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No.13690/CS(Agri)/A1/AOH/2022  
GOVERNMENT OF PUDUCHERRY  
CHIEF SECRETARIAT(AGRICULTURE)

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Puducherry, dated 18-11-2022

Date and time for  
submission  
of online application  
21.11.2022 (10.00 a.m.)  
to  
20.12.2022 (05.45 p.m.)

**NOTIFICATION**

Applications are invited from the eligible Indian Citizens who are Natives/Residents of Union Territory of Puducherry for the Competitive Examination to be held for Direct Recruitment to the post of **Agricultural Officer (Hydrogeology)** (Group 'B' Non-Gazetted, Non-Ministerial) in the Department of Agriculture and Farmers Welfare, Puducherry as detailed below:-

Name of the post and Level in the Pay Matrix	No. of vacancies	Reservation		
		Vertical		
		UR	OBC	SC
Agricultural Officer (Hydrogeology) Level 6	5	3	1	1

**Abbreviations :**

**UR**-Un-reserved, **OBC**-Other Backward Classes (includes MBC-Most Backward Classes/EBC-Extreme Backward Classes/BCM-Backward Classes Muslim/BT-Backward Tribes), **SC**-Scheduled Caste.

**Note :**

The vacancies notified are existing vacancies. However, Government reserves the right either to enhance or to reduce the number of vacancies notified depending upon the actual requirement at the time of selection and also to cancel the recruitment process. No interim enquiry will be entertained.

**1. Educational qualifications for eligibility:-**

- (i) Masters Degree in Geology or Applied Geology of a recognized University or equivalent.  
(or)  
(ii) Diploma in Geology or Applied Geology from the Indian School of Mines and Applied Geology, Dhanbad.

**Note:** The candidates possessing equivalent degrees shall produce the Equivalency Certificate from the concerned University, at the time of Certificate Verification.

*S. Srinivasan P*

## 2. AGE LIMIT

Between 18 and 30 years of age as on 20/12/2022. Age limit is relaxable in respect of OBC (includes MBC/EBC/BCM/BT), SC, Persons with Benchmark Disabilities, XSM and In-service officials as detailed below :-

Category	Relaxation of Upper Age Limit **
OBC (includes MBC/EBC/BCM/BT)	3 years
SC	5 years
Ex-servicemen (XSM)	Period of military service plus 3 years
Ex-servicemen and Commissioned Officers including ECOs or SSCOs who have rendered at least five years military services and have been released on completion of assignment (including those whose assignment is due to be completed within one year) otherwise than by way of dismissal or discharge on account of misconduct or inefficiency, or on account of physical disability attributable to military service or on invalidment	5 years
Disabled Defence service personnel	3 years
Disabled Defence service personnel - SC	8 years
<b>Persons with Benchmark Disabilities (PwBD)</b> (for Physical requirements & categories of disabilities suitable for this job, refer Part-II of General Instructions to candidates)	10 years (in respect of reserved applicants, over and above the admissible relaxation of 5 years for SC and 3 years for OBC (includes MBC/EBC/BCM/BT))

\*\*Requirement of age for candidates belonging to various categories are given in Part III of this Notification

## 3. NATIVITY / RESIDENCE :

Those who are the native of the Union Territory of Puducherry or who have continuous residence in the Union Territory of Puducherry for the last 5 years immediately preceding the date of notification only are eligible to apply for the post. The applicant can apply without a certificate but ON SELECTION should furnish the fresh Nativity/Residence Certificate issued by the Officer of the Department of Revenue and Disaster Management, Puducherry not below the rank of Deputy Tahsildar at the time of Certificate Verification.

