

**ANDHRA PRADESH PUBLIC SERVICE COMMISSION: HYDERABAD**

**NOTIFICATION NO.04/2017, Dt.30/03/2017**

**SPECIAL RECRUITMENT FOR THE POST OF ASSISTANT DIRECTOR OF HORTICULTURE IN A.P HORTICULTURE SERVICES (DISABLED BACKLOG VACANCY)**

**PARA – 1:**

Applications are invited On-line for recruitment to the post of Assistant director of Horticulture in A.P Horticulture Services.

**The proforma Application will be available on Commission's Website ([www.psc.ap.gov.in](http://www.psc.ap.gov.in)) from 31/03/2017 to 30/04/2017 (Note: 30/04/2017 is the last date for payment of fee up- to 11:59 mid night).**

Before applying for the post, an applicant shall register her bio-data particulars through One Time Profile Registration (OTPR) on the Commission Website viz., [www.psc.ap.gov.in](http://www.psc.ap.gov.in). Once applicant registers her particulars, a User ID is generated and sent to her registered mobile number and email ID. Applicants need to apply for the post using the OTPR User ID through Commission's website.

The Commission Conducts Screening Test in Off-line mode incase applicants exceed 25,000 in number and Main Examination in Online-mode for candidates selected in screening test.

The Main Examination is likely to be held On-line through computer based test on 14/06/2017 & 15/06/2017. The objective type question papers are to be answered on computer system. Instructions regarding this computer based recruitment test are detailed in the Annexure -III.

MOCK TEST facility will be provided to the applicants to acquaint themselves with the computer based recruitment test. Applicant shall visit the website and practice the answering pattern under MOCK TEST option available on main page of [website www.psc.ap.gov.in](http://www.psc.ap.gov.in)

HALL TICKETS can be downloaded 7 days before commencement of Examination.

All desirous and eligible applicants shall apply through **ON-LINE** after satisfying themselves that they are eligible as per the terms and conditions of this recruitment notification. The details are as follows:-

Sl. No	Name of the Post	No. of Vacancies	Age as on 1/7/2017 Min. Max.	Scale of Pay Rs.
01	Assistant Director of Horticulture in A.P Horticulture Services	01 VH(W)	18-42	Rs.40,270- 93,780

**IMPORTANT NOTE:** Distribution of vacancies among roster points is subject to variation and confirmation from the Unit Officer/ Appointing authority.

**PARA-2: EDUCATIONAL QUALIFICATIONS:**

Applicants must possess the qualifications from a recognized University as detailed below or equivalent thereto, subject to various specifications in the relevant Service rules and as per the indent received from the Department as on the date of notification.

Sl. No	Name of the Post	Educational Qualifications
01	Assistant Director of Horticulture in A.P Horticulture Service	Must possess M.Sc(Horticulture) with basic Degree in Horticulture of a recognized University in the State or any other University or institution recognized by the University Grants Commission.

**Para 3:** Age minimum 18 years maximum 42 years as on 01/7/2017(as per G.O. Ms. No396 General Administration (Ser-A) dept, dt.05/11/2016 and usual age concession of 10 years for physically Challenged Persons

**Age Relaxation:** The upper age limit prescribed above is relaxable in the following cases:

Sl. No	Category of candidates	Relaxation of age permissible
1.	Retrenched temporary employees in the State Census Department with a minimum service of 6 months.	3 Years
2.	A.P. State Government Employees (Employees of APSEB, APSRTC, Corporations, Municipalities etc. are not eligible).	5 Years based on the length of regular Service(ceiling for 5 years)
3	Physically Handicapped persons	10 Years

**PARA - 4: RESERVATION TO LOCAL CANDIDATES :**

The Rule of Reservation to the Local candidates is not applicable as the post is State Cadre.

The candidates claiming reservation as Local candidates should obtain the required Study Certificate(s) (from IV Class to X Class or SSC) OR Residence Certificate in the proforma only for those candidates who have not studied in any Educational Institutions as the case may be. The relevant certificates with authorized signature shall be produced as and when required.

**DEFINITION OF LOCAL CANDIDATE:**

- "LOCAL CANDIDATE" means a candidate for direct recruitment to any post in relation to that Local area(s) where he/she has studied in Educational Institution(s) for not less than four consecutive academic years prior to and including the year in which he/she appeared for S.S.C or its equivalent examination. If however, he/she has not studied in any educational institution during the above four years period, it is enough if he/she has resided in that area which is claimed as his/her local area during the above said period.
- In case a candidate does not fall within the scope of above then, if he/she has studied for a period of not less than seven years prior to and inclusive of the year in which he/she has studied SSC or its equivalent, he/she will be regarded as local candidate on the basis of the maximum period out of the said period of seven years AND where the period of his/her study in two or more local areas is equal, such local area where he/she has studied last in such equal periods will be taken for determining the local candidature. Similarly, if he/she has not studied during the above said period in any Educational Institution(s) the place of residence during the above period will be taken into consideration and local candidature determined with reference to the maximum period of residence or in the case of equal period where he/she has resided last in such equal periods.
- If the claim for local candidature is based on study, the candidate is required to produce a certificate from the Educational Institution(s) where he/she has studied during the said 4/7-year period. If, however, it is based on residence, a certificate should be obtained from an officer of the Revenue Department not below the rank of a Mandal Revenue Officer in independent charge of a Mandal.
- If, however, a candidate has resided in more than one Mandal during the relevant four/seven years period but within the same District or Zone as the case may be separate certificates from the Mandal Revenue Officers exercising jurisdiction have to be obtained in respect of different areas.

