

**SEMESTER FINAL EXAMINATION 2015-16**  
**COLLEGE OF HORTICULTURE**  
**VCSG Uttarakhand University of Horticulture & Forestry, Bharsar-246 123**  
**Pauni Garhwal, Uttarakhand**

Programme: B.Sc. (Hons.) Horticulture  
 Course Title: JRF  
 Credit Hours: .....  
 Max. Marks: 150.00 Marks

Roll No. .... 13014(anil Rana.....  
 Date of Examination:  
 Time: 09:30am - 12:30pm(3Hrs.)  
 2015-16

Note: (i) All the questions are compulsory, cutting & over writing is not allowed.  
 (ii) The question paper consists of two parts, Part-I (objective) of 20.00 marks and the Part-II (subjective) of 30.00 marks.  
 (iii) Write the answer of Part-1 on the question paper itself.

1. Deficiency of proteins results in - a. Beriberi b. **Kwashiorkar** c. Rickets d. Anaemia
2. Night blindness is due to the deficiency of a. **Vitamin a** b. Vitamin b c. Vitamin c d. Vitamin d.
3. Which of these mineral elements present larger quantities in vegetables compare to food materials. Ca, Fe and P b. K, n and p c. Mg, s and an d. N, k and mn.
4. Lack of vitamin c in our body leads to a. Scurvy b. **Ulcer** c. Rickets d. Indigestion
5. The average productivity of vegetables in India a. **15T/ha** b. 25T/ha c. 10T/ha d. 20 t/ha
6. As per ICMR, what is the percapita requirement of vegetables per day? a. **300g** b. 500g c. 200g d. 400 g
7. In the world, indicate the position of our country in respect of area, production of vegetables a. Ist **b. II nd** c. IIIrd d. IVth
8. ----- is also known as anti sterility vitamin a. Vitamin C b. **Vitamin E** c. Vitamin K d. Vitamin B
9. Pea is the richest source of a. Carbohydrate **b. Protein** c. Vitamin d. Fat
10. ----- is the richest source of vitamin A a. **Carrot** b. Tomato c. Potato d. Sweet potato
11. The AICVIP was started in a. 1968 b. 1988 c. 1986 d. **1970-71**
12. Out of the total cultivated area in India, vegetable crops occupy----- a. 0.5 per cent b. **2.2 per cent** c. 5 per cent d. None of the above
13. Which one of the following vegetables is the richest source of protein? a. **Pea** b. Fenugreek c. Pointed gourd d. Cucumber
14. Yellow coloured vegetables are rich source of ----- a. Vitamin E b. Vitamin C c. Vitamin A d. Vitamin B
15. A stem vegetable is a. Carrot b. **Knol-khol** c. Sweet potato d. Radish
16. All Cole crops belongs to the family----- a. Cucurbitaceae b. **Cruciferae** c. Umbelliferae d. None of the above
17. AVRDC is situated in a. Tokyo b. **Taiwan** c. Tasmania d. Turkmenistan
18. Which of the following is a biennial vegetable? a. Muskmelon b. Tomato c. **Onion** d. Chilli
19. Which of the following is fruit vegetable crop? a. Sweet potato b. **Okra** c. Potato d. Spinach
20. Which one of the following soil is best for vegetable cultivation? a. Sandy b. **Sandy loam** c. Clay loam d. Clay
21. Which one of the following vegetable produces maximum seeds per fruit? a. Tomato b. Brinjal c. Chilli d. **Potato**
22. Type of vegetable gardening followed on the of Dal lake of Kashmir valley is ----- i). **Floating** garden ii). Hydroponics. iii). Kitchen garden iv). None of the above
23. ----- gardening is to produce vegetables for local market. i) **Market gardening** ii) Truck gardening iii) Vegetable forcing iii) Vegetable processing

