



KARNATAKA GOVERNMENT
(Minor Irrigation and Ground Water development department)

No: MID 361 MISU 2023

Karnataka Government Secretariat,
Dr. B.R. Ambedkar Veedi,
Vikasa Soudha,
Bangaluru, dated:28.05.2025.

NOTIFICATION

Whereas the draft of the Karnataka Minor Irrigation Department Services (Cadre and Recruitment) Rules, 2025, was published as required by clause (a) of sub-section (2) of section 3 read with section 8 of the Karnataka State Civil Services Act, 1978(Karnataka Act 14 of 1990), In Notification No: MID 361 MISU 2023, dated:06.01.2025 in part-IVA Of the Karnataka Gazette dated:09.01.2025 inviting objections and suggestions from all persons likely to be affected thereby within fifteen days from the date of its publication in the official Gazette.

And Whereas the Said Gazette was made available to public on 06.01.2025.

And whereas objections and suggestions received in this regard have been considered by the Government.

Now Therefore, In Exercise of the powers conferred by sub -section(1) of section 3 read with section 8 of the Karnataka State Civil Services Act, 1978(Karnataka Act 14 of 1990), the Government of Karnataka hereby make the following rules, namely:-

RULES

1. Title and Commencement.-

- (1) These rules may be called the Karnataka Minor Irrigation Department Services (Cadre and Recruitment) Rules, 2025.
- (2) They shall come into force from the date of their final publication in the Official Gazette.

2. Submission of options.- On and from the date of commencement of these rules, within forty-five days from such commencement, the employees of Water Resources Department who are working on deputation in Minor Irrigation Department and the employees appointed by the Department of Public Works or Water Resources Department, if willing to be absorbed in the Minor Irrigation Department, (as specified in schedule-III) shall exercise an irrevocable option to get absorbed in the Karnataka Minor Irrigation Services. The seniority of the persons who have so expressed their willingness to be absorbed shall be determined with reference to their inter-se-seniority in the parent Department in accordance with the Karnataka Government Servants (Seniority) Rules, 1957, the employees who do not express their willingness to get absorbed in the Karnataka Minor Irrigation Service shall be treated as on deputation in this service.

3. Method of recruitment and minimum qualification, etc.- The Department of Karnataka Minor Irrigation Services shall consist of the categories of posts and scale of pay as specified in column (2) of the schedule below, their number, method of recruitment and minimum qualifications, shall be as specified in the corresponding entries in columns (3), (4), (5) and (6) thereof.

4. Amendment of the Karnataka Water Resources Services (Recruitment) Rules, 2014.- On and from the date of Commencement of these rules, the posts mentioned in rule 3 of these rules, which are transferred from the Karnataka Water Resources Services shall be omitted from the Karnataka Water Resources Services (Recruitment) Rules, 2014 and in their cadre strength notifications.

5. Savings.- Notwithstanding anything contained in these rules action already initiated if any for recruitment or appointment of any of the categories of posts in accordance with the Government order, before commencement of these rules, shall be saved as if they are made under these rules.

**By order and in the name
of Governor of Karnataka**


(PAMPANAGOUDA MELSEEME)
Joint Secretary to Government,
Minor Irrigation and Ground
Water Development Department.

SCHEDULE-I
(See rule-3)

Sl. No.	Category of post and scale of pay	Number of posts			Method of recruitment	Minimum qualification
		Permanent	Temporary	Deputation		
	2	3	4	5	6	7
1	Chief Engineer (Rs.144700-197200)	01	01	01	By promotion by selection from the cadre of Superintending Engineer.	Must have put in a service of not less than two years in the cadre of Superintending Engineer.
2	Superintending Engineer (Rs.118700-175200)	00	05	-	By promotion from the cadre of Executive Engineer.	Must have put in a service of not less than three years in the cadre of Executive Engineer.
3	Joint Director (Statistics) (Rs. 118700-175200)	00	01	-	By deputation of an officer in the equivalent cadre from the Department of Economics and Statistics.	
4	Executive Engineer (Rs.107500-167200)	00	21	01	By promotion from the cadre of Assistant Executive Engineer/ Technical Assistant Division-I.	Must have put in a service of not less than three years in the cadre of Assistant Executive Engineer / Technical Assistant Division-I.

5	Assistant Executive Engineer Division-I /Technical Assistant Division-I (Rs.83700-155200)	05	69	04	(1) Seventy percent by promotion from the cadre of Assistant Engineer Division-I; (2) Twenty percent by direct recruitment in accordance with the scheme of examination specified in Schedule-II; and (3) Ten percent by direct recruitment among in service officials not below the rank of group-C belonging to the Department of Minor Irrigation who possess the qualifications prescribed for direct recruitment in accordance with the scheme of examination specified in Schedule-II.	For promotion:- (1) Must be a holder of bachelor's degree in Civil or Mechanical Engineering or must possess equivalent qualification from an university established by law; and (2) Must have put in a service of not less than five years in the cadre of Assistant Engineer. Provided that, if officers who have put in a service of five years are not available, then officers who have put in a service of not less than three years may be considered for promotion. For direct recruitment. - Must be a holder of bachelor's degree in Civil or Mechanical Engineering or must possess equivalent qualification from an university established by law.
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					For direct recruitment of in service officials:- Must be holder of a bachelor's degree in civil or mechanical engineering or must possess equivalent qualification from an university established by law or a certificate of Diploma from the Institute of Engineers that he has passed Parts A and B of the Associate Membership Examination of Institute of Engineers or possess a qualification recognized by the Government as equivalent to such Degree/Certificate. Note: Notwithstanding anything contained in the Karnataka Civil Services (General Recruitment) Rules, 1977, in-service Assistant Engineers and Junior Engineers who have put in a service of not less than five years and whose probationary period has been declared may be considered irrespective of their upper age limit.
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6	Assistant Executive Engineer Division-II /Technical Assistant Division-II (Rs. 83700-155200)	1	17	-	By promotion from the cadre of Assistant Engineer-Division-II	Must have put in a service of not less than five years in the cadre of Assistant Engineer Division-II. Provided that, if officials who have put in a service of five years are not available, then officers who have put in a service of not less than three years may be considered for promotion
7	Accounts Officer (Rs. 83700-155200)	01	01	-	By deputation of an officer in the equivalent cadre from the Karnataka State Audit and Accounts Department.	
8	Assistant Engineer Division-I (Rs.69250-134200)	13	265	05	(1) Seventy percent by direct recruitment in accordance with the Scheme of examination specified in schedule-II; (2) Twenty percent by promotion from the cadre of Junior Engineer; and	For Direct Recruitment. - Must be holder of a bachelor's degree in civil or mechanical engineering as per the requirement as the case may be or must possess equivalent qualification from an university established by law or a certificate of Diploma from the Institute of Engineers that he has passed Parts A and B of

