

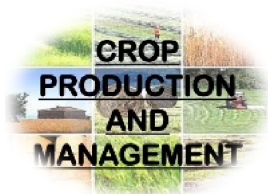
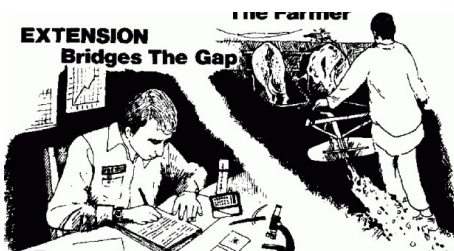
Learn... Unlearn... Relearn...



Explore Questions

# TNPSC – AHO

*Equip for Learning... Prepare for Unlearning... Practice for Relearning...*



## Paper I HORTICULTURE

As per the Revised & Updated Syllabus of TNPSC

**P. Dheivanai. M.Sc.(Ag.)**

Director and Trainer

**SAAI Academy**

25/9A VenkatapathyIyyengar Street,

KamarajarSalai, Madurai – 625 009, Tamil Nadu.

Phone: +91-93821 32593 Email: [saaistudies@gmail.com](mailto:saaistudies@gmail.com)

<http://saaiacademy.in/>

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## Foreword

Dear Friends,

Greeting from SAAI Academy!

- ***DON'T USE THIS BOOK, IF YOU HAVE JUST APPLIED FOR TNPSC - Assistant Horticulture Officer POST!***
- ***STUDY IF YOU ARE WILLING TO SUCCEED AND BE AN ASSISTANT HORTICULTURE OFFICER AS YOUR CAREER!***

This is the book with **Gist and important questions on the series for TNPSC – AHO Exams**. It contains the Core Paper such as *Basic Horticulture and Plant Propagation, Soil and Fertility, Irrigation and Weed Management, Production Technology of Fruits and Vegetables, Production Technology of Flower Crops and Landscaping, Production Technology of Spices, Plantation Crops, Medicinal and Aromatic Crops, Insect Pest and Diseases of Horticultural Crops and their Management, Post Harvest Handling and Value Addition of Horticultural Crops, Livestock Management and Poultry Production, Commercial Agriculture and Farm Management, Marketing and Extension Education* with special references to TNPSC Revised Syllabus for the candidates of **Diploma in Horticulture**. It is systematically compiled in a student-friendly manner and updated by keeping in mind on the present trends in TNPSC Exam patterns.

You are expected to be self-disciplined and self-motivated, and are **requested to prepare different models of questions as explained during the orientation programme. Self-Confidence with Systematic and SMART preparation would definitely make you a frontrunner.**

Wish you ALL THE BEST for your success in TNPSC-AHO exam. For further details please contact [saaistudies@gmail.com](mailto:saaistudies@gmail.com) or call +91-93821 32593.

Regards

**P. Dheivanai, M.Sc. (Ag.)**

**Director and Trainer**

**SAAI Academy**

25/9A Venkatapathy Iyyengar Street

Kamarajar Salai

Madurai – 625 009

Tamil Nadu

<http://saaiacademy.in/>



..... is a main organization under the control of ICAR for involving the conservation of animal genetic resources NBGAR

The long axis of the livestock housing should be in ..... direction in tropical countries and ..... direction in temperate countries East West, North South

Lower edges of the roof which is resting on the supporting wall is Eaves

The horizontal distance between the internal faces of walls or supports is Span

Pitch should not be exceeded at 45 degree

Kundi and Godhavari belongs to ..... group of buffalo breeds - Murrah

Uttar Pradesh group of buffalo breed includes Bhadawari and ..... Tarai

Origin of Red Dane cattle breed is .....Dutch

The crossbred cattle strain, Jamaica hope is created by crossing Jersey, Holstein Friesian and .....Sahiwal

Quantity of colostrum fed to buffaoe calf is ..... of its body weight - 1/15th

Castrated male sheep is called as Wether

Most milking machines have a pulsation ratio varying between .....Cycles per minute.  
40 to 60

Let down of milk in cow is due to secretion of: Oxytocin

Moisture content in butter must not exceed (as per legal standard):18 %

Ration contains all the nutrients in right proportion and quantities is known as?  
Balanced Ration

The process of removal of undesirable or non-productive animals from herd is called?  
Culling

Mating of crossbred back to its recessive parent is known as?Test cross

Which of the following is the largest compartment in ruminant animal?Rumen

The sate when animal first becomes sexually mature? Puberty

The fleshy evident mass found between the forelimbs of cows is known as:Brisket  
Genus of goat is:Capra