24. \_\_\_\_\_ gardening is to produce vegetables out of their normal season. i) Market gardening ii) Truck gardening iii) **Vegetable forcing** iii) Vegetable processing
25. \_\_\_\_\_ gardening is to produce vegetables for supply of processing factories. i) Market gardening ii) Truck gardening iii) Vegetable forcing iii) **Vegetable processing**
26. Which is the vegetable suitable for dehydration? i) **Onion** ii) Turnip iii) Carrot iii) Chillies
27. Which is the vegetable suitable for canning? i) **Asparagus** ii) Cauliflower iii) potato iii) Cucumber
28. Which is the vegetable suitable for Freezing? i) **Asparagus** ii) Cauliflower iii) potato iii) Cucumber
29. What is the colour of the used for identification of breeder seeds? i) Blue ii).White iii) Red iii) **Golden yellow**
30. Floating gardens are find in i) Karnataka ii).Kerala iii) Himachal Pradesh iii) **Jammu & Kashmir**
31. The centre of origin of tomato is ----- a. **Peru and Mexico** b. Mediterranean c. China d. India
32. The genus to which tomato belongs is ----- a. **Lycopersicon** b. Capsicum c. Solanum d. Physalis
33. Tomato variety CO-3 was evolved by ----- a. X rays b. Gamma rays c. **EMS** d. MMS
34. Tomato variety Pusa Lal Meeruti was evolved by a. X rays b. **Gamma rays** c. EMS d. MMS
35. ----- is considered as poor man's orange in India, while love of apple in India a. Capsicum b. Brinjal c. **Tomato** d. Water melon
36. Aroma of green leaf of tomato is due to a. Sirigrini b. **Glycoisocinate** c. Capsaicin d. None of the above
37. Tomato fruit aroma is due to a. Sulfonium b. Chlorophyll c. Carotenoid d. Polyphenols
38. The fruits of tomato is a. Pome b. Pepo c. Drupe d. **Berry**
39. Tomato produces ---flowers in cluster on the stem a. Proandry b. Protogynous c. **Cleistogamous** d. Hercogammy
40. Sioux and Marglobe varieties of tomato are introduced from a. Asia b. **USA** c. Africa d. Europe
41. Severianin is a -----variety of tomato a. Highly seeded b. **Parthenocarpic** c Parthenogenesis d. None of the above
42. Pusa Divya hybrid, Punjab Upma and Pusa Upkar are the latest varieties of a. Brinjal b. Chilli c. Capsicum d. **Tomato**
43. *Solanum lycopersicum* is a new botanical name of a. **Tomato** b. Brinjal c. Chilli d. None of the above
44. For distant transportation, tomato fruits are picked at a. **Immature green stage** b. mature green stage c. turning stage d. Red ripe stage
45. For processing tomato the fruits are picked at ----- a. Immature stage b. Pink stage c. hard ripe stage d. Over – ripe stage
46. In tomato, for fruit setting in adverse condition spray a. 2,4-d b. **PCPA** c. Ethrel d. Cycoel
47. Lycopene development in tomato is adversely affected when temperature is above ----- a. **30o C** b. 25o C c. 20o C d. 10o C
48. The best soil reaction pH for tomato cultivation is ----- a. Below 5 b. 8.0 and above c. **6.0-7.0** d. 7.0-8.0
49. Tomato seed sufficient to raise crop of one hectare area is ----- a. 500-800g b. **400-500g** c. 200-300g d. 800-900g
50. The red colour in tomato is due to pigment a. Anthocyanin b. Quercetin c. **Lycopene** d. Xanthophyll
51. The chemical used for hardening of seedlings in the nursery is a. **Cycoel** b. MH c. TIBA d. Hcl
52. \_\_\_\_\_ is used to induce fruit set. a. 2,4-D b. IBA c.PCPA d. **All of these**
53. Long dry spell followed by heavy irrigation causes a. Blossom end rot b. sunscald c.Silvering d. **Cracking**
54. Blossom end rot in tomato is caused by the deficiency of ----- a. **Calcium** b. Magnesium c. Boron d. None of the above
55. Puffy fruit in tomato is caused by a. Viral attack b. **Physiological disorder** c. Bacterial attack d. None of the above
56. The physiological disorder caused by boron deficiency in tomato is ----- a. Puffiness b. **Cracking**
57. Blossom end rot d. Silvering