**NOTE:**

- (A) Single certificate, whether of study or residence would suffice for enabling the candidate to apply as a "**LOCAL CANDIDATE**".
- (B) RESIDENCE CERTIFICATE WILL NOT BE ACCEPTED, IF A CANDIDATE HAS STUDIED IN ANY EDUCATIONAL INSTITUTION UPTO S.S.C. OR EQUIVALENT EXAMINATION, SUCH CANDIDATES HAVE TO PRODUCE STUDY CERTIFICATES INVARIABLY. **THE CANDIDATES, WHO ACQUIRED DEGREE FROM OPEN UNIVERSITIES WITHOUT STUDYING SSC/ MATRICULATION OR EQUIVALENT**

**IN EDUCATIONAL INSTITUTIONS, HAVE TO SUBMIT RESIDENCE CERTIFICATE ONLY. EDUCATIONAL INSTITUTIONS MEANS A RECOGNIZED INSTITUTION BY THE GOVERNMENT / UNIVERSITY/COMPETENT AUTHORITY.**

- (C) Candidates are advised to refer to provisions of the PRESIDENTIAL ORDER 1975 in this regard
- (D) At the time of verification, candidates who have migrated from Telangana to Andhra Pradesh in between 2<sup>nd</sup> June, 2014 and 1<sup>st</sup> June, 2017 shall produce local Status certificate as laid out in circular memo No.4136/SPF & MC/2015-5, Dated.08/08/2016.

**PARA - 5 HOW TO APPLY:**

**A) HOW TO UPLOAD THE APPLICATION FORM:**

(i) The Applicants have to read the User manual for On-Line submission of application and then proceed further. User manual is available at [www.psc.ap.gov.in](http://www.psc.ap.gov.in)

**I STEP:** The applicant has to fill the OTPR application to obtain ID Number. While filling the same, the candidates have to ensure that there are no mistakes in it. The Commission bears no responsibility for the mistakes, if any, made by the candidates.

**II STEP:** The applicant has to fill and submit Application and Click on the Link with Notification Number and Name, OTPR ID Number and Date of Birth to proceed further.

Applicant has to verify the details as obtained from OTPR database displayed on the screen. If any details are to be changed, applicant should go back to the website and use the Modify OTPR link. In addition to the details obtained from OTPR database, Notification specific details such as Examination City opted, eligibility and accepting declarations etc. are to be filled by the applicant. (Preview and Edit facility is available to make changes) and SUBMIT the application form. An Application Fee ID is generated and sent through the SMS/email after successful submission of application form, which is to be used for payment of Fee.

**III STEP:-** Once the Application Fee ID is generated, select the payment of Fee option for paying through either Net banking / Credit Card / Debit Card.

**IV STEP:-**After payment of fee, the PDF Application will be generated which contains the particulars furnished by the applicant. The Application Fee ID No in the PDF Application form has to be quoted for future reference/correspondence.

- Applicant shall note that, the details available with OTPR database at the time of submitting the application will be considered for the purpose of this notification. If, any changes are made by the applicant to OTPR database at a later date will not be considered for the purpose of this Notification.
- Hand written/ Typed/ Photostat copies/ outside printed Application Form will not be accepted and liable for rejection.
- iii) For any Technical problems related to Online submission and downloading of Hall Tickets please contact 040- 29802633 (Call Time: 10.30 A.M to 1.00 P.M && 1.30 P.M to 5.00 P.M) or mail to [appschelpdesk@gmail.com](mailto:appschelpdesk@gmail.com)

**NOTE:**

- The Commission is not responsible, for any omissions by the applicant in bio-data particulars while submitting the application form On-Line. The applicants are therefore, advised to strictly follow the instructions given in the User guide before submitting the application.
- All the candidates are requested to submit their application with correct data. It is noticed that some of the candidates are requesting for change in the data, after submission of the application. It is informed that such requests will not be entertained after one week of the last date of submission for application.
- The particulars furnished by the applicant in the Application Form will be taken as final, and data entry processed, based on these particulars only by Computer. Candidates should, therefore, be very careful in Uploading / Submitting the Application Form Online.
- INCOMPLETE/INCORRECT APPLICATION FORM WILL BE SUMMARILY REJECTED. THE INFORMATION IF ANY FURNISHED BY THE CANDIDATE SUBSEQUENTLY WILL NOT BE ENTERTAINED BY THE COMMISSION UNDER ANY CIRCUMSTANCES. APPLICANTS SHOULD BE CAREFUL IN FILLING-UP THE APPLICATION FORM AND SUBMISSION. IF ANY LAPSE IS DETECTED DURING THE SCRUTINY, THE CANDIDATURE WILL BE REJECTED EVEN

THOUGH HE/SHE COMES TO THE FINAL STAGE OF RECRUITMENT PROCESS OR EVEN AT A LATER STAGE.

- Before Uploading/Submission Application Form, the Candidates should carefully ensure his/her eligibility for this examination. NO RELEVANT COLUMN OF THE APPLICATION FORM SHOULD BE LEFT BLANK; OTHERWISE APPLICATION FORM WILL NOT BE ACCEPTED.

**PARA - 6: (a) FEE:**

***Applicant must pay Rs. 250/- (Rupees Two Hundred and Fifty Only) towards application processing fee.***

***Examination Fee:*** All candidates are exempted from payment of Fee.

**b) Mode of Payment of Fee:**

- The Fee mentioned in the above paragraph is to be paid through Payment Gateway or Net Banking/ Credit card / Debit Card. The list of Banks providing service for the purpose of online remittance of Fee will be appended separately.
- The fee once remitted shall not be refunded or adjusted under any circumstances. Failure to pay the examination fee, application fee will entail total rejection of application.
- IPOs / Demand Drafts are not accepted

**PARA-7: SCHEME OF EXAMINATION:-** The Scheme & Syllabus for the examination has been shown in Annexure-II

**PARA - 8: CENTRES FOR THE ON-LINE EXAMINATION (WRITTEN):**

The Main Examination will be held at **Vijayawada and Guntur** only.

