydrosphere), Ecosystem – structure. Food – chain, Food – web, Nitrogen cycle. General information about – Bio – technology, Bio – patents, Stem cell, Cloning, Test Tube baby, Artificial insemination.

4   Apiculture, Seri – Culture, Fishery, Poultry, Dairy industry, Cereals, Pulses, Vegetables, Fruits, Medicinal Plants. Blood group, Blood transfusion, Rh factor, Pollution and human health, Pathogen &human health, Intoxicant and human health, Mal – nutrition &human health.

5   Immunity, Vaccination, Types of diseases, Hereditary disease – Hemophilia Color blindness, Thalasemia, National Health Programme, Manures – Bio – manure, Vermi compost. Crop rotation, Plant disease control.

## गणित (Mathematics)

1   Natural numbers, rational and irrational numbers and their decimal expansions, operations on real numbers, laws of exponents for real numbers, rational numbers and their decimal expansions.

2   Ratio and proportion, percentage, Profit and loss, simple and compound interest, time and distance, time and speed, work and time.

3   Collection of data, presentation of data, graphical representation of data, measure of central tendency, mean, mode, median of ungrouped & grouped data.

## कम्प्यूटर के मूल सिद्धान्त (Basics of Computer)

1   **Introduction to Computer & Windows:** Input/output Devices, Memory PORTs, Windows Explorer Menu, Managing Files & Folders, Setup & Accessories, Formatting, Creating CD/DVD.

2   **Word Processing & Presentations:** Menu Bars, Managing Documents & Presentations, Text Formatting, Table Manipulations, Slide Designs, Animations, Page Layout, Printing.

3   **Spread Sheets:** Excel Menu Bar, Entering Data, Basic Formula`& Inbuilt Functions, Cell & Text Formatting, Navigating, Charts, Page Setup, Printing, Spread Sheets for Accounting.

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

भाग—ब

1. **Building Technology And Construction Management**

   **Building Materials**: stones, bricks, steel, Timber, lime, cement, sand, aggregates for cement concrete, paints, distempers, use of pozzolana manufacturing of lime concrete, cement concrete for plain, reinforced and pre-stressed concrete work.

   **Road Materials:** Coarse aggregate, screenings and binding materials for WBM, Bricks for soling, Coarse and fine aggregate for bituminous roads, IRC standard size aggregates, Tars and Asphalt, Asphaltic concrete, Asphaltic emulsions, Mastic Asphalt and Minerals fillers

   **Construction Management**: Plants and equipments, planning for construction using network analysis CPM and PERT techniques

2. **Fluid Mechanics**

   **Fluids**: Definition, Ideal fluids, real fluids, Newtonian and Non-Newtonian fluids.

   **Properties of Fluids**: Units of measurement, Mass density, Specific weight, Specific volume, Specific Gravity, Viscosity, Surface tension and Capillarity, Compressibility and Elasticity.

   **Hydrostatics**: Pressure at a point in a static fluid; pressure variation in an incompressible static fluid; atmospheric pressure, Gauge pressure, vacuum pressure, absolute pressure, Manometers Bourdon pressure gauge.

   **Buoyancy**: Forces acting on immersed plane surface. Centre of pressure, forces on curved surfaces. Conditions of equilibrium for floating bodies, meta-center and met centric height experimental and analytical determination of met centric height.

   Equilibrium of Fluid particles and flow: Fluid mass subjected to horizontal and vertical acceleration and uniform rotation.

   **Hydro-kinematics**: Types of Flows: Steady and unsteady, uniform and non-uniform, stream lines, path lines, stream tubes, principles of conservation of mass, equation of continuity, acceleration of fluid particles local and connective, rotational and irrotational motions, free and forced vortex, circulation and vorticity velocity potential and str

function, elementary treatment of flow net. Euler's equations of motion and integration of Euler's equations, Bernoulli's equation for incompressible Fluids, assumptions in Bernoulli's equation, Energy correction factor.

