SCHEME OF EXAMINATION and SYLLABUS FOR VILLAGE HORTICULTURE ASSISTANTS

PART-A
GENERAL STUDIES AND MENTAL ABILITY

1. General Mental ability and reasoning.
2. Quantitative aptitude including data interpretation.
3. General English.
5. General Science and its applications to the day to day life, Contemporary development in science and Technology and information Technology.
6. History & Culture of India with specific focus on AP.
7. Indian polity and governance: constitutional issues, 73/74th Amendments, public policy, reforms ad centre – state relations with specific reference to Andhra Pradesh.

**PART-B**

**HORTICULTURE**

1. **FUNDAMENTALS OF HORTICULTURE**

2. **PLANT PROPAGATION AND NURSERY MANAGEMENT**

3. **OLERICULTURE**
   Food security importance of vegetable in Indian economy and nutritional value Olericulture – varieties soil climate requirements – seed treatment – nursery transplanting - after care – fertilizer management - inter cultivation – irrigation harvesting storage – nutritional deficiency symptoms – use of growth regulators in the following crops – fruit vegetables (tomato, brinjal, bendi, chillies) – cucurbitaceous vegetables (bottle guard, bitter guard, musk melon, water melon, squashes and pumpkins) – leguminaceous vegetables (cluster bean, french bean, garden bean, cowpea and peas) – cole crops (cabbage, cauliflower) - root vegetables (radish, carrot, beetroot and turnip) – bulbs & tubers (onion, garlic, potato, sweet potato, tapioca, elephant foot yarn, colocasia) – leafy vegetables (amaranths, menthi, palak, spinach, hibiscus) – perennial vegetables (parawal, drumstick, curry leaf, coccinea).
4. FUNDAMENTALS OF SOIL SCIENCE

5. FARM POWER, AGRICULTURAL MACHINERY AND STRUCTURES

6. FARM MANAGEMENT, AGRICULTURAL FINANCE AND MARKETING

7. TROPICAL FRUIT CULTURE

8. SPICES AND PLANTATION CROPS
TURMERIC, GINGER, CORIENDER, FENUGREEK), PLANTATION CROPS (COCONUT, CASHEW NUT, OIL PALM, ARECANUT, BETELVINE, COCOA, COFFEA)

9. VALUE ADDED PRODUCTS OF FRUITS AND VEGETABLES
Methods of preparing value added products – jam, jelly, marmalade, candies, crystallized and glazed fruit preserves, pickles preserves – ketchup, sass, toti - fruiti syrup, fresh fruit juices, squash and cordials, fermented beverages – making methods.

10. MANURES AND FERTILIZERS

11. DISEASES OF HORTICULTURAL CROPS AND THEIR MANAGEMENT

12. SOIL AND WATER ENGINEERING
13. **SUB TROPICAL AND ARID FRUIT CULTURE**


14. **COMMERCIAL FLORICULTURE**

Growing methods, importance, origin, classification, species, varieties, soil climatic requirements, propagation, spacing, irrigation, fertilizers, Intercultivation, training and pruning special horticultural practices use of growth regulators, determination of harvesting stage, harvest, yield post harvest methods and flower drying methods for important commercial flower crops – Rose, Crossandra, Jasmin Chrysanthemum, Gladiolus, Michelia, China Aster, Marrigold, Anthurium, Carnation, Gerbera, Dahlia And Orchids.

15. **SEED PRODUCTION, CERTIFICATION AND VARIETAL TESTING**


16. **PEST MANAGEMENT OF HORTICULTURAL CROPS AND APICULTURE**

17. POST HARVEST MANAGEMENT OF HORTICULTURAL CROPS


18. ORNAMENTAL GARDENING AND LANDSCAPE ARCHITECTURE


19. MEDICINAL AND AROMATIC CROPS CULTIVATION

Origin, history, area, production, importance, uses, varieties, soil water requirements propagation, planting, inter cultivation, fertilizer, irrigation, training and pruning, harvest and processing in the medicinal (Dioscorea, Sarpagandha, kasivanga, Pyrethrum, Catharanthus, Poppy, Aswagandha, Amla, Aloevera, Cassia, Plantago, Isabgul and tulsi ) and aromatic crops (kamakshi kasupu, lemon grass, rosha grass, paneer, vetiver, davanam, nilgiri, pudina, vanilla, rose and jasmine)

20. PROTECTED CULTIVATION OF VEGETABLES AND FLOWERS.

Protected cultivation, introduction, importance, green house, poly house, definition, points to remember while construction, advantages over conventional open field cultivation – problems in green house – structures, site, types sizes of green houses – soil less media, sterilization – light and air – ventilation – fertigation – nutrient management through water soluble fertilizers in green houses – green house cultivation of rose, gerbera, tomato and capsicum varieties correction of nutrient deficiencies of plant protection and post harvest technology.

21. DRYLAND HORTICULTURE AND WATER SHED MANAGEMENT


22. HORTICULTURAL EXTENSION, TEACHING METHODS AND COMMUNICATION SKILLS

Horticultural Extension – concepts, aim, objective – principles are effective horticultural extension in villages – extension teaching methods – concept, classifications – personal relations, group relations, community relations, concept advantages and limitations – audio visual aids, concept, classification their importance in extension – visual aids (posters, charts, flannel graphs, flashcards) – horticultural information aids (leaflet, folder, circular, letter, information bulletin) – concept, planning, preparation – audio aids – concept, radio and tape recorder use in horticultural extension – communication skills – English vocabulary, active and passive voice, direct and indirect speech, use of articles, synonyms, antonyms, letter writing, referring dictionary, preparation of bio data and preparation of reports.

Note:- Multiple choice objective type questions will be based on syllabus prescribed for 2 years diploma course in Horticulture by Dr. YSR Horticultural University, Andhra Pradesh.