58. In tomato, locular Jelly may not fill the locular cavity which may lead to ----- a. Cracking b. Puffiness  
c. Cat facing d. Sun scald
59. Boron deficiency in tomato causing in a. Browning b. Cat facing c. Puffiness d. Fruit cracking
60. Distortion of blossom end of the fruit leads to formation of ridges, furrows and indentations which is known as a. Browning b. Cat facing c. Puffiness d. Fruit cracking
61. Gold fleck is due to deposition of a. Calcium oxalate b. MgSO<sub>4</sub> c. Boron d. Zinc
62. Delayed ripening of fruits overcome by application of a. Borax b ZnSO<sub>4</sub> c. NAA d. Ethrel
63. Fruit cracking occurs when the soil is deficient in a. Boron b Zn c. Mg d. Calcium
64. Silvering disorder may be caused due to the exposure of plants to a. Low temperature b High temperature c. High humidity d. Low humidity
65. Bitter taste in brinjal fruit is due to ----- a. Anti Vitamin E factor b. CN glycosides c. Solasodine d. Trypsin inhibitors
66. Brinjal belongs to the species a. Khasianum b. Sisymbriifolium c. Melongena d. None of the above
67. Brinjal is a native of ----- a. Africa b. South America c. India d. Korea
68. Brinjal variety MDV 1 was evolved by ----- a. X-rays b. Gamma rays c. EMS d. MMS
69. Flower in brinjal may be a. Long styled b. Medium styled c. Pseudo –short-styled d. All of the above
70. Flowers in Brinjal are a. Hermaphrodite b. Staminate c. Pistillate d. Solitary and hermaphrodite
71. ----- is also known as Egg plant a. Tomato b. Brinjal c. Chilli d. Okra
72. Brinjal borne ----- types of flower on the basis of length of style a. 4 b. 5 c. 3 d. 6
73. -----colour Brinjal is good for diabetic plant a. Purple b. Green c. White d. Black
74. Basic chromosome number in Brinjal is ----- a. 13 b. 8 c. 10 d. 12
75. ----- is variety of Brinjal resistant to phomopsis blight a. Pusa purple long b. Pusa bhairav c. Pant Rituraj d. Pant Samarat
76. Optimum temperature requirement for successful production of brinjal should be a. 15 -20<sup>o</sup> C b. 21- 27<sup>o</sup> C c. 30-35<sup>o</sup> C d. 10-15<sup>o</sup> C
77. Ideal soil PH for growth and development of brinjal is a. 5-5.5 b. 5.5-6 c. 6-6.5 d. 6.5-7
78. Seed requirement for raising one hectare crop of brinjal a. 250-375g b. 400-500g c. 500-750g d. 750-1000g
79. Brinjal seedlings are transplanted at a spacing of a. 60x30-45 b. 75-90x60-70cm c. 50-60x50-60cm d. None of the above
80. Average yield of brinjal is \_\_\_\_\_ t/ha in F1 hybrids. a. 10-20 b. 20-30 c. 40-80 d. 50-60
81. Chemical used for controlling root knot nematodes in brinjal is a. Aldrin b. Nemagon c. Chloropyriphos d. None of the above
82. Spraying of \_\_\_\_\_ controls poor fruit set in brinjal. a. GA3 b. MH c. CCC d. 2,4-D
83. \_\_\_\_\_ method is followed for extraction of seeds a. Fermentation b. Acid c. Alkali d. None of these
84. Little leaf of Brinjal is due to a. Fungus b. Bacteria c. Mycoplasma d. Root knot nematode
85. California wonder is an important variety of ----- a. Hot pepper b. Sweet pepper c. Black pepper d. None of the above
86. The chillies are rich in vitamin a. A b. C c. A&C d. None
87. The green chillies contain -----which has medicinal value a. Capsicin b. Resin c. Coumarin d. Rutin
88. The highest production of chillies in ----- a. Maharashtra b. Tamil Nadu c. Andhra Pradesh d. Arunachal Pradesh
89. The largest area in chillies is in ----- a. Maharashtra b. Tamil Nadu c. Andhra Pradesh d. Andaman