**Applications of Bernoulli's equation**: Pitot tube, Venturi meter, orifice meter, orifices & mouth pieces, time of emptying of tanks by orifices, sharp edged rectangular, triangular and trapezoidal notches, Francis formula. Velocity of approach. End contractions Cipoletti Weir, time of emptying reservoirs by weirs.

**Momentum Equation and its Application**: Development of momentum equation by control volume concept, Momentum correction factor, applications-Borda's mouth pieces, sudden enlargement of flow, pressure on flat plates, Nozzles.

**Flow Through Pipes**: Laminar flow, Reynolds experiment, transition from laminar to turbulent flow. Turbulent Flow: Laws of fluid friction, friction factor Moodys diagram, loss of head due to friction and other causes. Hydraulic gradient, total energy line Chezy's, Darcy's and Manning's formula, flow through parallel pipes and pipes in series, flow through branched pipes. Flow along a bypass. Power transmission through pipe, condition for maximum power. Elementary water hammer concept,

3. ### Surveying, Estimating, Costing & Field Engineering

**Introduction:** Importance of surveying to engineers, Plane and geodetic surveying, methods of location of points, principle of surveying from whole to part, conventional signs.

**Measurement of Distances**: Different types of chains, tapes and their uses. Sources of error and precautions, corrections to tape measurements. Field problems in distance measurement. Advance techniques of distance measurement.

**Measurement of Angles & Direction**: Different types of direction measuring instruments and their uses. Reference meridians, Bearing and azimuths, magnetic declination and its variation. Use and adjustment of surveyors and prismatic compass.

Venire and micro optic theodolite, temporary and permanent adjustment of venire theodolite Measurement of horizontal and vertical angle by different methods. Application of theodolite in field problems-

 **Traversing:** Different methods of traversing; chain traverse, chain & compass traverse, transit-tape traverse. Methods of computations and adjustment of traverse; transit rule, Bowditch rule, graphical method, axis method. Gales traverse table.

**Leveling**: Definitions of various terms in leveling. Different types of leveling, sources of error sin leveling curvature and refraction corrections. Temporary and permanent

adjustment of dumpy and tilting levels. Computation and adjustment of level. Profile leveling L-Section and cross-sections.

**Plane Table Surveying**: Elements of plane table survey working operations, methods of plane table survey; inter section, traversing and resection, two point and three point problems

**Contouring:** Characteristics of contours, contour interval, contour gradient, Methods of locatingcontours, uses of contour maps.

**Trigonometric Leveling:** Trigonometric leveling, Objects accessible and non-accessible,

Determination of levels object- when.

Field Astronomy: Definitions of terminology used in Astronomy,Introduction to Remote Sensing and GIS Estimation for quantities for various types of construction, Rate Analysis, Preparation of Tender & contract documents, Centre-line diagram, Building layout.

4. **Irrigation & Water Resources**

Definition, necessity, benefits, types and methods of irrigation, Hydrology-Measurement of rainfall, run off coefficient, rain gauge, losses from precipitation evaporation, infiltration, etc. Water requirement of crops, duty, delta and base period, Kharif and Rabi Crops, Command area, Time factor, Crop ratio, Overlap allowance, Irrigation efficiencies. Different type of canals, types of canal irrigation, loss of water in canals. Canal lining-types and advantages. Shallow and deep to wells, yield from a well. Weir and barrage, Failure of weirs and permeable foundation, Silt and Scour, Kennedy's theory of critical velocity. Lacey's theory of uniform flow. Definition of flood, causes and effects, methods of flood control, water logging, preventive measure. Land reclamation, Characteristics of affecting fertility of soils, purposes, methods, description of land and reclamation processes. Major irrigation projects in India.

Soil-Water-Plant relationship, water requirements of different crops irrigation scheduling, measurement of irrigation water. Water conveyance and control, data of field channels. Design of irrigation methods, irrigation efficiencies. Drainage: Benefits drainage, surface drainage, drainage of flat and slopping lands. Design and layout of surface and sub surface drainage, depth and spacing of drains, installation of drains and drains walls, Types of aquifer, well log, groundwater prospects and water lifting devices. Water Resources Development and Management: water resources of India, surface water

groundwater, development of irrigation potential, canal irrigation, command development, on farm development works.

