भारतीय वन्यजीव संस्थान
Wildlife Institute of India
(An Autonomous Institution of Ministry of Environment, Forest and Climate Change, Government of India)
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Contractual Engagement of Project Personnel

The Wildlife Institute of India (WII), Dehradun is a premier national autonomous Institute of the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India in the field of teaching, training and research in the area of wildlife conservation and Protected Area management. The Institute wishes to engage **eight research personnel** for various positions on contractual basis for the following projects and Tiger Cell:

1) **All India Assessment of Status of Tigers, Co-predators and Prey and their Habitats:** Since 2006, the National Tiger Conservation Authority (NTCA) in collaboration with the Wildlife Institute of India (WII) has been conducting a National level assessment for the "Status of Tigers, Co-predators, Prey and their Habitat" every four years based on a scientific methodology approved by the Tiger Task Force 2005. The project aims at assessment of tigers, other predators, major prey species, habitat qualities and human disturbance parameters in all potential tiger occupied landscapes spread over 18 States in the country.

2) **Monitoring System for Tigers' Intensive Protection and Ecological Status (MSTrIPES):**MSTrIPES is a smart tool for adaptive management of the Tiger Reserves of India using a holistic approach by integrating ecological insights obtained through the standardized tiger, prey, and habitat assessment protocols to guide protection and management. It enables managers to assess intensity and spatial coverage of patrols in a GIS based tool. The system performs statistical computations of occupancy, precision, sample size, and assesses trends over desired time and spatial scales for tigers, other carnivores, prey populations, human impacts, illegal activities, human-wildlife conflicts and law enforcement investments.

3) **Activities of Tiger Cell:**In order to achieve the goal of tiger conservation through a holistic approach based on science, the Tiger Cell (in collaboration with the National Tiger Conservation Authority – NTCA) was established at WII in April, 2016. The main mandates of the Cell includes:i) periodic, country-wide assessment of tigers, co-predators, prey and their habitat; ii) ecological monitoring of the Tiger Reserves; iii) implementation of MSTrIPES in Tiger Reserves; iv) site appraisals and evaluation of development projects vis-à-vis tiger distribution, dispersal and corridor network; v) maintain National Tiger Photo Data base for controlling illegal wildlife trade related to tigers and vi) provide training as and when required for ecological monitoring, research and management.

Details of the positions along with essential and desirable qualifications, terms and conditions and how to apply are given below:

Details of the advertised positions

Name and number of Position	Essential Qualification	Desirable Qualification	Consolidated emoluments/month (Rs.)	Recruitment Tenure with Assessment Period	Job description
Project title: All India Assessment of Status of Tigers, Co-predators and Prey and their Habitats					
Research Biologist (5)	B.E./B.Tech./B.Sc. or M.Sc. in Wildlife Science/Botany/Zoology/Forestry / Life Sciences/Environmental Sciences /Environmental Management/ Agricultural Sciences/Veterinary Sciences/Biotechnology/Genetics with a minimum of 55% aggregate marks from a recognized University.	Candidate(s) with prior experience in sampling design and animal abundance estimation will be preferred. Able to do field work in harsh condition.	25,000/- (B.E./B. Tech./M.Sc. candidates) 20,000/- (B.Sc. candidates)	**Six months**	Population estimation using camera traps, mark recapture, distance sampling and occupancy analysis. Habitat evaluation and human disturbance assessment. The research work will be carried out in different parts of India. Work will be primarily at field sites with occasional visits to the HQ at Dehradun.
Project title: Monitoring System for Tigers' Intensive Protection and Ecological Status (MSTrIPES)					
Project Biologist (1)	Post graduate degree in Zoology/Life Science/Wildlife Science/Botany/Forestry/Environmental Science with a minimum of 55% aggregate marks from a recognized university.	Candidates having field experience in conducting ecological research and monitoring will be given preference. Experience in animal abundance estimation, analytical skills and competency in ecological software is desirable.	25,000/-	**One year**	The research fellow is expected to work in Tiger Landscapes in helping implement MSTrIPES in collaboration with the forest departments. The program MSTrIPES involves generating GPS based patrolling data for protecting tigers and their habitat and regular ecological status monitoring using camera traps, transect surveys, track plots and occupancy surveys. This information is then to be analyzed in a software system dedicated for this purpose to generate periodic reports to assist management and protection of Tiger Reserves.

