ક્રમાંકઃ- પરચ-૧૦૨૦૧૮-૧૦૭૩-ક-૨
ગુજરાત સરકાર
કૃષિ, ખેડૂત કલ્યાણ અને સહકાર વિભાગ,
સચિવાલય, ગાંધીનગર.
તારીખઃ- 17 JUL 2018

પ્રતિ,
કુલસચિવશ્રી, દાંતીવાડા કૃષિ યુનિવર્સિટી, દાંતીવાડા,
કુલસચિવશ્રી, આણંદ કૃષિ યુનિવર્સિટી, આણંદ,
કુલસચિવશ્રી, નવસારી કૃષિ યુનિવર્સિટી, નવસારી,
કુલસચિવશ્રી, જૂનાગઢ કૃષિ યુનિવર્સિટી, જૂનાગઢ

વિષયઃ- **"PGDPHM કોર્ષ એડમિશન "બાબતે**

ઉપર્યુક્ત વિષય પરત્વે સંયુક્ત નિયામકશ્રી, PGDPHM ના તા.10.07.2018 પત્ર નકલ આ સાથે સામેલ છે. સદરહુ પત્રમાં જણાવેલ મુદ્દાઓ અંગે નિયમાનુસાર ઘટતી કાર્યવાહી કરવા વિનંતી છે.

(જી.એસ.મોદી)
સેકશન અધિકારી
કૃષિ, ખેડૂત કલ્યાણ અને સહકાર વિભાગ

બિડાણઃ-ઉપર મુજબ.

એકેડેમીક શાખા
કુલસચિવશ્રી ની કચેરી
ન. કૃ. યુ. નવસારી.
આવક નંબર....331.....
તારીખ.....06/08/18.....

31 JUL 2018

કુલસચિવ વિભાગ, ન.કૃ.યુ., નવસારી
ઈ.નં.૫૪૮૨
01 AUG 2018
એડીએમ-૩ શાખા

Annexure - I

Details of course content in respect of PGDPHM

The Post Graduate Diploma in Plant Health Management (PGDPHM) has been designed to expose the participants to plant health management, the science and practice of understanding and overcoming the biotic and abiotic factors that limit plants from achieving their full genetic potential as crops. The course also prepares the participants to address the emerging challenges in Biosecurity,

Aim of the Course

Develop a highly committed and competent cadre of agricultural professionals to promote environmentally sustainable plant health and biosecurity management in India and her neighborhood.

Objectives/Outcome

On completion of the course, participants will develop

- Competence in Agro-ecosystem based analysis which relies on experiential learning so as to promote environmentally sustainable plant health management.
- Skills in Ecological Engineering and Rhizosphere Engineering for pest management.
- Knowledge to promote safe and judicious use of pesticides through adoption of appropriate application techniques, besides expertise in pesticide formulation / residue analysis.
- Skills to organize Farmer Field Schools effectively to empower the farmers to take informed decisions by adopting discovery based learning
- Expertise in situation analysis of vertebrate pest problem, with special focus on rodents, in agricultural fields & commodity storage and adoption of ethological based management.
- Understanding of the issues involved in bio-security and incursion management in the context of globalization, with exposure to Sanitary and Phytosanitary issues.
- Mass multiplication of biocontrol agents including microbial biopesticedes
- Skill in Quality Assessment and Quality Management of microbial biopesticedes.

Course Design & Framework

The programme consists of four major components

1. **Participatory learning in classroom and laboratory.**
2. **Field visits for enhancing observational skills.**
3. **Agro-ecosystem based analysis through Farmers Field Schools (FFS)**
4. **Specialization in one of the following select areas :**

   a) **Biocontrol Input Production Management:** Participants specializing in this area will develop skills and competency in production of various Biocontrol Agents such as Fungi, Bacteria, Virus, Insects, and Mites that can be commercially exploited for pest management and will be able to produce commercial formulations of Microbial Biopesticides and develop analytical skills in quality control of Biopesticides.

   b) **Biosecurity Incursion Management:** Participants specializing in Plant Biosecurity will acquire knowledge in Plant Quarantine procedures, Regulations, International and National standards for Phytosanitary measures (ISPM & NSPM), and competency in Pest risk analysis, Pest Surveillance, Phyto Sanitary Treatments, Pest diagnostics and Pest Incursion Management.