## 5. Theory of Structures and Strength of Materials

Elasticity constants, types of beams - determinate and indeterminate, bending moment and shear force diagrams of simply supported, cantilever and over hanging beams. Moment of area and moment of inertia for rectangular & circular sections, Bending moment and shear stress for tee, channel and compound sections, chimneys, dams and retaining walls, Eccentric loads, slope deflection of simply supported and cantilever beams, critical load and columns. Torsion of circular section. Springs, Vibration.

## 6. Structural Analysis

Introduction to Indeterminate structures, Degrees of freedom per node, Static and Kinematic indeterminacy (i.e. for beams, frames & portal with & without sway etc.), Releases in structures, Maxwell's reciprocal theorem and Betti's theorem, Analysis of statically indeterminate structures using slope - deflection method. Analysis of structures using moment - distribution method applied to continuous beams and portal frames with and without inclined members. Unit load method and their applications: deflection of determinate beams and frames, analysis of determinate and redundant frames upto two degree of redundancy, lac of fit in redundant frames.

## 7. Soil Mechanics and Foundations Engineering

Origin of soil, phase diagram, Definitions-void ratio, porosity, degree of saturation, water content, specific gravity of soil grains, unit weights, density index and interrelationship of different parameters, Grain size distribution curves and their uses.

Index properties of soils, Atterberg's limits, ISI soil classification and plasticity chart. Permeability of soil, coefficient of permeability. determination of coefficient of permeability, Unconfined and confined aquifers, effective stress, quick sand, consolidation of soils, Principles of consolidation, degree of consolidation, pre-consolidationpressure, normally consolidated soil, e-log p curve, computation of ultimate settlement.

Shear strength of soils, direct shear test, Vane shear test, Triaxial test, Soil compaction. Laboratory compaction test,Maximum dry density and optimum moisture content,

pressure theories, active and passive earth pressures, bearing capacity of soils, plate load test, standard penetration test.

8. **Design of R.C. Concrete and Masonry Structures**

RCC beams- flexural strength, shear strength, bond strength, design of singly reinforced and double reinforced beams, cantilever beams, T-beams, lintels, one way and two way slabs, isolated footings. Reinforced brick works, columns, staircases, retaining wall, water tanks (RCC design questions may be based on both limit State and working stress methods).

Concrete Technology : Properties, Advantages and uses of Concrete, Cement Aggregates, importance of water quality, water cement ratio, workability, mix design, storage, batching, mixing , placement, compaction, finishing and curing of concrete, quality control of concrete, hot weather and cold weather concreting, repair and maintenance of concrete structures.

9. **Design of Steel Structures**
Steel design : Steel design and constructions of steel columns, beams roof trusses plate girders.

10. **Construction Technology**

**Stone and Brick Masonry:** Ashlar, course and random rubble, stone pillar, dry stone and arch masonry, brick bonds and type of walls.

**Lintels:** Plastering, pointing, flooring, Expansion and construction joints; Centering and shuttering. General Selection criteria of site, Planning and orientation of buildings.

**Roofing:** Stone slab, RCC, G.C. Steel, Asbestos cement and jack arch roofing.

**Flooring:** Cement concrete, flag stone, terrazzo mosaic, Terrazzo tile, Brick on edge, timber Granolithic, linoleum and other floorings.

**Plastering**: Lime, cement sand, composite and rough coat plaster, Plaster of Paris, painting, Damp proof course, anti-termite treatment.

**Centering and Shuttering:** Centering form work, shuttering and moulds, timber & steel trestles andfalse work, scaffolding and shoring, under pinning.