Name and number of Position	Essential Qualification	Desirable Qualification	Consolidated emoluments/month (Rs.)	Recruitment Tenure with Assessment Period	Job description
					The job requires extensive traveling to forest interiors, wildlife areas and arduous terrains across India for longer durations.
Project Assistant (GIS Component) (1)	Post Graduate in Science / Life Science / Environmental Science / Applied Science / Remote Sensing and GIS / M.A Geography OR Post Graduate / Diploma in Remote Sensing and GIS OR B.Tech in Geo Informatics / Environmental Engineering / Remote Sensing and GIS with a minimum of 55% aggregate marks from a recognized university.	Experience in Remote Sensing and GIS, competency in Arc GIS, ERDAS IMAGINE and other Open Source Software (Q GIS etc.) shall be given preference.	20,000/-	**One year**	The job primarily involves handling, processing and analyses of large scale spatial data. In particular, the responsibilities would be – • Data processing, digitization, feature extraction, and analysis within GIS platform. • Maintenance of spatial data, end user support and • Generation of maps and providing other GIS reports and information.
Project title: Tiger Cell					
Senior Biologist (1)	M.Sc. in Wildlife Sciences/Zoology/Botany/Life Sciences/Forestry/ Environmental Science/ Veterinary Science with a minimum of 55% aggregate marks in M.Sc. from a recognized University with at least 2 years of research experience	Candidates with prior experience in animal abundance estimation techniques. Proficiency in using computers and good writing skill in English language. Publication record desirable.	40,000/-	**One year**	Field work and analysis of data on animal abundance, occupancy and habitat parameters. Work will be both at HQ in Dehradun, with several field visits to forest interiors, wildlife areas and arduous terrains across India for longer durations.

Age Limit (yrs.) as on last date of submission of online application: Not exceeding 35 years for B.E./ B. Tech./M.Sc. and 28 years for B.Sc as on the date of application.

Age Relaxation: Relaxation in upper age limit shall be allowed in accordance with the Government of India, Ministry of Personnel, Public Grievances and Pensions (Department of Personnel & Training) OM No.1501282/2010-Estt.(D) dated 27.03.2012 as amended from time to time.

However, the categories of upper age relaxations are as follows:

(a) Scheduled Castes and Scheduled Tribes up to 5 years.
(b) Other Backward Class (OBC) up to 3 years.

Recruitment Process

Research personnel shall be recruited through a online written test followed by a personal interview.

The written test for these positions will be conducted at 7centres namely (i) Dehradun, (ii) Mumbai, (iii) Bengaluru, (iv) Chennai, (v) Kolkata, (vi) Delhi and (vii) Guwahati. The address of the centre(s) will be communicated to candidates in their Admit Cards.

The decision of the Institute Screening Committee in all matters relating to eligibility, work experience, acceptance or rejection of application, mode of selection will be final and binding on the candidates and no enquiry of correspondence will be entertained from any individual or his/her agency. At the time of the verification of original documents, if it is found that an attempt has been made by the applicant to willfully conceal, misrepresent or canvass the facts, his/her candidature will not be considered. A separate declaration form will have to be submitted through online application system.

Assessment period for recruited candidates: Candidate shall be assessed during the initial 3 months. Grant of further extension shall be subjected to the satisfactory performance and at the sole discretion of the Institute.

Written Examination and Interview:

a. The entrusted online agency will issue "Admit Card" to eligible candidates which can be downloaded from the weblink provided. The admit card will have details of Examination Centre, Date and Time**,** wherein the applicants shall appear at their own cost. Applicants will make their own arrangement for travel and accommodation for appearing in the said online examination.
b. For all positions **the online written examination (75 marks) will be of one-hour duration** comprising of:
    i) 25 multiple choice questions from General Ecology and Conservation (25 Marks)
    ii) Subject domains of respective posts (25 marks) – multiple choice questions from Ecology or GIS & Remote Sensing
    iii) An essay of maximum 500 words on the given topic related to Wildlife Conservation and Ecology (25 Marks) for all positions
c. Candidates appearing for two positions including Project Assistant (GIS component) shall need to appear for both subject domains (ecology and GIS & Remote Sensing) and shall be given an additional half an hour during the online examination.
d. **Online written examination will be conducted at respective centers on Saturday, 29th December, 2018 from 11 AM onwards.** The location of the centers will be communicated to the candidates by email and admit card.
e. The written test is of a qualifying nature; only short-listed candidates will be called for the interview. The final selection of the candidate will be in accordance with the performance in the interview and in order of merit as decided by the Interview Committee.
f. **The result of the written test shall be declared and hosted on the Institute's website www.wii.gov.in by middle of January, 2019**
g. Shortlisted candidates need to make their own accommodation arrangement to stay, if required.
h. Further details of the interview will be communicated to the shortlisted candidates separately. No TA/DA will be given for attending the written test or the interview.