90. The pungency in chillies is due to ----- a. Cucurbitain b. Resins c. Coumarin d. **Capsicin**
91. The red colour in fruits at the ripening stage in chillies is due to the pigment ----- a. **Capsanthin**  
b. Quercetin c. Anthocyanin d. Catechol
92. The chilli has originated from a. India b. Brazil c. **Tropical America** d. China
93. ----- is botanically known as *C. frutescens* a. Black pepper b. sweet pepper c. **Hot pepper** d. None of the above
94. MDU-1 is a variety developed through a. Pure line selection b. **Mutation breeding** c. Mass selection
95. ----- variety of chilli is cross of NP46A x Pure red a. Pant C-1 b. **Pusa Jwala** c. Pusa Sadabahar d. None of the above
96. Bharat is the first hybrid of capsicum released by a. MAHYCO b. **IAHS** c. Sugrow d. Namdhari
97. Blossom end rot in chilli is due to ----- a. Fungal disease b. viral disease c. **Non parasitic cause** d. None of the above
98. Bud, blossom and fruit drop in chilli, in general is due to a. Deficiency of nitrogen b. humid climate c. **Unfavourable temperature and water supply** d. None of the above
99. About \_\_\_\_gm of chilli seeds are needed for planting of one hectare area. a. 500 b. 1000 c. **1250** d. 1500
100. Chillies can be grown from sea level to an altitude of ----- a. **1000m** b. 2000m c. 3000m d. 4000m
101. CCC induces \_\_\_\_\_ in chilli. a. Vegetative growth b. Number of branches c. **Fruit set** d. **Fruit development.**
102. Fruit drop in chilli is prevented by application of a. **NAA** b. Ethrel c. CCC d. GA
103. Capsicum is generally \_\_\_\_\_ pollinated crop a. Self b. Cross c. **often cross** d. none of the above
104. The most suitable time of transplanting sweet pepper is a. **March – April** b. Mid February c. April – May d. None of the above
105. About \_\_\_\_\_ tons of dry chillies are obtained from one hectare irrigated area. a. 1.0 b. **1.5-2.5** c. 4-5 d. 7-8
106. The usual spacing followed for transplanting capsicum seedlings in northern India is ----- a. 60x30 b. 75x30cm c. **45x45cm** d. None of the above
107. Bhenidi variety tolerant to salinity is ----- a. Kalyanapur green b. Type -3 c. **Pusa Sawani** d. Pusa Dwarf
108. Arka Abhay is a variety of a. Brinjal b. Chilli c. Tomato d. **Bhenidi**
109. Mucilage, a sticky substance in okra, is generally extracted from ----- a. Flowers b. Buds c. **Stem and root** d. Leaves
110. Okra is ----- a. Self pollinated b. Cross – Pollinated c. **often – cross pollinated** d. Both b and c.
111. Original home of okra is ----- a. India b. **Africa** c. America d. None of the above
112. Variety of okra resistant to yellow vein mosaic virus is ----- a. Pusa Makhamali b. Pusa sawani c. **Punjab No. 8** d. None of the above
113. Varsha upahar is a variety of ----- a. **Okra** b. Cabbage c. Chilli d. Cowpea
114. ----- belongs to family Malvaceae a. Tomato b. Chilli c. French bean d. **Okra**
115. Okra fruits are excellent source of a. Calcium b. Magnesium c. Manganese d. Iodine
116. ----- variety of okra is cross of **pusa Makhmali x IC – 1542** a. Gujarat bhendi-1 b. Pusa Makhmali c. Pusa sawami d. Arka abhay
117. Cultivated okra is ----- in Nature a. **Polyploidy** b. Tetraploidy c. Aneuploidy d. All of the above
118. First picking in okra can be done after a. 30-35 days b. **45-50** days c. 60-65 days d. None of the above
119. Okra crop is sown at a spacing of a. 75x45 cm b. 60x45cm c. **45x75** cm d. None of the above
120. Okra seeds fail to germinate below -----°C a. 5 b. 10 c. 15 d. **20**
121. Optimum pH range for better growth of okra is a. 4.5-5.5 b. **6.0-6.8** c. 7.5-8.5 d. None of the above
122. Optimum temperature for okra seeds germination is -----°C a. 20 b. **30** c. 15 d. 35