11. **Auto Cad Civil Engineering Drawing**

12. **Soil and Water Conservation:**

Precipitation, hydrologic cycle, runoff measure prediction of peak rate of runoff, factors affecting runoff, hydrograph, Erosion-type factors associated with erosion, assessment of actual annual soil loss by erosion a Impact on agricultural production and productivity. Water erosion control measures, vegetation in soil and water conservation, grass waterways and design. Design of control measures Including permanent structures, stream bank erosion, mechanics of water erosion, wind erosion control, water harvesting structures i.e. Farm Ponds, Tanka, Nadi and Anicut.

**Watershed:** definition, concept and objectives, water management. Surveying instruments and their uses in watershed planning and executions.

### 13. <u>Farm Power and Machinery:</u>

Primary and secondary tillage machinery, their select operation, field capacity and efficiency. Machinery for sowing and intercultural operations. Power operated grains harvesting and threshing machinery, Farm tractors, Introduction different systems of tractors and their maintenance.

### 14. Agricultural Processing:

Mass and energy balance in food engineering, size reduction material handling and separation equipments. Principles of drying and drying equipments. Use of Psychrometric chart. Processing of milk, dairy equipments. Storage of grains a principles of food preservation. Rice and Pulse milling

### 15. <u>Renewable Energy Sources:</u>

Energy consumption pattern and energy resources, non conventional energy sources viz, solar thermal, solar photovoltaic, bio-energy resources and utilization, selection of biogas plant (site size and type), Improved biomass, cookstoves, wind energy, present status and potential of renewable energy sources in Rajasthan state.

## 2.संविदा लेखा सहायक:--

### परीक्षा की स्कीम

| क.सं. | विषय | अधिकतम अंक | समय |
|---|---|---|---|
| 1. | हिन्दी | 24 | |
| 2. | अंग्रेजी | 24 | |
| 3. | सामान्य ज्ञान (राजस्थान के संदर्भ में) | 26 | |
| 4. | दैनिक विज्ञान | 26 | |
| 5. | गणित | 30 | |
| 6. | कम्प्यूटर के मूल सिद्धान्त | 30 | |
| 7. | बही खाता (बुक कीपिंग) एवं लेखा कर्म | 40 | 3:00 घण्टे |
| 8. | व्यवसाय पद्धति | 30 | |
| 9. | लेखा परीक्षा | 40 | |
| 10. | भारतीय अर्थशास्त्र | 30 | |
| 11. | रा.से.नि. खण्ड-1 (अध्याय 2, 3, 10, 11, 13, 14, 15 एवं 16) Rajasthan Civil Service Joining Times Rules 1981. | 40 | |
| 12. | सा.वि.ले.नि. खण्ड-1 (अध्याय 1, 2, 3, 4, 5, 6, 14 एवं 17) | 40 | |
| 13. | RTPP Act-2012 and RTTP Rules 2013 | 20 | |
| 14. | योग | 400 | |

**नोट:--**

1. प्रश्न पत्र में बहुविकल्पीय प्रकार के 200 प्रश्न होगें तथा सभी प्रश्नों के अंक समान होगें।
2. परीक्षा में न्यूनतम निर्धारित उत्तीर्णांक 40 प्रतिशत है। अनु.जाति एवं अनु.जनजाति के अभ्यर्थियों के लिए न्यूनतम निर्धारित उत्तीर्णांक 35 प्रतिशत है। इससे कम अंक प्राप्त करने वाले अभ्यर्थी नियुक्ति के लिए पात्र नहीं होगें।
3. किसी प्रश्न के गलत उत्तर के लिए परीक्षार्थी के प्राप्तांकों में से उस प्रश्न के पूर्णांक का एक-तिहाई(1/3) अंक काटा जावेगा।