*Sundaram P*

**4. COMMUNITY CERTIFICATE (for OBC & SC Candidates) :**

a) The selected applicants should submit a fresh Community Certificate for SC/OBC obtained in the prescribed form issued by an Officer of the Department of Revenue and Disaster Management not below the rank of Deputy Tahsildar **at the time of certificate verification.**

b) Candidates selected under SC quota should furnish Community Certificate issued under **"The Constitution (Puducherry) Scheduled Castes Order, 1964"** and **"The Constitution (Puducherry) Scheduled Castes Order, 2002"** in respect of **"Puthirai Vannan"**. OBC candidates shall produce Non-Creamy Layer Certificate.

c) Candidates belonging to the communities of OBC U.T. of Puducherry, MBC, EBC, BCM, and BT categories of UT of Puducherry will be considered under the one umbrella of OBC for the purpose of reservation. Hence, the posts earmarked for OBC in this notification applies commonly to all the above communities viz., OBC UT of Puducherry, MBC, EBC, BCM and BT categories of UT of Puducherry.

**5. Document to be produced by candidates claiming age relaxation under Ex-Servicemen/Ex-Servicemen Commissioned Officers & Disabled Defence Service Personnel Category:**

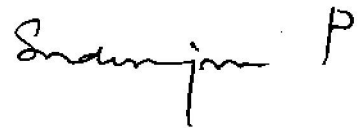
Applicants claiming age relaxation under Ex-servicemen, Ex-Servicemen Commissioned Officers and Disabled Defence Service Personnel category should produce original discharge book/discharge certificate issued by the Competent Authority during their Discharge from Military Service, at the time of certificate verification.

**6. Disability Certificate to be produced by Persons with Benchmark Disability (PwBD):**

The applicants who are Persons with Benchmark Disability (PwBD), on selection should necessarily submit the Medical Certificate issued by District Medical Board, Government of Puducherry at the time of certificate verification. Certificate received from any other authority will not be accepted. The categories of disability suitable for the post are detailed in Part-II of General Instructions to candidates.

**7. MODE OF RECRUITMENT/PATTERN OF EXAMINATION :-**

The vacancies in the above said post will be filled up through a Competitive Examination consists of two papers (Paper - I and Paper -II) as follows:



**Paper I (Forenoon) :**

The question paper will be of Objective type as per the syllabus in Part – IV of 2 hours duration having 100 questions carrying 1 mark for each question.

**Paper II (Afternoon) :**

The question paper will be of objective type with a duration of 2 hours having 100 questions carrying 1 mark for each question from General Mathematics, General Science, General English, Indian History & Geography, Indian Economics, Constitution of India, General Knowledge and Current Affairs.

The Question Paper will be in bilingual (except General English) i.e. in English and in any one of the regional languages namely, Tamil or Telugu or Malayalam. Therefore the candidates should indicate the choice of the language in which they prefer to write the examination, in the online-application.

Answering would be in the form of shading the correct answer by using **BLACK BALL POINT PEN** only and the applicants are permitted to take the carbon copy of their answer sheet along with their question booklet.

**Negative mark of 0.25 will be awarded for every wrong answer and multiple answers will be treated as a wrong answer. Candidates are, therefore, advised to keep this aspect in mind while answering the questions.**

The answer key will be published in the recruitment website <https://recruitment.py.gov.in> and also in the official website of the Department of Personnel and Administrative Reforms (Personnel Wing) viz., <https://dpar.py.gov.in> after completion of the examination process.

Minimum qualifying marks prescribed for the written examination:

A list of candidates will be provisionally shortlisted from the merit list based on the marks obtained by the applicants in the Written Examination subject to reservation as per rules in force. Minimum qualifying marks to be secured by the various category of candidates are as follows:-

UR	:	35%
OBC	:	30%
SC	:	25%

**Note:**

1. Candidates are required to appear for both Paper-I and Paper-II for consideration for selection. Failure to do so will result in rejection of their candidature
2. Select list will be drawn based on the marks obtained by the applicants in the competitive examination subject to reservation as per rules in force.

*Sudhakar P*

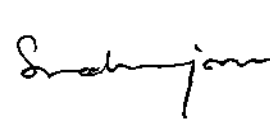
3. The validity of operation of wait list, if drawn, will be two years from the date of declaration of the result / publication of select list. The wait list will be operated in the event of occurrence of a vacancy caused in the Select list due to rejection of candidature for non-production of required certificates, non-appearance of candidate for certificate verification, non-joining of candidate within the stipulated time allowed for joining the post or when a candidate joins but resigns or dies within a period of one year from the date of joining etc.