					(3) Ten percent by direct recruitment among in-service Group-C officials belonging to the Karnataka Minor Irrigation Department in accordance with the scheme of examination specified in Schedule-II: Provided that if no suitable official is available for in-service direct recruitment, then by direct recruitment with the scheme of examination specified in Schedule-II.	the Associate Membership Examination of Institute of Engineers or possess a qualification recognized by the Government as equivalent to such Degree/Certificate. For promotion from the cadre of Junior Engineer.- (1) Must be holder of a bachelor's degree in civil or mechanical engineering or must possess equivalent qualification from an university established by law or a certificate of Diploma from the Institute of Engineers that he has passed Parts A and B of the Associate Membership Examination of Institute of Engineers or possess a qualification recognized by the Government as equivalent to such Degree/Certificate; and (2) Must have put in a service of not less than five years in cadre of Junior Engineer.
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Provided that, if officials who have put in a service of five years are not available, then officials who have put in a service of not less than three years may be considered for promotion.

Note: The irrevocable option shall be obtained from Junior Engineer before such promotion within the time stipulated by the Government.

For in-service direct recruitment.-

(1) Must be holder of a bachelor's degree in civil or mechanical engineering or must possess equivalent qualification from an university established by law or a certificate of Diploma from the Institute of Engineers that he has passed Parts A and B of the Associate Membership Examination of Institute of Engineers or possess a qualification recognized by the Government as

						equivalent to such Degree/Certificate.
9	Assistant Engineer Division-II (Rs. 69250-134200)	3	66	-	By promotion from the cadre of Junior Engineer.	(2) The Group-C officials (except Junior Engineer) must have put in a service of not less than five years in respective cadres. Note: The irrevocable option shall be obtained from Junior Engineer and Group-C officials before such direct recruitment appointment. Must have put in a service of not less than five years in the cadre of Junior Engineer. Provided that, if officials who have put in a service of five years are not available, then officials who have put in a service of not less than three years may be considered for promotion.
10	Assistant Administrative Officer (Rs. 65950-124900)	01	04	-	By promotion from the cadre of Superintendent.	Must have put in a service of not less than five years in the cadre of Superintendent. Provided that, if officials who have put in a service of five years are not

						available, then officers who have put in a service of not less than three years may be considered for promotion.
11	Accounts Superintendent (KSAAD) (Rs. 65950-124900)	01	08	-	By deputation of an official in the equivalent cadre from the Karnataka State Audit and Accounts Department	
12	Accounts Superintendent (MID) (Rs. 61300-112900)	00	10	-	(1) Ninety percent by promotion from the cadre of First Division Assistant / Stenographer/First Division Accounts Assistant in the ratio of 5:2:2 respectively; and (2) Ten percent by transfer from the cadre of Superintendent. Note: First Division Assistant, Stenographer or First Division Accounts Assistant shall exercise an irrevocable option at the time of promotion to this post.	For promotion: (1) Must have put in a service of not less than five years in the cadre of First Division Assistant/ Stenographer/ First Division Accounts Assistant; and (2) Must have passed SAS part-I, II and III examinations.

13	Superintendent (Rs.61300-112900)	03	22	-	By promotion from the cadre of First Division Assistant and Stenographers in the ratio of 8:1, every 9th vacancy shall be filled up by promotion from the cadre of Stenographer.	Must have put in a service of not less than five years in the cadre of First Division Assistant or Stenographers:
					Note: Stenographers Must have served for a period of not less than one year in the cadre of First Division Assistant on the basis of seniority cum merit.	Provided that, if officials who have put in a service of five years are not available, then officials who have put in a service of not less than three years may be considered for promotion
14	Junior Engineer (Rs 54175-99400)	00	195	-	(1) Eighty percent by direct recruitment in accordance with the Karnataka Civil Services (Direct Recruitment) (General) Rules, 2021; and (2) Twenty percent by direct recruitment among in-service Group-C officials belonging to the Karnataka Minor Irrigation Department in	For Direct Recruitment.- Must be holder of a Diploma in Civil or Mechanical Engineering from a recognized polytechnic in the Karnataka or possess equivalent qualification from University or Institution established by Law. For in-service direct recruitment.- (1) Must possess the qualification prescribed for direct recruitment; and

					accordance with the Karnataka Civil Services (Direct Recruitment) (General) Rules, 2021.	(2) Must have put in a service of not less than five years in the respective Group-C cadres: Provided that, if officials who have put in a service of five years are not available, then officials who have put in a service of not less than three years may be considered for in-service direct recruitment. Note: Notwithstanding anything contained in the Karnataka Civil Services (General Recruitment) Rules, 1977, in-service Group-C officials who have put in a service of not less than five years or three years and whose probationary period has been declared may be considered irrespective of their upper age limit.
15	Assistant Statistical Officer (Rs 54175-99400)	0	6	-	By deputation of an official in the cadre the of Department Economics and Statistics.	