# पाठ्यक्रम (Syllabus)

| 1. हिन्दी (Hindi) |
|---|

1. संधि और संधि विच्छेद।
2. सामासिक पदों की रचना और समास–विग्रह।
3. उपसर्ग।
4. प्रत्यय।
5. पर्यायवाची शब्द।
6. विपरीतार्थक (विलोम) शब्द।
7. अनेकार्थक शब्द।
8. शब्द युग्म।
9. संज्ञा शब्दों से विशेषण बनाना।
10. शब्द शुद्धिः अशुद्ध शब्दों का शुद्धीकरण और शब्दगत अशुद्धि का कारण।
11. वाक्य शुद्धिः अशुद्ध वाक्यों का शुद्धीकरण और वाक्यगत अशुद्धि का कारण।
12. वाच्यः कर्तृवाच्य, कर्मवाच्य और भाववाच्य का प्रयोग।
13. क्रियाः सकर्मक, अकर्मक और पूर्वकालिक क्रियाएँ।
14. वाक्यांश के लिए एक सार्थक शब्द।
15. मुहावरे और लोकोक्तियाँ।
16. अंग्रेजी के पारिभाषिक (तकनीकी) शब्दों के समानार्थक हिन्दी शब्द।
17. सरल, संयुक्त और मिश्र अंग्रेजी वाक्यों का हिन्दी में रूपान्तरण और हिन्दी वाक्यों का अंग्रेजी में रूपान्तरण।
18. कार्यालयी पत्रों से संबंधित ज्ञान।

| 2. अंग्रेजी (English) |
|---|

1. Tenses/Sequence of Tenses.
2. Voice: Active and Passive.
3. Narration: Direct and Indirect.
4. Transformation of Sentences: Assertive to Negative, Interrogative, Exclamatory and vice-versa.
5. Use of Articles and Determiners.
6. Use of Prepositions.
7. Translation of Simple (Ordinary/Common) Sentences from Hindi to English and vice-versa.
8. Correction of sentences including subject, Verb, Agreement, Degrees of Adjectives, Connectives and words wrongly used.
9. Glossary of official, Technical Terms (with their Hindi Versions.)
10. Synonyms.
11. Antonyms.
12. One word substitution.
13. Forming new words by using prefixes and suffixes.

| 14 | Confusable words. |
|---|---|
| 15 | Comprehension of a given passage. |
| **16** | Knowledge of writing letters: Official, Demi Official, Circulars and Notices, Tenders. |

# 3. सामान्य ज्ञान (राजस्थान के संदर्भ में)

| राजस्थान का इतिहास, कला, संस्कृति, साहित्य, परम्परा एवं विरासत |
|---|
| 1. राजस्थान के इतिहास के प्रमुख स्त्रोत |
| 2. राजस्थान की प्रमुख प्रागैतिहासिक सभ्यतायें |
| 3. राजस्थान के प्रमुख राजवंश एवं उनकी उपलब्धियां |
| 4. मुगल– राजपूत संबंध |
| 5. स्थापत्य कला की प्रमुख विशेषताऐं |
| 6. महत्वपूर्ण किले, स्मारक एवं संरचनाऐं |
| 7. राजस्थान के धार्मिक आंदोलन एवं लोक देवी–देवता |
| 8. राजस्थान की प्रमुख चित्रकलाऐं, शैलियां एवं हस्तशिल्प |
| 9. राजस्थानी भाषा एवं साहित्य की प्रमुख कृतियां, क्षैत्रीय बोलियां |
| 10. मेले, त्यौहार, लोक संगीत, लोक नृत्य, वाद्ययंत्र एवं आभूषण |
| 11. राजस्थानी संस्कृति, परम्पराएं एवं विरासत |
| 12. महत्वपूर्ण ऐतिहासिक पर्यटन स्थल |
| 13. राजस्थान के प्रमुख व्यक्तित्व |
| 14. राजस्थान की रियासतें एवं ब्रिटिश संधिया, 1857 का जन– आंदोलन |
| 15. कृषक एवं जन– जाति आंदोलन, प्रजामंडल आंदोलन |
| 16. राजस्थान का एकीकरण |
| 17. राजस्थान का राजनीतिक जनजागरण, एवं विकास– महिलाओं के विशेष संदर्भ में |
| **राजस्थान का भूगोल** |
| 1. स्थिति एवं विस्तार |
| 2. मुख्य भौतिक विभागः– मरूस्थलीय प्रदेश, अरावली पर्वतीय प्रदेश, मैदानी प्रदेश, पठारी प्रदेश |
| 3. अपवाह तंत्र |
| 4. जलवायु |
| 5. मृदा |
| 6. प्राकृतिक वनस्पति |
| 7. वन एवं वन्य जीव संरक्षण |
| 8. पर्यावरणीय एवं पारिस्थितिकीय मुद्दे |
| 9. मरूस्थलीकरण |
| 10. कृषि– जलवायु प्रदेश एवं प्रमुख फसलें |
| 11. पशुधन |
| 12. बहुउद्देशीय परियोजनाऐं |