**8. DATE AND VENUE OF EXAMINATION :**

The Competitive Examination will be held in Puducherry region only. The exact date, time and venue of the examination will be intimated to the eligible candidates in due course in the recruitment website & also in leading newspapers.

**9. HOW TO APPLY AND LAST DATE FOR APPLICATION :**

Applicants fulfilling the eligibility criteria as mentioned above may apply by online only through the official website <https://recruitment.py.gov.in> from 21.11.2022 (10.00 a.m.) to 20.12.2022 (05.45 p.m.).

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**GENERAL INSTRUCTIONS TO THE CANDIDATES**  
**PART-I**

**Applicants should read the following instructions carefully before applying :**

1. Mode of applying for the Competitive Examination for Direct Recruitment to the post of Agricultural Officer (Hydrogeology) is **through online only**. Applicants shall not send the online generated application in physical form (Except in case of in-service Applicants).
2. Avoid registering multiple online applications and register only a single application. All multiple online applications will be rejected summarily and the candidates will lose their chance to appear for the exam.
3. Applicants shall upload their Photograph and Signature using either option 1 or 2 provided in the recruitment portal as given below:-

Option 1 (Scanned Photograph and Signature as a single image)

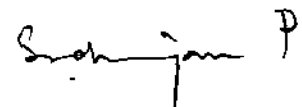
Applicants are instructed to scan their recent passport size colour photograph & signature in an A4 sheet with 200 DPI resolution, dimensions should be minimum of 600 x 600 pixel and the file size should be less than 150KB. (as shown in guidelines video for uploading and cropping your photograph and signature during online application)

Option 2 (Scanned Photograph and Signature as separate images)

Applicants are instructed to scan their Photograph in JPEG format with 238 x 306 pixel dimension and the file size should be less than 50KB.

Signature file format should be JPEG, dimensions should be 350 x 150 pixel and file size should be less than 30 KB.

4. The applicants have to register their Mobile Number in the online portal <https://recruitment.puducherry.gov.in> for applying through online. Then they will be receiving Username and Password through SMS in the mobile number provided while registration. Thereafter, the applicants have to login into the online portal using the Username and Password for applying to the post of Agricultural Officer.
5. The applicants are also advised to change the default password received in their mobile at first login. It is the applicant's responsibility to take ownership of the password and it should not be disclosed to anyone. Otherwise, the liabilities arose upon will be at the applicant's risk.
6. The applicants will be allowed to view, print & check the status of their application and download the Hall Ticket by login into the online portal using the username and password. Hence, they are advised to keep the user name and password safe for future reference until the recruitment process is over.
7. The applicant after applying can also make corrections in their on-line application, if any error occurred while entering the data. They are allowed to avail this facility till the last date for receipt of application.
8. The information/data furnished by the applicants in the online application are final and cannot be altered later after last date for submission i.e. 20.12.2022.