16	Statistical Inspector (Rs. 44425-83700)	0	7	-	By deputation of an official in the equivalent cadre from the Department of Economics and Statistics.	
17	Draftsman (Rs. 44425-83700)	0	8	-	The Posts shall stand abolished after the existing incumbents retire from service or transferred to any other cadre or promoted to the higher cadre.	
18	First Division Assistant (Rs. 44425-83700)	10	105	-	(1) Fifty Percent by direct recruitment in accordance with the Karnataka Civil Services (Recruitment to Ministerial Posts) Rules, 1978; and (2) Fifty percent by promotion from the cadre of Second Division Assistant. Note: A Stenographer shall be posted to work as First Division Assistant for a period of one year on the basis of seniority cum merit.	For Direct Recruitment - In accordance with the Karnataka Civil Services (Recruitment to Ministerial Posts) Rules, 1978. For Promotion. - Must have put in service of not less than five years in the cadre of Second Division Assistant:

19	First Division Accounts Assistant (Rs 44425-83700)	01	39	-	(1) Fifty percent by deputation of an official in an equivalent cadre from the Karnataka State Audit and Accounts Department; (2) Twenty percent by transfer from the cadre of First Division Assistant on the basis of seniority and willingness by exercising an irrevocable option to work as First Division Accounts Assistant; and (3) Thirty percent by promotion from the cadre of Second Division Assistant and Second Division Accounts Assistant on the basis of Combined Seniority; Note-1: The Second Division Assistant shall exercise an irrevocable option at the time of consideration for transfer.	For Transfer - (1) Must have passed SAS Departmental Examination or Local Laws Commercial Book Keeping Departmental Examination; and (2) Must have put in a service of not less than two years in the cadre of First Division Assistant; For Promotion. - (1) Must have put in a service of not less than three years in the cadre of Second Division Assistant / Second Division Accounts Assistant; and (2) Must have passed SAS examination or Local Laws Commercial Book Keeping Departmental Examination;
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20	Stenographer (Kannada / English) (Rs 44425-83700)	03	21	-	(1) Fifty percent by direct recruitment in accordance with the Karnataka Civil Services (Recruitment to the posts of Stenographers and Data Entry Assistants) Rules, 1983; and (2) Fifty percent by promotion from the cadre of Data Entry Assistant. Note: Notwithstanding anything contained in the Karnataka Civil Services (Recruitment to the posts of Stenographers and Data Entry Assistants) Rules, 1983, for recruitment of English Stenographers shall have obtained exemption from the said rules.	For direct recruitment.- Must have qualifications in accordance with the Karnataka Civil Services (Recruitment to the posts of Stenographers and Data Entry Assistants) Rules, 1983. For promotion.- (1) Must have qualifications in accordance with the Karnataka Civil Services (Recruitment to the posts of Stenographers and Data Entry Assistants) Rules, 1983; and (2) Must have put in a service of not less than three years in the cadre of Data Entry Assistant.
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21	Senior Data Entry Assistant (Rs 44425-83700)	20% of posts in data Entry Assistant cadre	By Promotion from the cadre of Data Entry Assistant.	Must have put in a service of not less than ten years in the cadre of Data Entry Assistant.
22	First Division Store Keeper (Rs 44425-83700)	0 1 -	The Posts shall stand abolished after the existing incumbents retire from service or transferred to any other cadre or promoted to the higher cadre.	
23	First Division Surveyor (Rs 44425-83700)	0 51 -	By deputation of an official in the equivalent cadre from the Department of Survey and Settlement and Land Records.	
24	Tracer (Rs 37500-76100)	0 12 -	The Posts shall stand abolished after the existing incumbents retire from service or transferred to any other cadre or promoted to the higher cadre.	
25	Blue Printer (Rs 34100-67600)	0 3 -	The Posts shall stand abolished after the existing incumbents retire from service or transferred to any other cadre or promoted to the higher cadre.	

26	Second Division Assistant (Rs 34100-67600)	10	180	-	(1) Sixty seven percent by direct recruitment in accordance with the Karnataka State Civil Services (Recruitment to the Ministerial posts) Rules, 1978; and (2) Thirty three percent by transfer from the cadre of Driver: Provided that, if no suitable Driver is available for transfer, then by promotion from the cadre of Group-D on the basis of combined seniority.	For direct recruitment.- In accordance with the Karnataka State Civil Services (Recruitment to the Ministerial posts) Rules, 1978. For transfer.- In accordance with the Karnataka State Civil Services (Recruitment to the Ministerial posts) Rules, 1978. For promotion.- In accordance with the Karnataka State Civil Services (Recruitment to Ministerial posts) Rules, 1978.
27	Second Division Accounts Assistant (Rs 34100-67600)	00	47	-	(1) Fifty percent by deputation of an official in the equivalent cadre from the Karnataka State Audit and Accounts Department; and (2) Fifty percent by transfer from the cadre of Second Division Assistant of Minor Irrigation Department on the	For Transfer.- Must have put in a service of not less than five years in the cadre of Second Division Assistant: Provided that, if officials who have put in a service of not less than five years of service are not available then officials who have put in not less

					basis of seniority and willingness and after exercise of an irrevocable option to work as Second Division Accounts Assistant: Provided that, if officials who have put in a service of not less than three years in the cadre of Second Division Assistant are not available, then by deputation of an official in the equivalent cadre from the Karnataka State Audit and Accounts Department.	than three years of service may be considered for transfer.
28	Data Entry Assistant (Rs 34100-67600)	08	124	-	By Direct recruitment in accordance with the Karnataka Civil Services (Recruitment to the posts of Stenographers and Data Entry Assistants) Rules, 1983. Note: The Cader strength of this post	In accordance with the Karnataka Civil Services (Recruitment to the posts of Stenographers and Data Entry Assistants) Rules, 1983.