13. सिंचाई परियोजनाऐं
14. जल संरक्षण
15. परिवहन
16. खनिज सम्पदाऐं

## राजस्थान की राजनीतिक एवं प्रशासनिक व्यवस्था

1. भारत का संविधान, राज्यपाल, मुख्यमंत्री, राज्य विधानसभा, उच्च न्यायालय, राजस्थान लोक सेवा आयोग, जिला प्रशासन, राज्य मानवाधिकार आयोग, लोकायुक्त, राज्य निर्वाचन आयोग, राज्य सूचना आयोग।
2. लोक नीति, विधिक अधिकार एवं नागरिक अधिकार–पत्र

## राजस्थान की अर्थव्यवस्था

1. अर्थव्यवस्था का वृहद परिदृश्य।
2. कृषि, उद्योग व सेवा क्षेत्र के प्रमुख मुद्दे।
3. संवृद्धि, विकास एवं आयोजना।
4. आधारभूत–संरचना एवं संसाधन।
5. प्रमुख विकास परियोजनाएँ।

## समसामयिक घटनाएँ

1. राजस्थान राज्य स्तरीय, राष्ट्रीय एवं अंतर्राष्ट्रीय महत्व की प्रमुख समसामयिक घटनाएँ एवं मुद्दे।
2. वर्तमान में चर्चित व्यक्ति एवं स्थान।
3. खेल एवं खेलकूद सम्बन्धी गतिविधियाँ।

## नरेगा अधिनियम एवं विभागीय योजनाएं

1. महात्मा गांधी नरेगा अधिनियम, 2005 (यथा संशोधित) एवं ग्रामीण विकास एवं पंचायती राज विभाग राजस्थान के तहत संचालित केन्द्र/राज्य परिवर्तित योजनाओं का सामान्य ज्ञान

## 4. दैनिक विज्ञान (Every Day Science)

1 Physical and chemical reactions, oxidation and reduction reactions, metals and non – metals. Hydro – carbons, Chloro – Fluro Carbon (CFC) Compressed Natural Gas (CNG), Soap and Detergent Pesticides, Reflection of light and its laws, examples of refraction, types of Lenses, Defects of vision and their corrections.

2 Electric current, Unit of electric current, Electric cell, Electric generator, Electric connection arrangement in house. Working of house – hold electrical appliances. Uses of space science, Remote Sensing Technique and its uses. Information Technology.

3 Environment – Components (Atmosphere, Lithosphere and Hydrosphere), Ecosystem – structure. Food – chain, Food – web, Nitrogen cycle. General information about – Bio – technology, Bio – patents, Stem cell, Cloning, Test Tube baby, Artificial insemination.

4 Apiculture, Seri – Culture, Fishery, Poultry, Dairy industry, Cereals, Pulses, Vegetables, Fruits, Medicinal Plants. Blood group, Blood transfusion, Rh factor, Pollution and human health, Pathogen & human health, Intoxicant and human health, Mal – nutrition & human health.