123. The most serious disease of okra is ----- a. **Yellow vein** mosaic b. Powdery mildew c. Root rot d. None of above
124. The seed rat per hectare of okra for rainy season is -----kg a. **8-10** b. 10-12 c. 12-14 d. 14-16
125. The seed rate per hectare of okra for spring summer and winter crop is -----kg a. 5-10 b. 10-15 c. **15-20** d. 20-25
126. Post harvest treatment with \_\_\_\_\_ enhances the shelf life of okra fruits. a. GA b. Ethophan c. **Cycozel** d. NAA
127. Average seed yield of okra is about \_\_\_\_\_ q /ha. a. 5-8 b. **10-15t/h** c. 20-25 d. All of the above
128. ----- is basically known as amaranths tricolour. a. **Amaranths**, b. Spinach beet, c. Spinach, d. None of the above.
129. Amaranths hypochondrias species of amaranths is of having. a. **Long day**, b. Short day, c. Day natural, d. Both 'a' and 'b'
130. Amaranths is rich in a. Vit. K, b. Vit-D, c. **Vit- A**, d. Vit-B.
131. Amaranths originated from a. Brazil, b. **India**, c. Europe, d. None of the above.
132. Basic chromosome number in amaranths is a. 20, b. 34, c. **17**, d. 16.
133. Amaranths belongs to family. a. Amarly Diaceae, b. **Amaranthaceous**, c. Lilaceae, d. Araceae.
134. Amaranths is a ----- crop. a. Self pollinated, b. **Cross pollinated**, c. Often cross pollinated, d. Heraphordate.
135. ----- is a most serioud disease of amaranths a. Black spot, b. **While rust**, c. Sun Scarching, d. Leaf curl.
136. Green yield of amaranths is about----- q/ha a. 40-60, b. 30-40, c. **60-80**, d. None of the above
137. ----- a grain type amaranths is widely grown in Gujarat and Maharashtra. a. Jobner Green, b. **Rajgarh**, c. Pusa Harit, d. Pant Haritima.
138. Seeds of amaranths are deride up to----- percent moisture and stored in moisture proof polyethylene bags. a. 3-4, b.5-6, c.1-3, **d.8-10**.
139. ----- is popularly known as malbar night shade, poi or Indian spinach. a. Methi, b. **Basella**, c. Spinach, d. Spinach belt.
140. Basella is commonly grown in a. **North India**, b. South India, c. Western India, d. Central India.
141. Botanical name of ----- is Basella Alba. a. Palak, b. Bari Chauhi, c. Choti Chauhi, d. **Basella**.
142. The origin place of Basella is a. Europe, b. China, c. America, d. **India**.
143. Basic chromosome number in Basella is a. 10, b. 20, c. **12**, d. 14.
144. Basella is a ----- plant in nature. a. Erect, b. Spreading c. Semi- erect, d. **Climbing**.
145. Basella sowing is usually done in South India during. a. June-July, b. August-September, c. **October-November**, d. December-January.
146. In order to raise one-hectare crop of Basella, about----- kg seed per hectare will be required a. 4-5, b. 5-10, c. **12-15**, d. 45-60,
147. Basella leaves become ready for harvesting ----- days after sowing the seeds. a. 3-40, b.20-30, c.12-50, **d.60-75**.
148. Basella belongs to family----- a. Alliaceous, b. Amaranthaceous, c. **Basellacea**, d. Chemopodiacea.
149. The total yield of Basella is ----- quintal per hectare. a. 5-60, b.60-70, c. 100-150, d.**150-200**.
150. **Family of sweat potato** convolvulaaece

.....All the best By Anil rana.....