					shall be subject to promotion of the post of Senior Data Entry Assistant.	
29	Second Division Surveyor (Rs 34100-67600)	00	01	-	By deputation of an official in the equivalent cadre from the Department of Survey settlement and Land Records.	
30	Driver /DRR Driver (Rs 34100-67600)	01	78	-	By promotion from the cadre of Group 'D' on the basis of combined seniority: Provided that, if no suitable official is available for promotion, then by direct recruitment in accordance with the Karnataka Civil Services (Direct Recruitment) (General) Rules, 2021.	For Promotion. - (1) Must have passed SSLC or possess equivalent qualification with a subject of Kannada; (2) Must possess first aid certificate, current heavy or light motor vehicle driving license from the concerned Authority; and (3) Must have put in a service of not less than five years in the cadre of Group 'D'. Provided that, if no officials who have put in a service of not less than five years are available, then officials who have put in a service of not less than three years may be considered for promotion;

						For direct recruitment.- (1) Must have passed SSLC or possess equivalent qualification with a subject of Kannada; and (2) Must possess first aid certificate, current heavy or light motor vehicle driving license from the concerned Authority.
31	Attender/Jamedar/ Dafedhar (Rs 29600-52800)	02	21	-	By promotion from the cadre of Peon /Watchman / Cycle orderly / Sweeper on the basis of combined seniority.	Must have put in a service of not less than five years in the respective cadres: Provided that, if no officials who have put in a service of not less than five years are available, then officials who have put in a service of not less than three years may be considered for promotion.
32	Meti-cum- Cook (Rs 29600-52800)	00	01	-	By direct recruitment in accordance with the Karnataka Civil Service (Direct Recruitment) Rules, (General) Rules, 2021	(1) Must have passed SSLC or possess equivalent qualification with a subject of Kannada; and (2) Must possess five years experience in cooking in any vegetarian and non- vegetarian hotel or restaurant.

33	Peon/Watchman/Cycle orderly/Sweeper (Rs 27000-46675)	14	299	-	By recruitment in accordance with the Karnataka Civil Service Recruitment (General) Rules, 2021.	direct in Civil Service Recruitment Rules,	Must have passed SSLC or possess equivalent qualification with a subject of Kannada.
34	Municipal Staff (Rs 27000-46675)	00	01	-	By recruitment in accordance with the Karnataka Civil Service Recruitment (General) Rules, 2021	direct in Civil Service Recruitment Rules,	Must have passed SSLC or possess equivalent qualification with a subject of Kannada.

By order and in the name
of Governor of Karnataka

(PAMPANAGOUDA MELSEME)
Joint Secretary to Government,
Minor Irrigation and Ground
Water Development Department.

SCHEDULE-II

(see rule 3)

SCHEME OF EXAMINATION

1. Title and application.-(1) This scheme may be called the Karnataka Minor Irrigation Department Services (Recruitment of Assistant Executive Engineer Division-I / Technical Assistant Division-I and Assistant Engineer Division-I by competitive examination) Scheme.

(2) The provision of this scheme shall apply to the direct recruitment of the category of posts of Assistant Executive Engineer Division-I / Technical Assistant Division-I and Assistant Engineer Division-I in the Karnataka Minor Irrigation Department Services.

2. Definitions.-(1) In this scheme, unless the context otherwise requires:-

- (a) 'Annexure' means Annexure to the Scheme of Examination appended to these rules; and
- (b) 'Commission' means the Karnataka Public Service Commission.

(2) Words and expressions used but not defined in this scheme shall have the same meaning as in the Karnataka Civil Services (General Recruitment) Rules, 1977.

3. Mode of recruitment.- Recruitment under this scheme shall be made on the basis of merit secured in the competitive examination and personality test conducted by the Commission. The competitive examination shall be held on such dates and at such places as may be notified by the Commission from time to time.

4. Age limit.- Candidates must have attained the age of 21 years and not attained the maximum age as prescribed in the Karnataka Civil Services (General Recruitment) Rules, 1977 as on the date specified for receipt of application:

Provided that, notwithstanding anything contained in the Karnataka Civil Services (General Recruitment) Rules, 1977, in-service Assistant Engineers and Junior Engineers who have put in a service of not less than five years and whose probationary period has been declared may be considered irrespective of their upper age limit.

5. Qualification.-Candidates must be holder of a Degree in Civil Engineering or Mechanical Engineering from an University established by Law in India or holder of a Diploma Certificate from the Institution of Engineers (India) that he has passed Part A and B of the Associate Membership Examination of the Institution of Engineers (India).

6. Conduct of Competitive Examination.- (1) The Commission shall invite application from eligible candidates by advertising the vacancies in the Karnataka Gazette specifying the conditions of eligibility, provisional number of vacancies to be filled and their classification according to the reservation policy of the State Government, for admission to the competitive examination, in such form as it may determine and before such date and on payment of such fees as may be specified by the commission. An abstract of such advertisement shall also be published in more than one widely circulated news paper in the Kannada Language and such other media of publication as it may deem fit. The Commission shall take all necessary steps for all arrangements relating to the conduct of competitive examination.

(2) No person shall be admitted to the competitive examination unless he obtains a certificate of admission from the Commission. The decision of the Commission as to the eligibility or otherwise of a person for admission to the competitive examination shall be final.

7. Syllabus of examination.- (1) The competitive examination shall consists of :-

- (i) a written examination in Kannada, English, General Knowledge and optional subjects specified in the Annexure ; and
- (ii) Personality test.

(2) The maximum marks for personality test shall not exceed 5% of the competitive exam marks.

8. Candidates to be called for personality test.- Taking into consideration of the merit in the written examination, the candidates shall be required to appear before the Commission for the Personality Test in the ratio of 1 : 5 (vacancy : candidate) in each category of reservation.