THE SCREENING TEST WILL BE HELD AT VIJAYAWADA AND ALL DIST. HEAD QUARTERS in case the number of applicants exceeds 25,000. However the Commission reserves the right to allot the applicant to any centre of examination depending on the availability of the resources like centres / systems.

**PARA – 9 RESOLUTION OF DISPUTES RELATED TO QUESTION PAPER, ANSWER KEY AND OTHER MATTER**

In the case of objective type examination, the Commission would publish on its website, the key, after conduct of the examination. Any objections with regard to the key and any other matter shall be filed with in one week of the publication of the key on the website of the Commission.

The objections if any would be examined and the decision of the Commission in this regard shall be final. Any objection filed after expiry of one week from the date of publication of key would not be entertained.

**PARA -10 NOTE ON IMPORTANT LEGAL PROVISIONS GOVERNING THE RECRUITMENT PROCESS:**

- **Vacancies:** The recruitment will be made to the notified vacancies only. There shall be no waiting list as per G.O. Ms. No. 81 General Administration (Ser. A) Department, Dated 22/02/1997 and Rule 6 of APPSC Rules of procedure. In any case, no cognizance will be taken by Commission of any vacancies arising or reported after the completion of the selection and recruitment process or the last date as decided by the Commission as far as this Notification is concerned, and these will be further dealt with as per G.O. & Rule cited above.
- The Recruitment will be processed as per this Notification and also as per the Rules and Instructions issued by the Government and also as decided by the Commission from time to time in terms of respective Special Rules/ Adhoc Rules governing the Recruitment applicable in this regard.
- **Rules:** The various conditions and criterion prescribed herein are governed by the General Rules of A.P. State and Subordinate Service Rules, 1996 read with the relevant Special Rules applicable to any particular Service in the departments. Any guidelines or clarification is based on the said Rules, and, in case of any necessity, any matter will be processed as per the relevant General and Special Rules in force.
- The Rule of Reservation to the Local candidates is not applicable it is State wide post

- The Commission is empowered under the provisions of Article 315 and 320 of the Constitution of India read with relevant laws, rules, regulations and executive instructions and all other enabling legal provisions in this regard to conduct examination for appointment to the posts notified herein, duly following the principle of order of merit as per Rule 3(vi) of the APPSC Rules of Procedure read with relevant statutory provisions and ensuring that the whole recruitment and selection process is carried out with utmost regard to maintenance of secrecy and confidentiality so as to ensure that the principle of merit is scrupulously followed. A candidate shall be disqualified for appointment, if he himself or through relations or friends or any others has canvassed or endeavored to enlist for his candidature, extraneous support, whether from official or non-official sources for appointment to this service.
- The persons already in Government Service/ Autonomous bodies/ Government aided institutions etc., whether in permanent or temporary capacity or as work charged employees are however required to inform in writing, their Head of Office/ Department that they have applied for this recruitment.
- The Commission is also empowered to invoke the penal provisions of the other Public Examinations (Prevention of Malpractices and Unfair means) Act 25/97 for matters connected therewith or incidental thereto in respect of this Notification. Any regulations with reference to malpractices in force at the time of examination also will be applicable.
- Reservation and eligibility in terms of General Rule 22 of A.P. State and Subordinate Service Rules are applicable.
- Reservation to Disabled persons is subject to their eligibility to any of the above category of posts and shall be subject to Special Rules/Adhoc Rules governing the posts. The required extent of deformity and the genuineness of the Medical Certificate and in case of ambiguity or doubt, the same shall be referred to the Appellate Medical Boards as per the instructions of the Government Orders of Hon'ble Supreme Court with reference to reservations for PH will be applied.
- The Reservation to Women will apply as per G.O. Ms. No. 40, DWCD & SC (Prog. II) Dt. 25/07/2016.

**PARA- 11 Please read the following Annexures appended to the notification before filling the application form**

Annexure- I- Break up of vacancies

Annexure- II- Scheme & Syllabus

Annexure- III- Instructions to candidates

**PARA-12: PROCEDURE OF SELECTION:**

Incase screening test is conducted as referred above, based on the Merit in screening test, candidates will be picked up in the ratio 50 per one notified post for the main examination, in order of General Merit. In case where no screening test is held, all the eligible applicants would be allowed to appear for the main examination.

THE FINAL SELECTION OF CANDIDATES FOR APPOINTMENT TO THE POSTS SHALL BE BASED ON THE MERIT IN THE COMPUTER BASED MAIN EXAMINATION, TO BE HELD AS PER THE SCHEME OF EXAMINATION ENUNCIATED AT PARA 7 ABOVE.

1. The minimum qualifying marks in the examination for consideration of a candidate to the selection process in case of OC category is 40%, BC category is 35% and for SC, ST and PH categories is 30% or as per the relevant rules. The minimum qualifying mark is relaxable in the case of SC/ST/BC/PH at the discretion of the Commission.
2. The candidates will be selected and allotted to Service/ Department as per their rank in the merit list.

N.B.: Mere securing of minimum qualifying marks does not confer any right to the candidate for being considered to the selection.

3. Appearance in all the papers is compulsory. Absence in any of the papers will automatically render the disqualification of the candidate.
4. Any candidate shall produce Original documents, as and when called for by the Commission for certificate verification. If any candidate fails to produce the certificates and/or the particulars furnished in the Application do not tally with the Original documents produced

by the candidate, his/her candidature will be rejected and he/she would be disqualified without any further correspondence. As candidature for the recruitment is processed through Computer/Electronic devices based on the particulars furnished in the Application Form, the candidate is advised to fill in all the relevant particulars carefully.