c) **Pesticide Management:** Participants specializing in Pesticide Management wi exposed to the complete life cycle management of pesticide encompassing iss involved in pesticide manufacture, import, export, transport, storage, use, applicatio post use surveillance and disposal. The regulatory provisions of licensing, inspection sampling,, analysis and further proceeding are also dealt in this course. The participants will acquire knowledge in principles of operation of sophisticated equipments and will undergo mandatory training required for analysis in Pesticide Formulation and specialized training in Pesticide Residue analysis by using GLC, HPLC, LC-MS-MS, and GC-MS-MS etc.

d) **Vertebrate and Structural Pest Management :** Participants specializing in Vertebrate & Structural Pest Management will develop competency in pest diagnostics, pest surveillance and acquire skills for integrated management of vertebrate pests with specific focus on Rodents and Structural Pests viz. termites, store grain pests, mosquitoes etc. The participants will also undertake a certificate course in Urban Integrated Pest Management as part of the Course.

e) **Plant Health Engineering:** Participants specializing in Plant Health Engineering will acquire requisite skills and knowledge in the area of pesticide application technology, selection, calibration and maintenance of related equipments and nozzles that will enable them to promote safe, judicious and efficient use of pesticides through adoption of appropriate engineering systems.

Programme Duration: One year: August, 2018- July2019 (2 Semesters – 30 credits each)

I semester- August 2018 to January 2019; II semester - February 2019 to July 2019 (observing 10 days semester break)

Eligibility: B.Sc.(Agri. or Hort.),M.Sc.(Entomology/ Plant Pathology/ Botany/ Zoology/ Microbiology/ Biotechnology/ Biochemistry / Chemistry /Biotechnology/Biochemistry/ Environmental Chemistry); B.Sc in Agriculture and Rural Development; B.Tech.(Agricultural Engineering).

Last date for submission of application forms: 16.07.2018.

Course fee, Lodging & boarding charges: NIL for Government nominated officials only.

Accommodation: Available within the NIPHM campus.

Travelling expenses: Reimbursement by NIPHM for entitled class but restricted to II-tier AC rail fare on production of original tickets.

Contact Address: Joint Director (Agro)

Course Director PGDPHM

National Institute of Plant Health Management (NIPHM),

Rajendranagar, Hyderabad - 500030

Telephone:+ **91-40-24015347** Tele-Fax: **9140-24015346**

e-mail: registrarniphm@nic.in, jdagroniphm-ap@.nic.in

For details please visit NIPHM website: **http://niphm.gov.in**

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Annexure - II

Details of course content in respect of DPHM (6 months duration)

Plant Health is dependent on several factors such as soil health, nutrient management, abiotic and biotic stresses and the ecological balance between pest and beneficial insects, which varies from one agro-climatic region to another. In order to reduce crop losses due to pests, expertise is required in plant health management - the science and practice of understanding and overcoming biotic and abiotic factors that limit plants from achieving their full genetic potential as crops.

The Diploma in PHM aims to impart specialised skills, with hands on training in:

- Soil, nutrient and weed management
- Agro-ecosystem analysis based plant health management
- Ecological engineering for pest management.
- Rodent pest management
- Pesticide application technologies for ensuring safe and judicious use of pesticides
- Mass production of biocontrol agents & assessment of quality of microbial biopesticides,

This course is unique in the sense that it encompasses all the aspects of Plant Health Management in a capsule form.

i. Diploma in Plant Biosecurity

Plant biosecurity is an emerging area for the professionals involved in Agriculture, Horticulture, Forestry, Environment and in international trade. The constant increase in international trade of agricultural commodities has paved way for long distance movement of plant pests from their place of origin. The pests in the new ecosystems become invasive and cause extensive damage to the native flora and fauna. The threats posed by exotic and invasive species through international trade has resulted in efforts for harmonization of plant protection measures at global level through the efforts of international plant protection convention (IPPC). The diploma in plant biosecurity will enable the student to get acquaint with

- Past Pest incursion and its consequences
- Phytosanitary rules, regulations, agreements and conventions
- Pest Risk Analysis
- quarantine pests / regulated pests of concern to India
- Emergency Preparedness to combat introduced pests
- Promote safe trade by adopting systems approach
- Identification of pest free areas or areas of low pest prevalence to promote safe trade
- Phytosanitary measures.
- Export market access.

ii. Diploma in Pesticide Management

A diploma programme of six months duration in Pesticide Management, covering the aspects of life cycle management of pesticides and related subjects is mooted for the Extension Officers. The objectives of the Diploma Programme is to develop expertise in Pesticide Formulation Analysis by classical volumetric methods & sophisticated instrumental methods of analysis, expertise in Pesticide Residue Analysis from various matrix of agricultural produce and environmental samples and expertise in Instrumental Analysis and Laboratory Management.