9. List of selected candidates.- The Commission shall prepare a final selection list of candidates eligible for appointment in the order of merit, on the basis of the aggregate of the percentage of the total marks secured in the written examination and the marks secured in the personality test and taking into consideration the orders in force relating to the reservation of appointments for the Scheduled Caste, Scheduled Tribe, Other Backward Classes and others.

10. Additional select list of candidates:- (1) The Commission shall prepare an additional list of candidates in the order of merit as specified in clause 9, who have appeared for personality test but not included in the final selection list. The number of candidates included in the additional select list shall be equal to ten percent of the number of vacancies notified in each category under clause 6.

(2) The candidates in the additional list may be appointed in the post, not exceeding the extent of unfilled vacancies in the final selection list.

11. Appointment of Candidates:- (1) Candidates whose names are included in the list prepared by the selecting authority under clause 9 may be appointed by the appointing authority, in the order in which their names appear in the list after satisfying itself about the suitability in all respect of each candidates to hold the post of Assistant Executive Engineer Division-I /Technical Assistant Division-I or Assistant Engineer Division-I after such enquiry as may be considered necessary.

(2) Candidates whose names are included in the additional list prepared under clause 10 may also be appointed by the appointing authority in unfilled vacancies arising due to non reporting of Candidates included in the final select list in the particular cadre or post in which their names are found in the additional select list, after such enquiry as may be considered necessary.

(3) The inclusion of name of the candidate in the final selection list or additional selection list published under clause 9 and 10 shall not confer any right of appointment to the candidate.

12. Period of operation of the select list and additional list:- A list of selected candidates prepared under clause 9 and 10 shall be valid under the provisions of rule 11 of the Karnataka Civil Services (Direct Recruitment) (General) Rules, 2021.

13. Application of the Karnataka Civil Services (General Recruitment) Rules, 1977:- The provisions of the Karnataka Civil Services (General Recruitment) Rules, 1977 shall apply in respect of matters for which no provision is made in this scheme.

ANNEXURE

(see item (a) of sub-clause (1) of clause 2 and item (i) of sub-clause (1) of clause 7 of SCHEDULE-II)

SYLLABUS

Written Examination:-

(1) All question papers, except Kannada language paper, must be answered in English in their own hand.

(1) **English:-** Maximum marks - 100. Duration of the paper 1 hour 30 minutes .

(2) **Kannada:-** Maximum marks - 100. Duration of the paper 1 hour 30 minutes .

Note-1: The marks obtained in compulsory papers (English and Kannada) shall be of qualifying nature. For qualifying in these papers, a minimum of thirty percent in each paper and thirty five percent aggregate is prescribed. The marks obtained in these two papers shall not be considered for determining the merit of selection. Candidates who do not secure the prescribed marks in the qualification papers, namely, Kannada and English shall not be eligible for personality test and selection.

(2) **General Knowledge :-** Maximum marks - 100. Duration of the paper 1 hour 30 minutes .

(3) **Optional Subjects :-** A candidate may select any two of the subjects specified in Part-A and any two of the subjects specified in Part B (questions in the nature of ...XX..).

Provided that, a candidate who has selected the subject of Roads and Bridges or Public Health Engineering Part-A shall not be eligible to select the subject of Highway Engineering or Public Health Engineering, as the case may be in Part-B.

(2) Maximum marks for each subject 100. Duration of each of the papers is 3 hours.

(3) The Standard and Syllabus of the Examination shall be as fixed in the B.E. degree or AMIE Examination.

Part-A		Part-B	
(i)	Irrigation	(i)	Advanced structure
(ii)	Roads and Bridges	(ii)	Pre-stressed Concrete
(iii)	Public Health Engineering	(iii)	Advanced Soil Mechanics
(iv)	Construction Technology and Management	(iv)	Public Health Engineering

(v) Highway Engineering
(vi) Hydraulics and Dams
(vii) Hydrology
(viii) Theory of Elasticity
(ix) Basic Electronics

Note: The question papers of General Knowledge and Optional Subjects shall be set in Kannada and English.

The Syllabi for papers on English, Kannada and General Knowledge and of the optional subjects are as follows:-

SYLLABI

English:- English paper shall be of S.S.L.C. level and comprises of comprehension of given passage, precise writing, usage, vocabulary, short essay and communication skills. For short essay a choice of subjects may be given. Candidates are expected to keep close to the subject of the essay; to arrange their ideas in orderly fashion and to write concisely. Passages shall be set for summary or precise. Credit shall be given for effective and exact expression.

Kannada:- Kannada paper shall be of S.S.L.C. level and comprises of comprehension of given passage, precise writing, usage, vocabulary, short essay and translation from English to Kannada. For short essay a choice of subjects shall be given. Candidates are expected to keep close to the subject of the essay; to arrange their ideas in orderly fashion and to write concisely. Passages shall be set for summary or precise. Credit shall be given for effective and exact expression.

General knowledge:- General knowledge including current events and of such matters of every day observation and experience in their scientific aspects as may be expected of an educated person who has not made a special study of any scientific subjects. The papers may also include questions of Indian History and Geography of a nature which candidates may be able to answer without special study.

OPTINAL SUBJECTS (PART A)