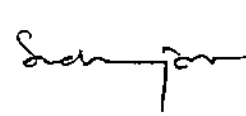
9. Applicants are advised to keep a copy of the application generated online for their reference.
10. Applicants except In-service candidate need not send the printout of the application or any other supporting document to this Department.
11. The applicants who are applying as In-service candidates should send the duly signed copy of the online generated applications through the respective Head of Department/Head of Office within the due date and time of 05.45 p.m. on 20.12.2022 to the Deputy Secretary to Govt. (Agriculture), Chief Secretariat, Puducherry. The applicants should also ensure that the Heads of Department/Office have duly signed the "Certificate by the Head of Department/Office" provided in the online generated applications. The "online generated applications received after the due date and time i.e. 05.45 p.m. on 20.12.2022 will be summarily rejected. Transit delay will not be entertained.
12. Original certificates are required to be produced by the provisionally short-listed candidates after the notification of result of this recruitment at the time of certificate verification.
13. All communications with regard to this recruitment will be published in the website <https://recruitment.py.gov.in>. Applicants are advised to access the above website and watch news and dailies regularly for information. They are advised to keep the mobile number given in the online application active for sending SMS connected with this recruitment.
14. After scrutiny, the status of the application will be indicated in the website <https://recruitment.py.gov.in>. The applicants are advised to check the official website to know their application status.
15. The decision of the Government as to the eligibility or otherwise of the applicant for admission to the examination shall be final.
16. This Secretariat will not undertake detailed scrutiny of applications for the eligibility and other aspects at the time of written examination and therefore, candidature will be accepted only provisionally. Candidates must go through the requirements of educational qualification, age, physical and medical standards etc. and satisfy themselves that they are eligible for the post. Copies of supporting documents will be sought at the time of Certificate Verification. When scrutiny is undertaken, if any claim made in the application is not found substantiated, the candidature will be cancelled and the Departmental Recruitment Committee's decision shall be final.
17. Candidates seeking reservation / age relaxation benefits available for SC/OBC/XSM/PwBD must ensure that they are entitled to such reservation / relaxation as per eligibility prescribed in the notification. They should also be in possession of the certificates in the prescribed format in support of their claim.
18. No correspondence will be entertained with regard to the recruitment process. Candidates are advised to verify the status of their application/Hall Ticket through online only.

*Sudhakar P*

19. A separate press note will be issued in leading regional news dailies regarding the issue of Hall tickets through online. The eligible applicants can download their Hall tickets from the website <https://recruitment.py.gov.in> by using the "User Name and Password".
20. The admission to the examination is only provisional. Success in the examination confers no right to appointment. The appointment is subject to verification of educational qualification/residence/community and any other special category claimed by the individual including Medical Fitness.
21. Change of address & Mobile Number, if any, after submission of application should invariably be intimated to the Department by registered post with acknowledgement due. Otherwise the Department will not be responsible for any delay/non-delivery of letters/SMS message.
22. No TA/DA will be paid for attending the Competitive Examinations except SC/ST candidates who will be paid TA as per rules.

**Help Line :**

For any clarification, if needed, please contact the Help line number (0413)-2233246 on all working days between 09:30 a.m. to 05:00 p.m.

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**PART-II**

(Annexure-II to G.I., Min. of Social Justice and Empowerment, Notification No.38-16/2020-DD.III, dated 4<sup>th</sup> January, 2021)

**Physical requirement for the post of Agricultural Officer (Hydrogeology) for the category of Persons with Benchmark Disability:**

Sl.No.	Physical Requirement
1.	Sitting
2.	Standing
3.	Walking
4.	Bending
5.	Manipulation by fingers
6.	Reading & Writing
7.	Seeing
8.	Hearing
9.	Communication.

**Categories of Disabled suitable for the post of Agriculture Officer (Hydrogeology)**

Sl.No.	Code	Category of Disability
1.	D	Deaf
2.	HH	Hard of Hearing
3.	OA	One Arm
4.	OL	One Leg
5.	OAL	One Arm and One Leg
6.	Dw	Dwarfism
7.		Multiple disabilities involving 1 to 6 above

*Sundaram P*

**PART-III**

**REQUIREMENT OF AGE FOR CANDIDATES BELONGING TO VARIOUS CATEGORIES**

Sl.No	Category	Candidates must have born	
		Not earlier than	Not later than
1	General/Unreserved	21-12-1992	<b>20-12-2004</b>
2	OBC (MBC/EBC/BCM/BT)	21-12-1989	
3	SC	21-12-1987	
4	Persons with Benchmark disabilities General/Unreserved	21-12-1982	
5	Persons with Benchmark disabilities OBC (MBC/EBC/BCM/BT)	21-12-1979	
6	Persons with Benchmark disabilities - SC	21-12-1977	
7	Ex-Servicemen ECO / SSCO	21-12-1987	
8	Disabled Defence service personnel	21-12-1989	
9	Disabled Defence service personnel - SC	21-12-1984	

*Sundaram P*

**PART -IV**

**SYLLABUS FOR AGRICULTURAL OFFICER (HYDROGEOLOGY)**

**PAPER - I**

**Geology**

**A: Physical and Structural Geology**

The origin of the solar system and the formation of the planet Earth. Earth Systems. Geological time scale. Theory of plate tectonics and supercontinents. Heat, temperature, and pressure inside the Earth.

