

ગુજરાત ગૌણ સેવા પસંદગી મંડળ, ગાંધીનગર

જાહેરાત ક્રમાંક ૨૧૩/૨૦૨૩૨૪ ની સ્પર્ધાત્મક કસોટીના વિગતવાર અભ્યાસક્રમ અંગેની અગત્યની સૂચના

મંડળ દ્વારા જાહેરાત ક્રમાંક ૨૧૩/૨૦૨૩૨૪, સર્વેચર, વર્ગ-૩ સંવર્ગની MCQ-CBRT (Computer Based Response Test) પદ્ધતિથી પરીક્ષાનું આયોજન કરવાનો નિર્ણય લીધેલ છે, જેની સંબંધિત ઉમેદવારોએ નોંધ લેવી. સદર સંવર્ગની પરીક્ષાનો વિગતવાર અભ્યાસક્રમ નીચે મુજબ રહેશે.

DETAILED SYLLABUS of EXAM

PART: A (60 MARKS)

(1) Reasoning & Data Interpretation (30 Questions, 30 Marks):

1. Problems on Ages
2. Venn Diagram
3. Visual reasoning
4. Blood relation
5. Arithmetic reasoning
6. Data interpretation (charts, graphs, tables)
7. Data sufficiency

(2) Quantitative Aptitude (30 Questions, 30 Marks):

1. Number Systems
2. Simplification and Algebra
3. Arithmetic and Geometric Progression
4. Average
5. Percentage
6. Profit-Loss
7. Ration and Proportion
8. Partnership

9. Time and Work
10. Time, Speed and Distance
11. Work, Wages and chain rule

PART: B (150 MARKS)

(1) Constitution of India (10 Questions, 10 Marks)

1. Preamble of the Constitution
2. Fundamental rights
3. Directive principles of state policy
4. Fundamental Duty
5. Power, role and responsibility of President, vice president and governor
6. Parliamentary system
7. Amendment of Indian constitution, emergency provisions in Indian constitution
8. Centre – State Government and their relation
9. Judicial System of Indian Constitution
10. Constitutional body

(2) Current Affairs (10 Questions, 10 Marks)

1. Current events of state, national and international importance

(3) Comprehension (Gujarati {5 marks} & English {5 marks})

(10 Questions, 10 Marks)

1. to assess comprehension, interpretation and inference skills

A paragraph given with set of question on the basis of paragraph

Or statement and assertion type question can be asked

(4) Questions and Its Applications related to Technical Qualification

(120 Questions, 120 Marks)

1. Introduction of Surveying:

Introduction of Surveying, types of Surveying, use, application principal, Types of scales and uses of scales.

2. Chain/Tape Survey:

Uses of Chain/tape, testing of a chain & correction. Ranging (direct & indirect), Principle of chain survey, application, Terms used in chain survey, offset, types of offsets, limit of offset, field book, types of field book, entry of field book method of chaining in slopping ground, Field procedure of chain survey errors in chain survey, plotting procedure, Calculation of area (regular & irregular figure).

3. Compass Survey:

Basic terms used in compass survey, Instrument & its setting up, Conversion of bearing web to R.B., Calculation of included angle from bearing local attraction, magnetic declination and true bearing, closing error, Adjustment of closing error, precaution in using prismatic compass.

4. Auto CAD:

Introduction to Auto CAD. Use AutoCAD command..

5. Plane table Survey:

Plane table survey, principle, merits & demerits Instrument used in plane table survey setting up the plane table. (centering, levelling, orientation), Methods of plane table survey (radiation, intersection, resection, traversing), Error in plane table survey.

6. Theodolite survey:

Introduction to Theodolite, Types of Theodolite, parts of Theodolite, Terms used in Theodolite survey. Temporary adjustment of Theodolite, Angle

measurement process, Reading of angles, field book entry of measured angles, Permanent adjustment of Theodolite.