I. Irrigation:-

1. General:- Terminology, History of Irrigation, Irrigation practice in India, Factors governing feasibility of Irrigation development.
2. Irrigation Systems:- Well Irrigation, Lift Irrigation., Flow irrigation by canals, inundation Irrigation and Delta Irrigation of South India, Sprinkle Irrigation, Comparative study of the various systems.
3. Irrigation Projects:- Investigations and Planning of Irrigation Projects, Productive and protective works, Details of projects surveys. Location of sites for reservoir, canal alignment preparation of plans, estimates and reports for irrigation works, Estimation of view for the economic design of storage reservoirs, Multipurpose Projects.
4. Economic and Administrative aspects of Irrigation Schemes:- Socio economic aspect, Organization and administration of projects, Legal aspects, Cost benefit studies, Classification and use of Project land, Water resources, water requirements, Ground water surveys.
5. Hydrological studies for an irrigation scheme:- Catchments characteristics, Run off cycle, Rainfall losses percolation, evaporation, transpiration evapotranspiration and consumptive use, Flood frequency studies, Flood hydrographs, Unit hydrographs, Synthetic unit graphs.
6. Amount and frequency of irrigation watering Quality of irrigation water, Salinity and alkalinity engineering aspects of land drainage. Soil investigations Structure and Fertility, Soil moisture constants, Infiltration measurement, Laws of solid water movement.
7. Reservoirs/ Different kinds of reservoirs, Selection of sites. Flood absorptive capacity of reservoirs and its importance, Isolated tanks. Tanks in series, Tanks fed by feeder channels from rivers or streams, Design, Construction, maintenance and repairs of earthen bunds. Fillies up breaches, Design of surplus works, Tank sluices, Drainage arrangements. Elements of design, construction and maintenance of masonry dams. Drainage galleries, Various forms of surplus works for flood water disposal, Head sluices and securing sluices in dams.

8. Anicuts or river weirs:- Types of river weirs, Weirs on permeable strata. Design and construction of river regulators, Securing and heads sluices. Crest shelters, Flood Banks and protective works.
9. Distribution System:- Classification of channels, methods of alignment design of canal sections, capacities and velocities in canals, in deltaic and non deltaic country. Location and design of distributor system, Design of cross drainage works, Silt and Scour. Kennedy's theory, silt deposits in reservoirs, tanks and canals. Methods of arrest silt accumulation Soil erosion and its cause, prevention and control Catchments treatment.
10. River Training:- Regime of river Molly's Theory: Flood Bank and Levels. Navigation aspects; Model studies of river. Ball's sours and Groynes.
11. Anti-malaria engineering works and their importance.
12. Lift Irrigation- Design of Jack well, Raising main, Pumping machinery, Computation of Design discharge:
13. Retaining wall- Type of retaining wall, Gravity, cantilever, counter fort type,
14. Design of permeable foundation, adoption of Bligh's theory and Khosla's theory in the design of permeable foundation.

II. ROADS AND BRIDGES

Roads

1. **General** - Importance of highway development, Highway economics and Highway financing and Highway systems.
2. **Surveys** - Highway planning surveys location surveys and soil surveys, Presentation of data in terms of charts and tables (urban and rural areas) Highway plans and specification.
3. **Highway Design** - Geometric design - Rights of way, Highway capacity, design speeds, cross section sight distances, grade line, alignments, channelization, inter sections and inter changes, grade separators, rotary inter sections etc.

4. **Highway Construction** - Urban and Rural areas, economic principles: drainage of road way and road side and subsoil drainage and hydrology, hydrology, hydraulically design principles, drainage structures.
5. **Highway Construction** - Site Clearance, different types of road rollers, earth moving equipment and construction equipment Modern highway practices of construction, Specifications for highway materials and construction.
6. **Highway maintenance** - Surface maintenance, shoulder and approach maintenance, snow and ice control, bridge and culvert maintenance etc. Traffic service and maintenance cost.

Bridges

1. ATE for design, Hydrologic investigations of the watershed area, Flood estimation for bridge water ways by Emperical formulas. Rational method, Probability method and Unit Graph method.
2. Practical rules of design and economic Span Types of Bridges such as Deck and through bridges, Bowstring suspension and Moveable span bridges.
3. Design of floor system and different types of bearing specifications for Railway and Highway bridges.

III. Public Health engineering:-

Sanitary Engineering

1. **Drainage and Sewerage** :- Objects of Scheme-surface drainage, underground sewerage systems and the general arrangement of the several works, principles of design, date to be collected, allowances for inclusions of the foul part of the rainfall, size velocity and gradients of sewers, Selection of suitable system and evolution of a scheme. Design of the several necessary works of a sewer line.
2. **House Drainage** - Water closets, taps, soil and other pipes sinks, inventories, urinals and baths.
3. **The sewer line** - Laying pointing and testing of sewer, Construction of manholes, flushing tanks. Over flows junctions, catch-basin inverted siphons and public conveniences. Maintenance of sewer lines.

4. **Pumping Sewerage** - Treatment of sewage before disposal objects, Characteristics of sewage, Modern method of treatment including diffused air and other processes. Collection and disposal of solid refuse, Screening the pulverizing various methods of composting - utilization and disposal.
5. **Elements of Public Health Engineers** - Latrines, Drainage refuse collection and disposal, plumbing, food and milk sanitation, restaurants, market places, slaughter houses, cemeteries, parks hospitals, playgrounds and cinema halls.
6. **Elements of town Planning** - Housing Zoning, Lighting and Ventilation factors, Dust control, Developing environment beautifying town, malaria control, fly and rodent control rural sanitation, fairs and festivals and disinfection.

Water Supply

7. **Value and Importance of water Supply:-** Domestic, Commercial and public requirement-allowance for prospective population-variation in demand.
8. **Quantity of Water** - Estimating the quantity of water for a town or city, considering various modifying influences affecting consumption per capita, Estimation the quantity of water available from a source (surface water from rainfall and catchments and underground water by pumping and other methods). Sources of Water-impounded, perennial streams, artesian wells, shallow wells, deep well and infiltration galleries.
9. **Quality of Water** - Pollution contamination and infection waterborne diseases, sanitary survey, conservation of catchments and basin. Water analysis physical bacterial, chemical and microscopic, Protection of water supplies - Control of algae, river pollution and its control, Purity of water, PH vale.
10. **Construction of Water works** - General principles of economies, construction and arrangement of the several types of water intake works for different sources.
11. **Purification of water** - Study of impurities (Suspended, dissolved and colloidal) plain sedimentation, sedimentation with coagulation, types of coagulants and their uses, slow and rapid filtration, pressure and other filters modern methods of sterilization and aeration-purification of water for industrial use, different methods.