Concept of stress, strain, and stress components. Homogeneous deformation, shape change, and strain ellipsoid. Rheology and behaviour of materials under stress. Concepts and measurement of attitude. Structural elements. Folds, faults, joints and unconformity. Shear zones.

**B: Mineralogy and Petrology**

External and Internal symmetry of crystals. Crystal classes. Unit cell and Crystallographic systems. Classification of minerals: silicates, carbonates, oxides and hydroxides, sulphides and sulphates, phosphates, and halides. Classification of silicates: ortho- and ring-silicates, chain-silicates, sheet-silicates and framework-silicates. Physical properties, crystal structure, and identification of common rock-forming minerals. Solid solution, isomorphism, and polymorphism.

Mantle melting and magmatic differentiation. Geochemical classification of elements. Trace elemental distribution during melting and crystallization.

Forms and types of intrusive and extrusive igneous bodies. Volcanoes and types of volcanoes, pyroclastic deposits. Concept of concordant and discordant intrusion. Structure, texture, and classification of igneous rocks.

Agents and types of metamorphism. Texture and classification of metamorphic rocks. Mineralogical phase rule. Concept of isograds, metamorphic facies, and facies series. Types of metamorphic reactions. Important metamorphic rock types - blueschist, eclogite, granulite (khondalite and charnockite) and migmatite.

Weathering, erosion, and soil formation. Soil types and soil profile. Classification of sedimentary rocks. Texture, fabric, and classification of clastic rocks. Classification of carbonate rocks. Introduction to flow mechanics and genesis of sedimentary structures. Fundamentals of diagenesis, depositional environment, and the concept of sedimentary facies.

**C: Geomorphology and surface processes**

Theory of uniformitarianism. The cycle of erosion and base level control. Role of structure, process, time, and climate in landform evolution.

Mass wasting and hillslope stability. Classification of mass wasting processes. Fluvial erosion, transportation, and deposition mechanisms. Landforms formed by fluvial erosion. Karst topography. Rock dissolution and cavern formation. Karst landforms. Aeolian processes and landforms. Loess deposits. Glacial and periglacial processes and landforms. Coastal and submarine processes and landforms. Sea floor topography.

*Sudhakar P*

## **D: Paleontology and Stratigraphy**

Process of fossilization, types, and significance of fossils. Morphology and distribution of the invertebrates (Protozoa, Coelenterata, Brachiopoda, Mollusca, Echinodermata, Graptoloidea, and Trilobita). A brief account of the geological distribution of important Gondwana flora in India. Siwalik vertebrate fossils.

Principles of stratigraphy. Geological time scale. Stratigraphic classification. Stratigraphic divisions and their equivalents in India. Stratigraphy of Purana Basins and an outline of Paleozoic rocks and Gondwana Supergroup. An outline of Triassic, Jurassic, and Cretaceous rocks of India. Intertrappeans, Intratrappeans, and Infratrappeans. Tertiary and Quaternary rocks of India.

## **E: Economic Geology**

Concept and classification of ore minerals and gangue minerals. Physical properties, chemical composition, and mode of occurrence of important ore minerals. Industrial minerals, fossil fuels, and building stones.

Types, morphology, and forms of ore bodies. Spatial distribution of mineral deposits and their distribution through geological time. Genetic classifications of mineral deposits. Ore forming processes and physical-chemical environment of ore deposition.

Geological characteristics and Indian occurrences of important types of magmatic, pegmatitic, skarn, hydrothermal, metamorphic and sedimentary deposits.

Various types of coal deposits and oil and natural gas occurrences. On-shore and off-shore petroliferous basins of India.