5 Immunity, Vaccination, Types of diseases, Hereditary disease – Hemophilia, Colour blindness, Thalasemia, National Health Program. Manures – Bio – manure, Vermi compost. Crop rotation, Plant disease control.

| 5. गणित (Mathematics) |
|---|

1. Natural numbers, rational and irrational numbers and their decimal expansions, operations on real numbers, laws of exponents for real numbers, rational numbers and their decimal expansions.
2. Ratio and proportion, percentage, Profit and loss, simple and compound interest, time and distance, time and speed, work and time.
3. Collection of data, presentation of data, graphical representation of data, measure of central tendency, mean, mode, median of ungrouped & grouped data.

| 6. कम्प्यूटर के मूल सिद्धान्त (Basics of Computer) |
|---|

1. Introduction to Computer & Windows: Input/output Devices, Memory PORTs, Windows Explorer Menu, Managing Files & Folders, Setup & Accessories, Formatting, Creating CD/DVD.
2. Word Processing & Presentations: Menu Bars, Managing Documents & Presentations, Text Formatting, Table Manipulations, Slide Designs, Animations, Page Layout, Printing.
3. Spread Sheets: Excel Menu Bar, Entering Data, Basic Formula` & Inbuilt Functions, Cell & Text Formatting, Navigating, Charts, Page Setup, Printing, Spread Sheets for Accounting.
4. Working with Internet and e – mails: Web Browsing & Searching, Downloading & Uploading, Managing an E – mail Account, e – Banking.

| 7. BOOK – KEEPING AND ACCOUNTANCY |
|---|

1. Accounting – meaning, nature, functions and usefulness, types of accounting, accounting equation, generally accepted accounting principles, concept and conventions.
2. Accounting process: journals and ledger leading to preparation of trial balance and preparation of final accounts with adjustments.
3. Preparation of bank reconciliation statement.
4. Rectification of errors.
5. Accounting for depreciation – need, significance and methods of providing depreciation.
6. Receipts and Payments account and income and expenditure account and balance sheet.
7. Single entry system – Preparation of accounts from incomplete records.
8. Partnership accounts:
    (i) Fundamentals – capital – fixed and fluctuating, adjustments for change in profit sharing ratios, revaluation of assets and treatment of goodwill.
    (ii) Reconstitution of the firm – Admission, Retirement and Death of a partner including treatment of life policy.
9. Insurance claims.

8. – BUSINESS METHODS

1. Business: Introduction, scope and objectives ; Business Ethics and social responsibilities of business.
2. Forms of Business Organizations :- Sole proprietorship, Partnership and Company.
3. Entrepreneurship:- Concept, Importance and causes of low development of entrepreneurship in India.
4. Negotiable Instruments :- Meaning and types (Promissory note, bills of exchange and Cheques).
5. Sources of Business finance.
6. Advertising : Meaning, Importance and methods.
7. Consumer Rights and Protection against exploitation.
8. Human resource planning, recruitment, selection and training.
9. Communication - Process, barriers and suggestions to overcome barriers.
10. Discipline : Causes and suggestions for effective discipline.
11. Coordination :- Importance and Principles.

## 9. – AUDITING

1. Auditing: meaning, objectives, types of audit, planning and procedures, audit programme, working papers, test checking, routine checking.
2. Vouching: concepts importance and procedures.
3. Internal Control: meaning, objectives, internal check and internal audit.
4. Valuation and verification of assets and liabilities.
5. Rights, Duties and Liabilities of Company Auditor.
6. Audit of Government Companies.
7. Audit Reports and Audit Certificates.

## 10. – INDIAN ECONOMICS

1. Indian Economy - Features and Problems, Economic policy, Industrial policy and fiscal policy of India.
2. Meaning, objectives and importance of economic planning in India. Basic features of eleventh five year plan.
3. Population Explosion - Causes, effects and remedies. Relation between population and economic growth.
4. Role and significance of agriculture in Indian economy. Sources of agriculture finance and recent trends in agriculture marketing.
5. Industrial growth and prospects in India.
6. Inflation - Causes, effects and remedies. .
7. Role and problems of public sector in India.
8. Impact of globalization and liberalization of agriculture and industry.
9. Role of Multi - national corporations in Indian economy.
10. Foreign Trade - Volume, composition and direction.
11. National Income - Concept, computation methods and distribution.
12. Economy of Rajasthan - Basic features, development and prospects of agriculture.