12. **Pumping and Distribution System** - System of supply, construction of pipelines and conduits, pumping machinery services reservoirs, beaching reservoirs, stand pipes and water towers, Distribution system (grid iron, dead-end and ring system) Appurtenances such as valves, hydrant, rate controllers and meters, expansion joints, manholes, Principles to be followed in the design of distributions system, maintenance and repairs, detection of leakages prevention of waste.

IV.

Construction Technology and Management:-

1. Quantitative methods in construction
2. Construction, planning and control
3. Advances in construction materials
4. Construction in disaster prone areas
5. Rehabilitation of structures
6. Construction economics and finance
7. Construction management and computer application
8. Mechanization in Construction
9. State laws governing construction.

OPTIONAL SUBJECTS (PART-B)

I. Advance Structure:-

1. Compound stressed and strains-Mohr's Circle and its application, Compound strains, Principal strains, graphical solutions.
2. Effects of temperature on Mechanical properties of materials.
3. Theories of elastic failure.
4. Strain Energy Methods-Deflection of simple trusses strain energy methods applied to simple beams and trusses.
5. Castiglione's Theorem I and its application to simple cases
6. Analysis of continuous beams, propped cantilevers, fixed beams, slope-deflection equations and moment distribution.
7. Three hinged arches. Lines of resistance through hinged arches under dead live loads. Influence lines for horizontal thrust and bending moment Reaction locus.

8. Rolling loads-curves of maximum bending moments and maximum shear forces, the enveloping parabola and determination of equivalent uniformly distributed load under different system of loading.
9. Influence lines of reaction, shear force, bending moment and deflection. Reversal of stress under line load. Willet-Mohr's diagram.
10. Determination of stressed in the members of the frames due to falling loads-Influence lines.

II. Prestressed Concrete:-

1. Technology of high strength concrete and steel bars and wires, Principles of design, Review of the various design methods. Continuous beams-elastic and ultimate design. Flat slabs.
2. Indeterminate prestressed concrete structure-Prestressed concrete lon-span bridges design.
3. Theories-bond, creep and other related phenomena.
4. Stress analysis of the anchorage zone.

III. Advance Soil Mechanics:-

1. Definition of soil components – Soil identification and classification, Solid-water-air phases in soils and fundamental relationships. Soil structure and significance of oil structure. Physical-chemical approach.
2. Flow of water through soil-Concept of Darcy's Co-efficient. Permeability and its measurement. Capillary Phenomena, Shrinkage and swelling of soils. Frost action. Drainage.
3. Consistency and plasticity of soils-requirements for engineering classification-compaction of soils and fundamentals.
4. Compressibility of soils-contact pressure and sub-grade relation. Strength theories for granular and cohesive soils and related tests. Application practical problems.
5. Active and passive earth pressure-effects of surcharge. Theories of earth pressure in tunneling and shaft lining. Bearing capacity approximate theories of bearing capacity. Design considerations, evaluation of design procedures. Building codes-Load tests. Settlement analysis.

6. Land slides and related phenomena. Stability of slopes and cuts, Bulk heads and sheet-piles, Methods of stability Analysis and selection of shear parameters, Ground water flow problems, Basic differential equations, Mechanics of piping effects of cut-offs, filters and beams.

IV Highway Engineering:-

1. **General** - Importance of highway development, Highway economics and Highway financing and Highway systems.
2. **Surveys** - Highway planning surveys location surveys and soil surveys, Presentation of data in terms of charts and tables (urban and rural areas) Highway plans and specification.
3. **Highway Design** - Geometric design - Rights of way, Highway capacity, design speeds, cross section sight distances, grade line, alignments, channelization, inter sections etc.
4. **Highway Drainage** - Urban and Rural areas, economic principles: drainage of road way and road side and subsoil drainage and hydrology, hydrology, hydraulically design principles, drainage structures.
5. **Highway Construction** - Site Clearance, different types of road rollers, earth moving equipment and construction equipment Modern highway practices of construction, Specifications for highway materials and construction.
6. **Highway Maintenance** - Surface maintenance, shoulder and approach maintenance, snow and ice control, bridge and culvert maintenance etc. Traffic service and maintenance cost.

V Hydraulics and Dams :-

1. General equation of motion of fluids, potential flow conformal mapping applied to hydraulic structures, laminar and turbulent motion in conduits, boundary layer phenomena, turbulent mixing and flow past flat plates. Circular cylinders and spheres.
2. Steady and unsteady flow in open channels backwater curves in natural and artificial channels, hydraulic jump, surges and waves, stranding waves in super-critical flow. Transportation of sediments.
3. Details design of earthen bunds, Stability-Investigation of Projects, Special features of designs of other hydraulic-structures.
4. Details design of masonry dams (various methods).

i.Hydrology :-

1. Hydrologic cycle, Basic data, sources of Hydraulic data. Hydrologic failures.
2. Hydrographs, ground water and soil moisture Hydrologic analysis, Run -off and factors affecting run off, Stream flow records.
3. Precipitation: types, measurement of rainfall, Precipitation records storm frequency and mean annual rain fall.
4. Water losses: Evaporation and Percolation losses. Transpiration losses/ Soli Evaporation, Water-shed leakage.
5. Arid, semi-Arid regions (with particular reference to india)
6. Snow and Floods – Distribution, function and structure methods of control, cause, distribution and control of floods.

Vii . Theory of Elasticity :-

Components of stress and strain. Hooker's law, Differential equation of equations. Compatibility of equations. Stress function. Two dimensional problems in rectangular coordinates. St.Venant's principle. Bending of a cantilever loaded at one end. Deflection of beams. Two dimensional problems in polar Co-ordinates.