- \*Panama wilt of banana is also called as-*Fusarium wilt*
- \*Bunchy top of banana is caused by-*Virus*
- \*Which pathogen caused heavy losses to wine industry in France due to its epidemics in 1875?-*Plasmopara viticola*
- \*Citrus canker is caused by-*Xanthomonas compestris pv citri*
- \*Citrus gumosis is caused by-*Phytophthora palmivora*
- \*Mottle leaf of citrus is due to deficiency of-Zinc
- \*Greening of citrus is caused by-*Gracillicuts* (a gram negative bacteria)
- \*Downy mildew of grape vine is controlled by-Bordeaux mixture

#### Tomato and Brinjal

- \*Leaf curl of tomato is spread by-White fly
- \*Early blight of tomato is caused by-*Alternaria solani*
- \*Wilting in Brinjal is caused by-*Pseudomonas solanacearum*
- \*Phomopsis blight or Fruit rot of Brinjal is caused by-*Phomopsis vexans*
- \*Damping off of Brinjal seedlings is due to-*Pithium sp*

#### Other Vegetable Diseases

- \*Yellow vein mosaic of okra is transmitted through-White fly
- \*Damping off of chilly seedlings is due to-*Pithium sp*
- \*Anthracnose/Ripe rot/Die back of chilly is caused by-*Collectotrichum capsici*
- \*White blister of cabbage is caused by-*Albugo candida*
- \*Black rot of cabbage is caused by-*Xanthomonas compestris*
- \*A cabbage disease which is known to be more severe in acidic soils is-Black rot
- \*Powdery mildew of cucurbits is caused by-*Erysiphe cichoracearum*
- \*Downey mildew of cucurbits is caused by-*Pseudoperonospora cubensis*
- \*Downy mildew disease can be effectively managed by spraying of-Metalaxyl

#### Beneficial Insects

The process of rearing a silkworm for silk is known as sericulture.

A silkworm feed on the mulberry leaves.

A lot of feeding is required at the Silkworm stage

The silkworm is a Caterpillar & Larva

How many pairs of glands develop a cocoon? Two pairs



- The portal helps farmers adopt modern farm machineries through government subsidies

### **National Agriculture Market (e-NAM)**

- The National Agriculture Market scheme (e-NAM) envisages initiation of e-marketing platform at national level and to support creation of infrastructure to enable e-marketing in regulated markets across the country
- This innovative market process is revolutionizing Agricultural markets by ensuring better price discovery, bringing in transparency and competition to enable farmers to get improved remuneration for their produce in moving towards 'One Nation One Market'
- NAM was launched on 14 April 2016 with 21 mandis from 8 States joining it and the first phase of connecting 250 mandis was over on 6 October 2016.

### **Kisan Call centre**

- In order to harness the potential of ICT in Agriculture, Ministry of Agriculture & Farmers Welfare launched the scheme in 2004
- Main aim of the project is to answer farmers' queries on a telephone call in their own dialect
- KISAN CALL CENTER (KCC) (Toll Free No.1800-180-1551).

### **Village Resource Centres**

- Village Resource Centres provide space-based services in the rural areas. They are one of the unique initiatives that use Satellite Communication (SATCOM) network and Earth Observation (EO) satellite data to reach out to the villages to address the needs of the local people in villages themselves.

### **Digital Agriculture Mission**

- The Digital Agriculture Mission (2021–2025) aims to support and accelerate projects based on new technologies, like AI, block chain, remote sensing and GIS technology and use of drones and robots

### **Unified Farmer Service Platform (UFSP):**



How would you use inorganic fertilizer in Organic Farming? As a complementary component.

Which is not a component of Organic Farming? Synthetic pesticides.

..... is a microbial pesticide. *Bacillus thuringiensis*.

How would you limit nutrient loss? (a). Proper recycling of wastes., (b). Synchronizing release and uptake of nutrients. (c). Proper handling of organic wastes.

Which is a bulky organic manure? (a). Farm Yard Manure. (b). Green manure. (c). Oil cakes.

What is the percent amount of nitrogen, phosphorus, and potash in farm yard manure? 0.5, 0.2, and 0.3.

The cow dung + urine + agricultural waste are ready to be used as farm yard manure after how many days? 90 to 120 days.

Which type of process composting is? (a). Self heating. (b). Aerobic biological. (c). Thermophilic.

Which green manure crop is *Sesbania aculeate*? Dhaincha.

Which is true about green manure crop? 1. Green manure plants uptake nutrients from the lower layer of soils. 2. It maintains soil's Organic Manure status. 3. It makes soils light.