5. While the Commission calls for preference of candidates in respect of Posts in the Application Form, it is hereby clarified that the said preferences are only indicative for being considered to the extent possible but not binding or limiting the Commission's powers enjoyed under Article 315 and 320 of the Constitution of India. Therefore, the Commission has the power to assign a successful candidate to any of the notified posts for which he is considered by them to be qualified and eligible, subject to fulfilling the selection criterion.

6. The appointment of selected candidates will be subject to their being found medically fit in the appropriate medical classification, and if he/she is of sound health, active habits free from any bodily defect or infirmity.

**PARA-13: DEBARMENT:**

- Candidates should make sure of their eligibility to the post applied for and that the declaration made by them in the format of application regarding their eligibility is correct in all respects. Any candidate furnishing in-correct information or making false declaration regarding his/her eligibility at any stage or suppressing any information is liable TO BE DEBARRED FOR FIVE YEARS FROM APPEARING FOR ANY OF THE EXAMINATIONS CONDUCTED BY THE COMMISSION, and summary rejection of their candidature for this recruitment.
- The Penal Provisions of Act 25/97 published in the A.P. Gazette No. 35, Part-IV.B Extraordinary dated: 21/08/1997 shall be invoked if malpractice and unfair means are noticed at any stage of the recruitment. Further candidates shall be liable for penalty as per G.O. Ms. No.385, G.A (Ser-A) Dept, Dt.18.10.2016. The Chief Superintendent of the examination centre is authorized to take decision in case of malpractice or usage of unfair means or creation of disturbance or use of physical force by any candidate and report the matter to the competent authority as well register a police case.
- The Commission is vested with the constitutional duty of conducting recruitment and selection as per rules duly maintaining utmost secrecy and confidentiality in this process and any attempt by anyone causing or likely to cause breach of this constitutional duty in such manner or by such action as to violate or likely to violate the fair practices followed and ensured by the Commission will be sufficient cause for rendering such questionable means as ground for debarment and penal consequences as per law and rules as per decision of the Commission.
- Any candidate found impersonating or procuring impersonation by any person or resorting to any other irregular or improper means in connection with his / her candidature for selection or obtaining support of candidature by any means, such a candidate may in addition to rendering himself/ herself liable to criminal prosecution, will be liable to be debarred permanently from any exam or selection held by the Service Commissions in the country.
- **MEMORANDUM OF MARKS:** Answer key would be published on the website and also as marks of each candidate are also displayed on website no separate memorandum of marks would be issued.

**PARA-14: COMMISSION'S DECISION TO BE FINAL:**

The decision of the Commission in all aspects and all respects pertaining to the application and its acceptance or rejection as the case may be, conduct of examination and at all consequent stages culminating in the selection or otherwise of any candidate shall be final in all respects and binding on all concerned, under the powers vested with it under Article 315 and 320 of the Constitution of India. Commission also reserves its right to alter and modify the terms and conditions laid down in the notification for conducting the various stages up to selection, duly intimating details thereof to all concerned, as warranted by any unforeseen circumstances arising during the course of this process, or as deemed necessary by the Commission at any stage.

HYDERABAD  
DATE:30/03/2017

Sd/-  
SECRETARY

**Annexure – I****Break up of disabled backlog vacancies**

Sl. No	Name of the Post	No. of Vacancies
01	Assistant Director of Horticulture in A.P Horticulture Services (State wide)	01 VH(W)

**Annexure-II****SCHEME AND SYLLABUS FOR THE POST OF ASSISTANT DIRECTOR OF HORTICULTURE IN AP HORTICULTURE SERVICE****SCHEME**

Objective Type Examination		Max. Marks	No. Questions	Duration
<b>PAPER - I</b>	General Studies & Mental Ability	150 Marks	150 Questions.	150 Minutes
<b>PAPER - II</b>	Horticulture	150 Marks	150 Questions.	150 Minutes
<b>PAPER - III</b>	Horticulture	150 Marks	150 Questions.	150 Minutes
Total Marks		450 Marks		
<b>NEGATIVE MARKS: As per G.O.Ms. No.235, Finance (HR-I, Plg &amp; Policy) Dept., Dt. 06/12/2016, for each wrong answer will be penalized with 1/3<sup>rd</sup> of the marks prescribed for the question.</b>				

**SYLLABUS****PAPER - I****GENERAL STUDIES & MENTAL ABILITY**

1. Events of national and international importance.
2. Current affairs- international, national and regional.
3. General Science and its applications to the day to day life Contemporary developments in Science & Technology and Information Technology
4. Social- economic and political history of modern India with emphasis on Indian national movement.
5. Indian polity and governance: constitutional issues, public policy, reforms and e-governance initiatives.
6. Economic development in India since independence.
7. Geography of India with focus on Andhra Pradesh.
8. Disaster management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster
9. Sustainable Development and Environmental Protection
10. Logical reasoning, analytical ability and data interpretation.
11. Data Analysis:  
Tabulation of data  
Visual representation of data  
Basic data analysis (Summary Statistics such as mean and variance coefficient of variation etc.) and Interpretation
12. Bifurcation of Andhra Pradesh and its Administrative, Economic, Social, Cultural, Political, and legal implications /problems, including
  - a). Loss of capital city, challenges in building new capital and its financial implications.
  - b). Division and rebuilding of common Institutions.
  - c). Division of employees, their relocation and nativity issues.
  - d). Effect of bifurcation on commerce and entrepreneurs.
  - e). Implications to financial resources of state government.
  - f). Task of post-bifurcation infrastructure development and opportunities for investments.
  - g). Socioeconomic, cultural and demographic impact of bifurcation.
  - h). Impact of bifurcation on river water sharing and consequential issues.
  - i). AP REORGANISATION ACT, 2014 on AP and the arbitrariness of certain provisions.