Viii . Basic Electronics :-

1. High Vacuum Tubes – Fundamental properties of election tubes, thermionic emission and other types of emissions. Diode its characteristics, Diode its characteristics. Diode as a Rectifies, Space charge. Action of the Grid. The triode. Tutored and pentode-their characteristics. Beam tubes and Remote cu-off tubes.
2. Power supply system for cathode heating, Anode Power Grid bias supply Rectifier circuits and filters.
3. Vacuum Tubes amplifiers: Triode as an amplifier and its equivalent circuit. Inter stage couplings. Resistance capacitance coupied. Transformer-coupled and impedance-coupled Amplifiers, Frequency Response, Classification of Amplifiers Class-A, Class-B, Class-C, operation. Voltage Amplifiers and power Amplifiers, Efficiencies of power Amplifiers. Push-pull working Negative feed back Amplifier C.C amplifiers Radio Frequency. Voltage and Power Amplifiers Feed and neutralizing Circuits.
4. Vacuum Tubes oscillators and common oscillators.

5. Modulation and Detection: Principles of simple and super heterodyne receives.
6. Electrical discharge through Gas Townsend discharge, Glow discharge, Arc discharge, Characteristics of Phenatrons and Thuratrons Phase Shift, control of
7. Cathode Ray Tube Construction, operation and simple application.
8. Photo-electric cells Principle, Characteristics and simple application
9. Simple Industrial application
 - (a) Motor Control Circuit.
 - (b) Welding Equipment Control Circuit.
 - (c) Hoist Control
 - (d) Glow Tube Voltage Regulator.

Schedule – III

ಭಾಗ-1

ಅಭಿಮತ : ಇಚ್ಛಾಪತ್ರ

FORM OF OPTION ; WILLINGNESS

ವಿಷಯ: ಕರ್ನಾಟಕ ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಗೆ ಹೊಸದಾಗಿ ರೂಪಿಸಿ ಹೊರಡಿಸಿರುವ ವೃಂದ ಮತ್ತು ನೇಮಕಾತಿ ನಿಯಮಗಳಲ್ಲಿ ಅವಕಾಶವಿರುವಂತೆ ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಯಲ್ಲಿ ಶಾಶ್ವತವಾಗಿ ವಿಲೀನಗೊಳ್ಳಲು ನನ್ನ ಅಭಿಮತ : ಇಚ್ಛಾಪತ್ರ (Option: Willingness) ನೀಡುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: ಸರ್ಕಾರದ ಅಧೀನೊಚನೆ ಸಂಖ್ಯೆ: ಸನೀಇ 361 ಎಂಬಎಸ್‌ಯು2023 ದಿನಾಂಕ :

ಮೇಲಿನ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಉಲ್ಲೇಖಿತ ಸರ್ಕಾರದ ಅಧೀನೊಚನೆ ಮೇರೆಗೆ ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಗೆ ಹೊಸದಾಗಿ ರೂಪಿಸಿ ಹೊರಡಿಸಿರುವ ವೃಂದ ಮತ್ತು ನೇಮಕಾತಿ ನಿಯಮಗಳಲ್ಲಿ ಅವಕಾಶವಿರುವಂತೆ ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಯಲ್ಲಿ ಶಾಶ್ವತವಾಗಿ ವಿಲೀನಗೊಳ್ಳಲು ನನ್ನ ಅಭಿಮತ : ಇಚ್ಛಾಪತ್ರ (Option: Willingness) ವನ್ನು ಈ ಮೂಲಕ ಸಲ್ಲಿಸುತ್ತಿದ್ದೇನೆ.

ಅಧಿಕಾರಿ : ನೌಕರರ ಸಹಿ
 ಅಧಿಕಾರಿ : ನೌಕರರ ಹೆಸರು
 ಅಧಿಕಾರಿ : ನೌಕರರ ಪದನಾಮ
 ಕಚೇರಿ ವಿಳಾಸ

Part-2

KGID Policy No:

(First KGID Policy No. To be entered, If KGID Policy No. not available this to be left blank)

A	Name (As entered in service Register if Gazette as in Ag pay slip)	
B	Designation (Post Held)	
C	Seniority No. in the present cadre	
D	Date of Birth	
E	Date of Entry into the service (Initial Appointment after regulation)	
F	Gender	
G	Fathers name	
H	Caste	
I	Sub Caste	
J	Marital Status	
K	Whether Spouse working	
L	If working (Please specify whether state Govt / Central Govt / PSU / etc.,)	
M	Permanent Address	
N	Communication Address (only if different from above)	
O	Office Telephone No. (Compulsary)	
P	Personal Telephone No. (Land line)	
Q	Personal Telephone No. (Mobile)	

Date:

Place:

Employee Signature

Part-3
Mode of Initial Appointment

DWS (Daily Wages Employees)	Date of Entry into the DWS	
	Date of Regularization	
	Post Regularized as	
	Regularization order No. & Date	
W.C (Work Charge Establishment)	Whether working in Sanction post	
	Date from Which working in sanctioned post	
	Date of Entry into the WC	
	Date of Regularization	
L.C (Local Candidate)	Post Regularized as	
	Regularization order No. & Date	
	Whether working in Sanction post	
	Date from Which working in sanctioned post	
Compassionate Ground	Date of Entry into the W.C	
	Date of Regularization	
	Post Regularized as	
	Regularization order No. & Date	
Direct Recruitment	Whether working in Sanction post	
	Date from Which working in sanctioned post	
	Date of Entry into the Service	
	order No. & Date	
Direct Recruitment	Departmental Recruitment Committee	
	HFSC	
	Employment Exchange	
	Appointment Order N. & Date	

Date:
Place:

Employee Signature

Part-4

Mode of Initial Appointment

Sl No	Educational Qualification	Year of Passing	School/College University	Remarks
1	Diploma in Civil Engineering (General			
2	Bachelor of Engineering Civil Engineering			

By order and in the name
of Governor of Karnataka


(PAMPANAGOUDA MELSEEME)
Joint Secretary to Government,
Minor Irrigation and Ground
Water Development Department.