The course comprises the following topics/subjects in brief;

- Life cycle management of pesticides (cradle to grave),
- The legislation
- International Code of Conduct
- Registration procedures
- Introduction and practices of Plant Health Management
- Pesticide Application Technology
- Quality control
- Monitoring of Residues
- Laboratory Organisation and Management
- Agricultural economics
- Export and Import regulations for Pesticides
- The Marketing practices and others

iii. Diploma in Vertebrate Pest Management and Structural Pest Management

Vertebrate pests constituting birds, wild animals and rodents cause damage to major crops at farm level and in storage in India. Among the various vertebrate pests, rodents are one of the major production constraints in agriculture and allied sectors apart from transmitting several diseases to the humans and live stock. Cereal crops and commercial crops like sugarcane, cocoa including oilseed crops like groundnut, coconut, oil palm etc. are most often damaged by rodents causing severe damage upto 20-30%. In addition to rodent pests, other vertebrate pests like wild boar, blue bulls and birds also pose a major challenge to crop production.

The course gives exposures on major vertebrate pests, especially rodents and principles of their integrated management. The course covers; Economic importance of vertebrate pests in agriculture, horticulture, public health, veterinary and storage sectors, Taxonomy, morphology and anatomy, behavioural adoptability and reproductive plasticity, preventive and curative methods of management of different vertebrate pests in particular the rodents.

Increased urbanization in the country had a tremendous pressure on civic infra structure systems including sewerage, drainage, solid waste management and consequently public health. The public health problems are compounded due to increasing interface between human and pest populations, viz., rodents, mosquitoes, flies etc. Considering its importance, Urban Integrated Pest Management was given major focus and the course provides an

opportunity to develop skills in pest management operations and prepares the participants for emergency preparedness to prevent the outbreak of communicable zoonotic diseases.

The course deals with biology and bionomics of major urban pests like mosquitoes, cockroaches, bedbugs, flies, termites and rodents etc.. Exposures were also given on integrated bird, weed management, pest management chemicals and their safe and judicious application in urban environs.

iv. Diploma in Plant Health Engineering

The focus of the Diploma in Plant Health Engineering is to impart skills on 'Pesticide Application Technology' ,'Safe & Judicious use of pesticides' and Post Harvest Management of Food Grains'.The course is practical oriented and covers importance of proper techniques of application, distribution and coverage, storage and irrigation management. It also highlights the principles of High Volume, Low Volume, and Ultra Low Volume Spraying techniques, as well as the salient features of the appliances and Spray Nozzles, their classification, selection and calibration. Operational aspects of Dusters/ Granule Applicators, Power Sources used in Plant Protection Machines, pumps & engines, maintenance procedures, etc are also covered. Important issues regarding Weed and Rodent control techniques, remote sensing and GIS applications in Agriculture, etc are also discussed by specialists in these areas.

The participants of this course develop skills in guiding the farmers in appropriate choice of pesticide application technology, storage methods, etc to be adopted to successfully manage the prevailing problems in their fields in scientific, safe & judicious manner.

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Annexure III

NATIONAL INSTITUTE OF PLANT HEALTH MANAGEMENT
Rajendranagar Hyderabad 500 030

NOMINATION FORM FOR PGDPHM/DPHM 2018-19

Name (in capital letter) :
Designation :

Office address :

Present Residential Address :

Contact number :

Email id :

Educational Qualifications

Qualification	University	Subject/Specialization	Marks/Grade	Division	Year of Passing
S.S.C					
Intermediate (10+2)					
Graduation					
Post-Graduation					
Any other					

Hostel Accommodation required / not required :

DECLARATION

I hereby declare that all the information furnished above by me are true and correct to the best of my knowledge and belief. I agree to abide by all codes and conduct and rules applicable in the institute for smooth conduct of the programme.

Date:
Place: (Signature of the Applicant)

CERTIFICATE
(to be Issued by the forwarding officer)

It is hereby certified that Dr./ Mr. ----------Designation---------- is posted at ---------- . He is hereby nominated for the above mentioned training programme at NIPHM Hyderabad. Applicable fees/charges other than free facilities provided by NIPHM shall be borne by us.

Date:

Place: (Signature with Seal)

Note: Filled in application in all aspects should reach the Registrar, NIPHM, Rajendranagar, Hyderabad in prescribed time either by Post / Email (registrarniphm@nic.in) before 16.07.2018.