7. Traverse survey by Theodolite:

Traversing using theodolite (closed & open), traverse computation, determination of consecutive coordinates, independent co-ordinate, checking & balancing of traverse, preparation of gales traverse table, computation of area using co-ordinates, calculation of omitted measurement

8. Levelling Instruments:

Introduction to levelling. Types of levelling instrument, Technical terms used in levelling, Temporary & permanent adjustment, Different types of levelling, Entry of level book. (Reduced level calculation method), Curvature & refraction effect sensitivity of bubble tube, Common error and their elevation, Degree of accuracy.

9. Tachometric survey:

Introduction of tachometry & terms use advantages and disadvantages, Tachometric constants & its determination, Determination of horizontal & vertical distances by various methods.

10. Contouring:

Contouring, contour interval selection of contour interval, characteristics of contour, uses of contour contouring by various method. Interpolation of contour by various methods, drawing of contours, computation of volume establishment of gradient by abney level.

11. Curves:

Curves, Purpose, Types of curves - simple, compound, reverse, transition, vertical, Elements of simple curve, computation of elements of simple curve, Various methods for setting out simple, compound, reverse, transition & vertical curve.

12. Modern survey instruments:

Familiarization with modern survey instruments, Parts of Total station, temporary adjustment of T.S, working procedure of T.S.

13. Cadastral Survey:

Familiarisation with cadastral map, term used in cadastral survey, preliminary knowledge for prepare a site plan. Calculation of area by digital planimeter. Details Knowledge for preparation of Cadastral map.

14. Road Project Survey:

Types of surveys for location of a road. Points to be considered during reconnaissance survey. Classification of roads and terms used in road engineering, alignment of roads relative importance of length of road, height of embankment depth of cutting & filling, road gradients super elevation etc. Details Knowledge for preparation of a road project.

15. Details Knowledge for Topographical map.

16. Concept & drawing of cartographic projection:

Importance of cartographic projection. Uses of various types of cartographic projection for mapping.

17. GIS & GPS:

Introduction of GIS& GPS, Elements of GPS/DGPS, Observation principles, Sources of error & handling of error in GPS, Various type of GPS application, Concept & use of survey software.

18. Hydrographic survey:

Introduction to hydrographic survey, practice various methods of water depth measurement process, flow velocity measurement & determination of cross sectional area of a river. Handling of eco sounder, current meter.

19. Transmission line survey:

Basic terms used in transmission line survey, justification criteria for constructing new line, marking process of tentative alignment, selection process of a good alignment, Process of detail survey & final location survey. Use of sag template, various type of tower, construction of tower foundation.

20. Current Trends and Recent Advancements in the Above Fields.

ખાસ નોંધ:

- (૧) **Part-A** માં તમામ પ્રશ્નો ગુજરાતીમાં રહેશે.
- (૨) **Part-B** માં અંગ્રેજી કોમ્પ્રીહેન્સનના પ્રશ્નો અંગ્રેજીમાં અને શૈક્ષણિક લાયકાતને સંબંધિત વિષય અને તેની ઉપયોગીતાને લગતા પ્રશ્નો ગુજરાતી અને અંગ્રેજી એમ બંને ભાષામાં રહેશે.
- (૩) જાહેરાત ક્રમાંક:૨૧૩/૨૦૨૩૨૪ ના અનુસંધાને તા.૧૦/૧૧/૨૦૨૩ ના રોજ મંડળની વેબસાઈટ પર પ્રસિદ્ધ કરવામાં આવેલ અન્ય સુચનાઓ યથાવત રહેશે.

સ્પર્ધાત્મક પરીક્ષાની તારીખ અને કોલ લેટર ડાઉનલોડ કરવા માટેનો વિગતવાર કાર્યક્રમ મંડળની વેબસાઈટ પર મૂકવામાં આવશે. જેની સંબંધિત ઉમેદવારોએ નોંધ લેવા આથી જણાવવામાં આવે છે.

સ્થળ: ગાંધીનગર

તારીખ : ૦૬/૦૧/૨૦૨૪

(હસમુખ પટેલ)

સચિવ