## **HORTICULTURE - PAPER-II**

### **PART-A**

#### **1. FUNDAMENTALS OF HORTICULTURE**

Definition, importance of horticulture in terms of economy, productions, and employment generation. Nutritional value of horticultural crops. Divisions of horticulture and their importance. Horticultural stations in Andhra Pradesh. Horticultural zones of India and Andhra Pradesh.

Temperature, light, humidity, rainfall and soil requirements for horticultural crops. Selection of site for establishing an orchard, orchard plan, systems of planting and establishment of an orchard. Importance, scope and practicing of organic farming in horticultural crop production.

Nutrition of horticultural crops-assessment of nutritional requirements based on soil, tissue analysis, and field requirements. Identification of deficiency symptoms of a various nutrients and methods of nutrient application. Assessment of irrigation requirements for different horticultural crops and different methods of irrigation. Pruning and training their objectives and methods. Pollination and fruit set, problems and requirements, flower and fruit drop, stage, causes and remedial measures. Fruit thinning, objectives advantages and disadvantages. Unfruitfulness, reasons and remedial measures.

#### **2. PLANT PROPAGATION AND NURSERY MANAGEMENT**

Introduction, principles and classification and plant propagation methods. Selection of site for commercial nursery. Ecological and economic factors. Plant propagation structures, containers and media.

Sexual propagation and its importance. Seed germination, process of seed germination. Factors affecting seed germination and pre-germination treatments and viability tests.

A Sexual propagation and its importance. Propagation of plants by cuttage, types of cuttings and factors affecting regeneration of plants from cuttings. Propagation by layerage. Methods of layerage. Factors affecting regeneration of plants by layerage.

Propagation by grafting and importance of graftage. Methods of grafting. Factors for successful graft formation and steps in graft union. Methods of budding and bud wood selection. Role of rootstocks in fruit production. Selection of rootstocks for commercial fruit plants. Production of nursery stock. Propagation of various fruit and ornamental plants. Role growth regulators in propagation.

Importance of micro propagation of plants. Types of aseptic cultures. Types of media, preparation of media and inoculation of explants, establishment, sub culture and rooting of explants.

Establishing of in vitro rooted cuttings in growing media and hardening.

#### **3. FRUIT CROPS**

Area, production importance, uses, origin, distribution, botany, classification of varieties, use of rootstocks, high density planting, climate, soils, planting methods, training and pruning, nutrition, irrigation scheduling, intercrops, weed control, problems in orchard management, flowering, fruit set, problems in fruit set, harvesting indices, harvesting, pre harvest treatments, use of growth regulators, yield, grading, packing for internal and export markets, ripening methods and storage in respect of mango, banana, citrus, grape, pineapple, guava, papaya and sapota.

### **PART-B**

#### **4. VEGETABLE CROPS**

Importance of vegetables in human diet and national economy. Detailed study regarding origin and distribution area and production, importance, nutritive value, botany, varieties, soil and climatic requirements, seed treatment, seed sowing/nursery raising, transplanting nutrition irrigation intercultural operations physiological disorders, harvest indices, harvesting, post harvest handling curing storage and usage of plant growth regulators in vegetable crops like tomato, brinjal, chillies, sweet pepper, potato, okra, cucurbitaceous crops like cucumber, pumpkin, ridge gourd, snake gourd, bitter gourd, bottle gourd, melons like water melon and musk melon, leguminous vegetables like cluster bean, French bean, dolichos bean, pea and broad bean, cole crops like cabbage, cauliflower and knolkhol, root crops like radish, carrot, beetroot and turnip, bulb crops like onion and garlic, tuber crops like sweet potato, tapioca, amorphophallus, colacasia, dioscorea and



yam, leafy vegetables like amaranthus, palak , Roselle, perennial vegetables like drumstick , coccinia and murraya.

## **5.PRESERVATION OF FRUITS AND VEGETABLES**

Importance and scope of fruit and vegetable preservation in India .Principles of preservation by heat, low temperature, chemicals and various methods of preservation .Selection of site for processing , processing unit layout and precautions for hygienic conditions of the unit . Preservation of fruits and vegetables through canning, bottling, freezing, dehydration , drying , ultraviolet and ionizing radiations.

Micro –organisms associated with spoilage of fruit and vegetables products .Spoilage of canned products-hydrogen swell, filipper, dent, leaker etc., Biochemical changes associated with spoilage of fruit and vegetable products. Preservatives and colours permitted and prohibited in India.

Different kinds of equipments used in processing. Preparation of jams, jellies, marmalades, candies, crystallized and glazed fruits, preserves, chutneys, pickles, ketchup, sauce, puree, syrups, juices, squashes and cordials.

## **6. PLANT PHYSIOLOGY (INCLUDING C3&C4 PLANT) PHOTOSYTHESIS RESPIRATION ETC., GROWTH REGULATION & HARMONES**

Nomenclature of plant growth substances. Plant growth substances and their classification. History, occurrence, distribution, mode of action, movement, mechanism of action and function of auxins, gibberellins, cytokinins, ethylene, inhibitors, retardants, phenolic substances and morphactins.

Role of plant growth regulators in seed and bud dormancy, juvenility, maturity and senescence, flowering, pollination, fruitset including parthenocarpy, fruit growth, fruit drop and fruit ripening (Climacteric and non-climacteric) and fruit colour development, tuber and bulb formation and sex expression and extension of shelf life in fruits, vegetables and flowers. Role of growth regulators in plant propagation.

### **6(a) ENTOMOLOGY**

Commonly occurring pests, life cycle of pests, control measures.

### **6(b) PATHOLOGY**

Commonly occurring disease, life cycle of bacteria, fungal parasites, control measures.