How to Apply

a. The entire process for registration and the eligibility test is "Online". Details for online registration and examination will be hosted on the WII's website (https://services2.armezo.com/wiircntest/reg). **The online registration process will remain open up to Friday, 20th December 2018** till **17:00hrs**.
b. All eligible interested candidates are advised to follow the latest updates on the WII's website (https://services2.armezo.com/wiircntest/reg) for online registration, submission of application and payment of application processing fee, etc.
c. Candidates will be required to fill in their personal, educational and professional experience profiles online besides uploading a recent passport size photograph. Candidates will make the payment of application processing fee of **Rs. 800/- (Rupees Eight Hundred Only)** through the prescribed "Payment Gateway". Payment can be made via Internet Banking/Debit Card/Credit Card

through online secured payment gateway. Candidates belonging to SC/ST categories need to pay only **Rs 100/- (Rupees One Hundred Only)** as communication fee.

d. Candidates can apply for maximum of two positions as per the advertised EQ/DQ of the concerned project and shall have to pay the fee for every position.
e. Shortlisted candidates called for interview shall produce all documents in original *viz*., Educational Qualifications, Research Experience, Extra-curricular activities, Date of Birth etc., along with copies of mark sheets of all examinations for verification.

Important Dates:

Last date of submission of online application form: December 20, 2018 (17:00hrs)

Online written examination at 7 Centres: December 29, 2018

Result of written examination: first of January, 2018

Personal Interview at WII, Dehradun: Middle of January, 2019

Syllabus for Online Examination

General ecology and conservation (25 marks, common for all candidates)

General wildlife conservation issues in India. Losses and threats to biodiversity and climate change. Role of protected areas in conservation. Conservation outside Protected Areas. Translocation and reintroduction projects. Major conservation projects like Project Tiger, Elephant, Lion etc. Human wildlife interactions. Village relocation and compensation schemes for conservation. Legal instruments for conservation: Wildlife (Protection) Act, 1972; Indian Forest Act, 1927; Forest (Conservation) Act, 1980; and Environmental (Protection) Act, 1986. International agreements and conventions (CITES, CMS, CBD and Ramsar).

Subject domains of respective posts (25 Marks)

Ecology (for candidates applying for positions of Research Biologist, Project Biologist and Senior Biologist)

General ecology, Basic concepts of ecosystems. Energy flow, nutrient cycles and trophic levels. Definitions of plant and communities, populations and individuals. Species interactions: competition, predation and mutualism. Population demography and dynamics. Carrying capacity. Meta population concept. Nature and structure of biological communities. Niche concept. Succession. Factors governing species diversity. Vertebrate biology. Bio-molecules (DNA, RNA and proteins); Conservation applications of genetics (loss of genetic diversity, inbreeding depression and bottleneck). Population and Habitat Viability Analysis. Small and declining population paradigms. Ecological restoration.

Probability theory and distributions. Parametric and Non Parametric tests of difference. ANOVA, Correlation and regression analysis. Population enumeration techniques.

Major wildlife habitats in India: forests, grasslands, wetlands and deserts. Bio-geographic zones and affinities of flora and fauna in Indian subcontinent. Protected Area network. Losses and threats to biodiversity. Habitat fragmentation, barriers and isolation. Climate change.In situ and ex situ conservation. Management of small and insular populations. Role of protected areas in Conservation. Conservation outside Protected Areas. Translocation and reintroduction projects. Project Tiger, Elephant and Snow Leopard. Human wildlife interactions. Concepts of eco-development, village relocation, and compensation schemes for conservation.

GIS & Remote Sensing (for candidates applying for positions of Project Assistant-GIS component)

Basic principles of remote sensing and aerial photo interpretation. Fundamental laws governing the remote sensing science, Concept of Electro-Magnetic Spectrum and Energy interactions with atmosphere and with earth surface features. Platforms and Sensors, Resolution, Image and False colour composite, introduction to digital data, Digital Image processing, elements of visual interpretation techniques. Advance Remote sensing techniques.

Geographic Information System-Basics, Components of GIS, Coordinate systems and Map Projections, Data Models-Raster and Vector. GIS data and its structure Geospatial Data and GIS operations, attribute data, thematic layers and query analysis, Global positioning systems.

Basic concepts of ecology, Major wildlife habitats in India, Protected Area network. Project Tiger, Impacts of developmental projects on wildlife.