Which is true about the composition of vermicompost? 1. pH value is 6.5 to 7.2., 2. Nitrogen is 0.5 to 3%., 3. Humus content is 6 to 8%.

# Best wishes





- Apart from India, south East Asia is major ginger producing region. Ginger production in this region comes mainly from China, Thailand, Taiwan, Korea and Vietnam, China being the largest producer.

#### **Turmeric**

- Turmeric, the sacred spice of Asian countries is herbaceous perennial native to Indo Malayan region.
- Turmeric is essentially a tropical crop grown in India, Pakistan, Malaysia, Thailand, Philippines, Japan, China, Srilanka, Africa and Central America.
- It is the third important spice crop of India, next to chillies and black pepper. India is the largest producer and exporter of turmeric contributing about 80% of production and 45% of export.
- The crop occupies major share of area in Andhra Pradesh followed by Orissa, Tamil Nadu, West Bengal and Maharashtra.

#### **Clove**

- It is native to Moluccas, so they called "spice islands" in Indonesia and was first introduced in India around 1800 A.D. by the East India Company in their "Spice garden" in Courtallam, Tamil Nadu.
- Major clove producing countries are Indonesia, Zanzibar, and Madagascar, Zanzibar being the biggest producer. Importing countries are India, USA, Germany, France and Singapore.

#### **Nutmeg**

- Native of Indonesia, nutmeg tree grows there abundantly and is now naturalized in West Indies, Srilanka, India, Philippines, Tropical America and Pacific Islands.
- In India the plant is grown in certain pockets of Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra, North East India and Andaman.
- It is also grown in a small scale in Srilanka, Trinidad, China, Tobago, Zanzibar and Mauritius.

#### **Cinnamon**

- The genus, a native of South- Western tropical India and Srilanka, consists of more than 250 species distributed in South East Asia, China and Australia.
- Seychelles and Malagasy Republic are the major producing countries of Cinnamon besides Srilanka.





- A women oriented self-employment programme of the government Mahila Coir Yojana
- A scheme that aims to provide connectivity by way of an all-weather road to the eligible unconnected habitations in the rural areas is: PMGSY
- A scheme that aims to organize the traditional industries and artisans into clusters to make them competitive and provide support for their long term sustainability: SFURTI
- An online trading platform for agricultural commodities in India: eNAM
- The Market Promotion & Development Scheme (MPDA) was launched under KVIC
- A scheme that encourage farmers to adopt innovative and modern agricultural practices: Pradhan Mantri Fasal Bima Yojana
- A scheme formulated with the vision of extending the coverage of irrigation and improving water use efficiency: Pradhan Mantri Krishi Sinchayee Yojana
- Which one of the following is not an objective of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) ? To protect farmers against crop failure due to natural calamities
- Financial literacy is an integral part of which Mission? PradhanMantri Jan DhanYojana
- For effective market segmentation, the market must be Measurable
- Segmentation of a market requires the markets to be: accessible
- Demographic segmentation in rural marketing is done on the basis of Land ownership
- One of the basic cultural values in rural India is: decision making is collective
- The family life cycle: refers to the process of family formation and dissolution
- Rural marketing problem is essentially a distribution problem
- A system where essential commodities are distributed through a network of fair price shops: Public Distribution System
- e-Distribution represents application of Internet based technologies as a tool, to facilitate efficient and effective exchange with and from: the rural market
- A channel of distribution which uses a network of FPS (fair price shops) is called: Public Distribution System



- \*Transport proteins are-**Haemoglobin and Myoglobin**
- \*Structural proteins are-**Collagen and Elastin**
- \*The most abundant protein present in the world-**Rubisco**
- \*Muscle protein is known as-**Collagen**
- \*Silk protein is known as-**Fibroin**
- \*Soybean protein is known as-**Glycinin**
- \*Wheat protein is known as-**Gluten**
- \*Nucleic acids were first discovered by-**Friedrich Meischer (1868)**
- \*DNA denotes-**Deoxyribose nucleic acid**
- \*Who discovered the base composition of DNA?-**Chargaff (1953)**
- \*Deoxyribose sugar + Nitrogenous base is-**Nucleoside**
- \*Deoxyribose sugar + Nitrogenous base + phosphate group (PO<sub>2</sub>)-**Nucleotide**
- \*Single stranded DNA-**Bacteriophage**
- \*The form of DNA present in living organisms-**B-form**
- \*RNA that transfer amino acids from cytoplasm to ribosome-**m-RNA**
- \*Most abundant form of RNA that constitutes 80% parts of cellular RNA-**t-RNA**
- \*Which nucleic acid controls all cellular activities?-**DNA**
- \*Which nucleic acid is necessary for protein biosynthesis?-**RNA**
- \*Double helix model of DNA was proposed by-**Watson and Crick (1953)**
- \*The term 'Enzyme' was given by-**W. Kuhne (1867)**
- \*Enzyme is discovered by-**Buckner (1897)**
- \*1st enzyme which was discovered by yeast-**Zymase**
- \*The enzyme involved in biological nitrogen fixation-**Nitrogenase**
- \*Apoenzyme + Prosthetic group-**Holoenzyme**
- \*Enzyme without Prosthetic group-**Apo enzyme**