## **HORTICULTURE - PAPER-III**

### **Part-A**

#### **1.COMMERCIAL FLORICULTURE**

Area, production, importance, uses, origin, distribution, classification of varieties , propagation, environmental factors affecting growth and flowering soils, nutrition, irrigation weeding, special techniques of production such as controlling growth and production of flowers . use of growth regulators, harvesting, postharvest handling, extension of shelf life of flowers of commercial flowers crops such as rose, chrysanthemum, jasmine, camations, gladiolus , anthurium , tuberose , china aster marigold , crossandra and gerbera.

#### **2.GREENHOUSE MANAGEMENT OF HORTICULTURAL CROPS**

Importance, uses ,scope and production of horticultural crops in greenhouse .Status and development of greenhouse production of horticultural crops in the world and India. Development, constraints, research needs and future of protected culture of horticultural crops in India and A.P. Points to be considered before establishing a greenhouse. Types of greenhouses, classification of greenhouses based on the shapes, material used, utility and cladding material used. Size and arrangement of greenhouses and characteristics of various greenhouse cladding materials, greenhouse benches etc.,

Management of light, temperature (greenhouse heating and cooling), CO<sub>2</sub> and relative humidity inside the greenhouse.

Various types of growing media used and their suitability for different horticultural crops. Preparation of growing media and its pasteurization . Management of nutrients through fertigation.

Detailed production technology in respect of tomato, cucumber, rose, carnation, gerbera, chrysanthemum and anthurium under greenhouse /polyhouse.

#### **3.MEDICAL, AROMATIC, SPICE, CONDIMENT AND PLANTATION CROPS**

Origen, importance, export potential, varieties, climate, soil requirements, propagation and planting and after care, maring, irrigation, training, pruning, harvesting, yield and post harvest handling, curing and processing practices, storage methods, and distillation of essential oils of the following crops.

#### **Medicinal plants**

Aloe, amla (aonla), stevia, ashwagandha, dioscorea, opium poppy, sarpangandha, steroids bearing solanum, phyllanthus amarus, chakramani, madhunasaini, sweet flag, Catharanthus, roseus, isabgol, fox glove, belladonna, senna, tinospora, annatto, coleus, safed musli and asparagus.

#### **Aromatic crops**

Citronella, lemon grass, palmarosa, vetiver, geranium, davana, mint lavender and vanilla.

#### **Spices and condiments**

Turmeric, ginger, coriander, fenugreek, cardamom, pepper, cinnamon, clove, nutmeg and cumin.

#### **Plantation crops**

Coconut, cashewnut, oil palm, betelvine, coffee, tea cacao, arecanut and rubber.

### **PART-B**

#### **4. ORNAMENTAL GARDENING AND LANDSCAPE ARCHITECTURE**

Need for bioaesthetic planning, places suitable for bioaesthetic planning –towns, cities, villages, schools, temples, road side, parks, ghats of rivers and canals, platforms, railway lines, public and private buildings, institutes and places of worship. Study of ornamental trees, shrubs and climbers used in bioaesthetic or landscape gardening. Study of cacti, succulents and bonsai. Principles of garden designs types of gardens-japanese, English and Moghul gardens. Various features of gardens such as paths, garden walls, fencing, steps, edges, hedges, arches, pergolas, shrubbery, topiary, rockery, flower beds, lawns, fountains, statues, water garden, conservatory and glass or greenhouse. Indoor plants, and their management.

Flower arrangement-principles, styles, containers and holding solutions.

#### **5. DRYLAND HORTICULTURE AND WATERSHED MANAGEMENT**

Dry land horticulture farming, introduction, definition, dry climate and their classifications with reference to India in general and Andhra Pradesh in particular. Importance of horticultural crops in dry land, yield potential of agriculture and horticulture crops in dry lands. Fruits and vegetables crops suitable for dry land farming. Adaptive features of dry land fruit crops for drought and salinity.

Watershed management, objectives, approaches, steps in watershed development planning, land use capability, classification, soil and rain water conservation, water harvesting measures in watershed area. Problems and prospects under water shed. Alternate water use system.

Cultural practices like planting, training, pruning, nutrition and water management and harvesting of important dry land fruits viz., ber, pomegranate, custard apple, phalsa, fig, aonla, jamun and tamarind.

#### **6. SOCIAL AND FARM FORESTRY**

Introduction – forests in India, forest policy and law, gap between demand and supply of forest products. Principles of general silviculture.

Social forestry – need, objectives and scope, choice of species for fuelwood, fodder, smaller timber and timber, their culture, propagation, application of agro- techniques and economic benefits, management of social forestry plantations nurseries and their practices.

Afforestation on different problematic sites. Voluntary organizations and their role in promoting afforestation programmes. Maintenance and conservation of village woodlots. Energy plantations. Social forestry for watershed management.

Farm forestry- objectives and role, need for shelter belts and wind breaks, types of farm forestry.

Agroforestry –need, objectives, scope, principles and practices of agroforestry systems, choice of the tree species and management implications

Forest products, their processing and use.