| | |
|---|---|
| | industry and tourism. |
| 11 – | **Rajasthan Service Rules Vol. 1 (Chapter II, III, X, XI, XIII, XIV, XV & XVI) Rajasthan Civil Service Joining Times Rules, 1981.** |
| 12. – | **G.F. & A.R. – Pt. 1 (Chapter 1, 2, 3, 4, 5, 6, 14 & 17)** |
| 13. - | **RTPP Act- 2012 and RTPP Rules 2013** |

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बोर्ड द्वारा आयोजित की जाने वाली सभी वस्तुनिष्ठ परीक्षाओं में किसी प्रश्न का उत्तर नहीं दिये जाने के संबंध में अभ्यर्थी से पुष्टि करवाये जाने हेतु ओ.एम.आर. उत्तरपत्रक में पाँचवा विकल्प के संबंध में निम्नलिखित विशेष निर्देश लागू किये गये है :–

1. प्रत्येक प्रश्न के 05 विकल्प A, B, C, D, E. अंकित रहेगें। उनमें से अभ्यर्थी को केवल एक विकल्प को नीले बॉल पेन से गहरा गोल उत्तरपुस्तिका में सही उत्तर दर्शाने हेतु करना होगा।

   Each question has five options marked as A, B, C, D, E. You have to darken only one circle (bubble) indicating the correct answer on the Answer Sheet using BLUE BALL POINT PEN.

2. प्रत्येक प्रश्न के लिये विकल्पों में से केवल एक विकल्प को भरना आवश्यक होगा।

   It is mandatory to fill only one of the options for each question.

3. यदि अभ्यर्थी द्वारा किसी प्रश्न को हल नहीं किया है तो उसके लिये पाँचवा विकल्प E को गोला गहरा करना होगा। यदि पाँचों विकल्पों में से किसी को भी गहरा नहीं किया जाता है तो ऐसे 10 प्रतिशत प्रश्नों तक प्रत्येक प्रश्न के 1/3 अंक घटाये जावेंगें।

   If you are not attempting a question then you have to darken the circle 'E'. If none of the five circles is darkend, one third (1/3) part of the marks of question shall be deducted.

4. प्रश्न पत्र हल करने के बाद अभ्यर्थी को यह सुनिश्चित करना होगा कि उसने प्रत्येक प्रश्न का एक गोला गहरा भर दिया है। इस हेतु निर्धारित समय के बाद अभ्यर्थी को 10 मिनट अतिरिक्त समय दिया जावेगा।

   After solving question paper, candidate must ascertain that he\she has darkened one of the circles (bubbles) for each of the question. Extra time of 10 minutes beyond scheduled time, is provided for this.

5. जिस अभ्यर्थी द्वारा 10 प्रतिशत से अधिक प्रश्नो को किन्ही पाँच गोलों में से गहरा नहीं भरने पर उसे अयोग्य किया जावेगा।

   A candidate who has not darkened any of the five circles in more than 10% question shall be disqualifed.

22. **बोर्ड की वेबसाईटः–**अभ्यर्थी बोर्ड की वेबसाईट http://rssb.rajasthan.gov.in पर उपलब्ध सूचना से भी जानकारी प्राप्त कर सकते है। इसके अतिरिक्त किसी भी प्रकार के मार्ग निर्देशन/सूचना/स्पष्टीकरण राजस्थान कर्मचारी चयन बोर्ड, जयपुर के परिसर में स्थित स्वागत कक्ष पर व्यक्तिगत रूप से अथवा दूरभाष नम्बर 0141–2722520 पर सम्पर्क किया जा सकता है। समस्त पत्र व्यवहार सचिव, राजस्थान कर्मचारी चयन बोर्ड, राज्य कृषि प्रबंध संस्थान परिसर दुर्गापुरा, जयपुर–302018 को सम्बोधित किया जायेगा।

(डॉ. बी.सी. बधाल)
सचिव