- Which of the following is a true vegetable crop? Okra
- Tomato variety RKMT is evolved through: X-rays
- Turnip belongs to the family? Cruciferae
- Potato is a source of Vitamin: C
- Whiptail in cauliflower is caused by: Deficiency of Mo
- The largest chilli growing state is: Andhra Pradesh
- The most ancient type of garden is: Kitchen garden
- The most serious disease of okra is: Tomato spotted wilt virus
- which of the following vegetable is perennial? Asparagus
- "Suverna" is a popular variety of : Fenugreek
- Powdery mildew is caused by: Fungus
- "Buck eye rot" is associated with: Tomato
- Which chemical is used for de-greening of fruit? Ethylene
- HQ of International Society for Horticulture Science (ISHS) is at \_\_\_\_\_ Belgium
- Journal "Indian Horticulture" is published by \_\_\_\_\_ ICAR
- Most abundant and basic Auxin is \_\_\_\_\_ IAA
- India is known as home of \_\_\_\_\_ Spices and Medicinal
- High Water Use Efficiency (WUE) Drip
- Protray are related to \_\_\_\_\_ Nursery
- Disease free plants in micro propagation can be obtained through Meristem culture
- Making an incision below a bud to retard its growth Nicking
- Angle formed by attached of a branch to the trunk Crotch
- "Queen of Fruits" is called \_\_\_\_\_ Mangosteen
- "King of Fruits" is called \_\_\_\_\_ Mango





**Lye peeling:** Fruits like peaches, apricots, sweet oranges, mandarin oranges and vegetables like carrots and sweet potatoes are peeled by dipping them in 1 to 2 per cent boiling caustic soda solution (lye) for 30 seconds to 2 minutes depending on their nature and maturity. Hot lye loosens the skin from the flesh by dissolving the pectin.

**Flame peeling:** It is used only for garlic and onion which have a papery outer covering. This is just burnt off. Vegetables like peas are shelled, carrots are scarped, and beans are snapped or trimmed.

**Blanching:** It is also known as scalding, parboiling or precooking. It is usually done in case of vegetables by exposing them to boiling water or steam for 2 to 5 minutes, followed by cooling.

**This brief heat treatment accomplishes the following:**

1. Inactivates most of the plant enzymes which cause toughness, discolouration (polyphenol oxidase), mustiness, off-flavour (peroxidase), softening and loss of nutritive value.
2. Reduces the area of leafy vegetables such as spinach by shrinkage or wilting, making their packing easier.
3. Removes tissue gases which reduce sulphides.
4. Reduces the number of microorganisms by as much as 99%.
5. Enhances the green colour of vegetables such as peas, broccoli and spinach.
6. Removes saponin in peas.
7. Removes undesirable acids and astringent taste of the peel, and thus improves flavour.
8. Removes the skin of vegetable such as beetroot and tomatoes which helps in their peeling.

**Syruping :** A solution of sugar in water is called a syrup. Normally sucrose syrup is used in canning.

**Brining :** A solution of salt in water is called brine.

**Exhausting:** The process of removal of air from cans is known as exhausting. After filling and lidding or clinching, exhausting is essential.



## Our Programs

### Study

- UGC NET
- TNPSC Agri / Horti.
- +1, +2
- CA/CMA/CS Foundation Courses

### Research

- Proposals
- Impact Assessment
- Making Case Study
- Thesis works
- Research Paper

### Greens

- Promote Blue - Green Infrastructure in urban, rural context.
- Promote micro farming
- All Gardening Products in One Roof.

### Tech

- Designs Online Courses
- Develops E-Resources, E-Contents & Build Institutional Websites.

### Astro

- Scientific predictions through birth chart.
- ஜோதிட வகுப்புகள் நடத்தப்படுகின்றன
- Orator Programmes.

# SAAI Academy

**9382182593**

<https://saaiacademy.in/>

**25/9A Venkatapathy Iyyenkar Street  
Kamarajar Salai, Madurai - 625009**



**Enter to Excell!**



**Exit to Demonstrate!**



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