### **Annexure-III**

#### **INSTRUCTIONS TO CANDIDATES:**

##### **A) INSTRUCTIONS TO CANDIDATES:**

- THE APPLICANTS ARE REQUIRED TO GO THROUGH THE USER GUIDE AND SATISFY THEMSELVES AS TO THEIR ELIGIBILITY FOR THIS RECRUITMENT CAREFULLY BEFORE APPLYING AND ENTER THE PARTICULARS COMPLETELY ONLINE.
- APPLICANT MUST COMPULSORILY FILL-UP ALL RELEVANT COLUMNS OF APPLICATION AND SUBMIT APPLICATION THROUGH WEBSITE ONLY. THE PARTICULARS MADE AVAILABLE IN THE WEBSITE SHALL BE PROCESSED THROUGH COMPUTER AND THE ELIGIBILITY DECIDED IN TERMS OF NOTIFICATION AND CONFIRMED ACCORDINGLY.
- THE APPLICATIONS RECEIVED ONLINE IN THE PRESCRIBED PROFORMA AVAILABLE IN THE WEBSITE AND WITHIN THE TIME SHALL ONLY BE CONSIDERED AND THE COMMISSION WILL NOT BE HELD RESPONSIBLE FOR ANY KIND OF DISCREPANCY.
- APPLICANTS MUST COMPULSORILY UPLOAD HIS/HER OWN SCANNED PHOTO AND SIGNATURE THROUGH J.P.G FORMAT.
- THE APPLICANTS SHOULD NOT FURNISH ANY PARTICULARS THAT ARE FALSE, TAMPERED, FABRICATED OR SUPPRESS ANY MATERIAL INFORMATION WHILE MAKING AN APPLICATION THROUGH WEBSITE.
- **IMPORTANT:-** HAND WRITTEN/TYPED/PHOTOSTAT COPIES/PRINTED APPLICATION FORM WILL NOT BE ENTERTAINED.

THE APPLICANT SHALL PRODUCE ALL THE ESSENTIAL CERTIFICATES ISSUED BY THE COMPETENT AUTHORITY, FOR VERIFICATION BY THE COMMISSION, AS AND WHEN CALLED FOR. IF CANDIDATES FAIL TO PRODUCE THE SAME, HIS/HER CANDIDATURE SHALL BE REJECTED / DISQUALIFIED WITHOUT ANY FURTHER CORRESPONDENCE.

**The following certificate formats are available on the Commission's Website ([www.psc.ap.gov.in](http://www.psc.ap.gov.in)) for reference.**

- **Community, Nativity and Date of Birth Certificate**
- **Declaration by the Un-Employed**
- **School Study Certificate**
- **Certificate of Residence**
- **a) Medical Certificate for the Blind**
- **b) Certificate of Hearing Disability and Hearing Assessment**
- **c) Medical Certificate in respect of Orthopedically Handicapped Candidates**
- **Creamy Layer Certificate**
- **Local status certificate (if applicable)**

##### **B) INSTRUCTIONS REGARDING OFF-LINE EXAMINATION FOR CANDIDATES:**

1. The candidates should go through the instructions given on the cover page of test booklet and carefully write his/her Registration Number, Subject / Subject Code, Booklet Series, Name of the Examination Centre etc., in the Answer Sheet, which will be provided to him/her in the examination hall.
2. Since the answer sheets are to be scanned (valued) with Optical Mark Scanner system, the candidates have to USE BALL POINT PEN (BLUE/BLACK) ONLY FOR MARKING THE ANSWERS. The candidates will be supplied OMR Sheet consisting of two copies i.e., the Original Copy (Top Sheet) and Duplicate Copy (Bottom Sheet). The candidate is required to use Ball Point Pen (Blue or Black) for filling the relevant blocks in the OMR Sheet including bubbling the answers. After writing the examination the candidate has to handover the original OMR sheet (Top Sheet) to the invigilator in the examination hall. If any candidate takes away the original OMR Sheet (Top Sheet) his/her candidature will be rejected. However the candidate is permitted to take away the duplicate (Bottom Sheet) OMR Sheet for his/her record. The candidates should bring Ball Point Pen (Blue/Black and smooth writing pad) to fill up relevant columns on

the Answer Sheet. The candidate must ensure encoding the Registration Number, Subject/Subject Code, Booklet Series correctly, write the Name of the Examination Centre, appending Signatures of the Candidate and Invigilator, etc., on the O.M.R. Answer sheet correctly, failing which the Answer sheet will not be valued. Use of whitener / correcting fluid / Blade / Powder/ Eraser / folding / Tearing / Rough Work or any kind of tampering to change the answers on OMR Sheet will lead to disqualification / invalidation / rejection. No correspondence whatsoever will be entertained from the candidates in this regard.

- 3) The OMR Sheet is to be bubbled by Ball Point Pen (Blue/Black) only. Use of any other colour like whitener etc., shall make the answer sheet invalid. Bubbling by Pencil / Ink Pen / Gel Pen is not permitted in this examination. Any kind of tampering to change the answers on the OMR Sheet will lead to disqualification / invalidation / rejection. No correspondence whatsoever will be entertained from the candidates in this regard.

**C) INSTRUCTIONS REGARDING ON-LINE EXAMINATION FOR CANDIDATES:**

1) The candidates should take their seats at the prescribed time before the commencement of the examination. Biometric identification would be conducted before entry into examination hall. The entry time would be mentioned in the hall ticket. Late entry after the given entry time would not be allowed. Candidates should not leave the examination hall till the expiry of fulltime. Loaning and interchanging of articles among the candidates is not permitted in the examination hall. Electronic devices including cell phones and pagers are not allowed in the examination hall. Non programmable calculators would be permitted, wherever necessary.

2) *The starting time of each examination paper and the entry time would be mentioned in the hall ticket*

3) *The examination link with the login screen will already be available on your system. Please inform the invigilator if this is not the case.*

4) *10 minutes prior to the exam, you'll be prompted to login. Please type the Login ID (Roll No) and the Password (Password for Candidate will be given on exam day) to proceed further.*

5) *Invigilator will announce the password at 09.50 AM and 02.20 PM.*

6) *Copying or noting down questions and/or options is not allowed. Severe action will be taken if any candidate is found noting down the questions and/or options.*

7) *After logging in, your screen will display:*

*\*Profile Information - Check the details & click on "I Confirm" or "I Deny".*

*\*Detailed exam instructions - Please read and understand thoroughly.*

*\*Please click on the "I am ready to Begin" button, after reading the instructions.*

8) *You have to use the mouse to answer the multiple choice type questions with FOUR alternative answers.*

9) *To answer any numerical answer type question, you need to use the virtual numeric key pad and the mouse.*