## **F: Applied Geology (Remote Sensing and GIS, Engineering, and Environmental Geology)**

Introduction to Electromagnetic Radiation (EMR) and its relationship to remote sensing in the ultraviolet, visible, infrared, and microwave region. Interaction of EMR with objects and atmosphere. Spectral signature of common earth objects. Sun-synchronous and geosynchronous satellites.

Digital representation of satellite image, the concept of grey color, RGB, natural color, and FCC. Interpretation of aerial photo/satellite images using photo interpretation elements - tone, texture, pattern, size, shadow, and association. Geological applications of remote sensed data. Fundamentals of Geographical Information System (GIS).

Physical and mechanical properties of rocks. Strength, deformation, hydraulic aspects, weathering, and discontinuities in rock masses. Engineering classification of Rocks. Construction materials.

Concepts of ecosystems. Biogeographical zonations of the Earth. Concept of residence time and rates of natural cycles. Catastrophic geological hazards. Resources and reserves. Environmental impact of exploitation, processing, and smelting of minerals. Environmental effects associated with each type of energy resource, viz. petroleum, natural gas, hydropower, nuclear, coal, solar, and wind energy. Ice sheets and fluctuations of sea levels. Resources of oceans. Ocean pollution by toxic wastes. Radioactive waste management. Biogeochemical factors in environmental health. Trace elements, and health. Possible effects of imbalance of some trace elements. Diseases induced by human use of land. Environmental legislation in India. Global Climate Change.

*Sudhakar P*

### **G: Origin, occurrence and distribution of water**

Water on earth; Types of water — meteoric, juvenile, magmatic and sea water; Hydrological Cycle and its components; Water balance; Water-bearing properties of rocks — porosity, permeability, specific yield and specific retention; Vertical distribution of water; Zone of aeration and zone of saturation; Classification of rocks according to their water-bearing properties; Aquifers; Classification of aquifers; Concepts of drainage basins and groundwater basins; Aquifer parameters- transmissivity and storage coefficient; Water table and piezometric surface; Fluctuations of water table and piezometric surface; Barometric and tidal efficiencies; Water table contour maps; Hydrographs; Springs; Geologic and geomorphic controls on groundwater; Hydrostratigraphic units; Groundwater provinces of India. Hydrogeology of arid zones of India; Hydrogeology of wet lands.

### **H: Groundwater Hydraulics**

Theory of groundwater flow; Darcy's law and its applications; Determination of permeability in laboratory and in field; Flow through aquifers; steady, unsteady and radial flow conditions; Evaluation of aquifer parameters of confined, semi-confined and unconfined aquifers -Thiem, Thies, Jacob and Walton's methods; Groundwater modelling.

### **I: Groundwater Exploration and Water Well Construction**


Geologic and Hydrogeological methods of exploration; Role of remote sensing in groundwater exploration; Hydro geomorphic and lineament 'napping; Surface geophysical methods - seismic, gravity, geo-electrical and magnetic methods; Types of water wells and methods of construction; Design, development, maintenance and revitalization of wells; Sub-surface geophysical methods; Yield characteristics of wells; Pumping tests- methods, data analysis and interpretation.

### **J: Groundwater Quality**

Physical and chemical properties of water; Quality criteria for different uses; Graphical presentation of groundwater quality data; Groundwater quality in different provinces in India; Groundwater contamination; natural (geogenic) and anthropogenic contaminants; Saline water intrusion; Radioisotopes in hydrogeological studies.

### **K: Groundwater Management**

Groundwater problems related to foundation work, mining, canals and tunnels; Over-exploitation of groundwater and groundwater mining; Groundwater problems in urban areas; Ground water management in arid and semi arid areas; Climate change impact on ground water resources; Concept of sustainable development of groundwater resources; Groundwater management —supply side and demand side management; Rainwater harvesting and managed aquifer recharge; Conjunctive use of surface and groundwater; Groundwater legislation.

  
(SUNDARARAJAN, P)

DEPUTY SECRETARY TO GOVERNMENT  
(AGRICULTURE)