10) *On the online exam question screen, the timer will display the balance time remaining for the completion of exam.*

11) *The question numbers are color coordinated and of different shapes based on the process of recording your response: White (Square) - For un-attempted questions. Red (Inverted Pentagon) - For unanswered questions. Green (Pentagon) - For attempted questions. Violet (Circle) - Question marked by candidate for review, to be answered later. Violet (Circle with a Tick mark) - Question answered and marked by candidate for review.*

12) *After answering a question, click the SAVE & NEXT button to save your response and move onto the next question.*

13) *Click on Mark for Review & NEXT to mark your question for review, and then go to the next question.*

14) *To clear any answer chosen for a particular question, please click on the CLEAR RESPONSE button.*

15) *A summary of each section, (i.e. questions answered, not answered, marked for review) is available for each section. You have to place the cursor over the section name for this summary.*

16) In case you wish to view a larger font size, please inform the Invigilator. On the Invigilator's confirmation, click on the font size you wish to select. The font size will be visible on the top.

17) You may view INSTRUCTIONS at any point of time during exam, by clicking on the INSTRUCTIONS button on your screen.

18) The SUBMIT button will be activated after 150 Minutes. Please keep checking the timer on your screen.

19) In case of automatic or manual log out, all your attempted responses will be saved. Also, the exam will start from the time where it had stopped.

20) You will be provided a blank sheet for rough work. Do write your Login ID and Password on it. Please ensure that you return it to the invigilator at the end of the exam after tearing only the password from it.

21) Please don't touch the key board as your exam ID will get locked. If your ID gets locked, please inform a nearby invigilator who will help in unlocking your ID and then you can continue with the exam.

22) Please inform the invigilator in case of any technical issues.

23) Please do not talk to or disturb other candidates.

24) In case you are carrying articles other than the admit card, photo identity proof and pen, please leave them outside the exam room.

25) You cannot leave exam room before submitting the paper. Please inform the invigilator if you want to use the wash room.

**D) GENERAL INSTRUCTIONS TO CANDIDATES:**

1) If the candidate notices any discrepancy printed on the Hall ticket, as to community, date of birth etc., he/she may immediately bring it to the notice of Commission's officials/Chief Superintendent in the examination centre and necessary corrections can be made in the Nominal Roll, in the Examination Hall against his/her Hall Ticket Number for being verified by the Commission's Office.

2) The candidate should satisfy the Invigilator of his/her identity with reference to the signature and photographs available on the Nominal Rolls and Hall Ticket.

3) The candidates should take their seats at the given time before the commencement of the examination and are not to be allowed after of the scheduled time. The time of Examination and entry time would be mentioned in the hall ticket. Late entry after the given entry time would not be allowed. Candidates should not leave the examination hall till the expiry of fulltime.

4) The candidates must note that his/her admission to the examination is strictly provisional. The mere fact that an Admission to the examination does not imply that his/her candidature has been finally cleared by the Commission or that the entries made by the candidate in his/her application have been accepted by the Commission as true and correct. The candidates have to be found suitable after verification of original certificates; and other eligibility criteria. The Applicants have to upload his/her scanned recent colour passport photo and signature to the Application Form. Failure to produce the same photograph, if required, at the time of interview/ verification, may lead to disqualification. Hence the candidates are advised not to change their appearance till the recruitment process is complete.

5) The candidates are not allowed to bring any Electronic devices such as mobile / cellphones, programmable calculators, tablets, iPad, Bluetooth, pagers, watches or any other computing devices to examination Hall. Non programmable calculators would be permitted, wherever necessary. Loaning and interchanging of articles among the candidates is not permitted in the examination hall and any form of malpractice will not be permitted in the exam hall.

6) The candidates are expected to behave in orderly and disciplined manner while writing the examination. The candidature will be rejected and in case of impersonation/ disorder/ rowdy behaviour during Examination, necessary F.I.R. for this incident will be lodged with concerned Police Station, apart from disqualifying his / her candidature. The chief superintendent of the centre is authorize to take spot decision in this matter.

7) Candidates trying to use unfair means shall be disqualified from the selection. No correspondence whatsoever will be entertained from the candidates.

8) The Penal Provisions of Act 25/97 published in the A.P. Gazette No. 35, Part-IV.B Extraordinary dated: 21/08/1997 shall be invoked if malpractice and unfair means are

*noticed at any stage of the Examination. Action will be taken to penalize as per any other Regulations/Rules in force as on date of examination.*

6). (a) Wherever the candidates who are totally blind will be provided a scribe to write the examination and 20 minutes extra time is permitted to them per hour. Eligible candidates are also allowed to bring their own scribe after due intimation to the Commission after duly providing the full identification details of the scribe like name, address and appropriate proof of identification.

(b) The applicants shall upload the certificate relating to percentage of disability for considering the appointment of scribe in the examination.

(c) An extra time of 20 minutes per hour is also permitted for the candidates with locomotor disability and CEREBRAL PALSY where dominant (writing) extremity is affected for the extent slowing the performance of function (Minimum of 40% impairment). No scribe is allowed to such candidates.

(d) The candidate as well as the scribe will have to give a suitable undertaking confirming the rules applicable

9). In case the Hall-Ticket is without photo or too small, he/she should affix a passport size photo on Hall-ticket and appear by duly getting attested by Gazetted Officer. He/she shall handover similar photo for each paper to Chief Superintendent for affixing the same on the Nominal Rolls.

10) The candidate will not be admitted to the examination Hall without procedural formalities.

11) The candidate's admission to the Examination is provisional, subject to the eligibility, confirmation/satisfaction of conditions laid down in this Notification.

12) The candidates should put his/ her signature and get the signature of the invigilator at the appropriate places in the Nominal Roll or OMR Answer Sheet.

13) Instructions to be followed scrupulously in the Examination Hall.