TIME ALLOWED: 50 MINUTES

GENERAL DIRECTIONS

THIS EXAM PAPER CONTAINS **AGRICULTURE** EXAMINATION. IN THIS EXAMINATION, THERE ARE A TOTAL OF **40 MULTIPLE CHOICE** QUESTIONS. CAREFULLY SELECT THE BEST ANSWER AND BLACKEN ONLY THE LETTER OF YOUR CHOICE ON THE SEPARATE ANSWER SHEET PROVIDED. FOLLOW THE INSTRUCTIONS ON THE ANSWER SHEET AND THE EXAMINATION PAPER CAREFULLY. USE ONLY **PENCIL** TO MARK YOUR ANSWERS; YOUR ANSWER MARK SHOULD BE **HEAVY** AND **DARK**, COVERING THE ANSWER SPACE COMPLETELY. PLEASE ERASE ALL UNNECESSARY MARKS COMPLETELY FROM YOUR ANSWER SHEET.

YOU ARE ALLOWED TO WORK ON THE EXAM FOR **50 MINUTES.** WHEN TIME IS CALLED, YOU MUST IMMEDIATELY STOP WORKING, PUT YOUR PENCIL DOWN, AND WAIT FOR FURTHER INSTRUCTIONS.

ANY FORM OF CHEATING OR AN ATTEMPT TO CHEAT TO CHEAT IN THE IN THE EXAMINATION HALL AND CANCELLATION OF YOUR SCORE(S).

PLEASE MAKE SURE THAT YOU HAVE WRITTEN ALL THE REQUIRED INFORMATION ON THE ANSWER SHEET BEFORE YOU START TO WORK ON THE EXAMINATION.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

1. Why to learn agriculture as field of study?

A. Turn back the pervious educational policy and plan

B.Delay the agricultural input for smallholder farmers like Urea and improved seed

C.Sacrcity and high level of inflation happen in the country and the people

D. Create awareness to the society about the production and management of crop products

2. Which of the following edible part is their flower?

A. Asparagus C. Broccoli

B. Pumpkin D. Cucumber

3. Fruits divided into climacteric and non-climacteric based on:

A. Temperature requirements C. Plant characteristics

B. Based on ripening D. Structure

4. Which one of the following is a warm season vegetable crops?

A. Tomato C Carrot

B. Celery D. Cauliflower

5. Ethiopian children collect and consume indigenous fruits from the wild is:

A. Kega C. Broccoli

B. Cabbage D. Asparagus

6. Which one is **incorrect** about smallholder farmers in Ethiopia?

A. Produce vegetable for own consumption

B. Choose to grow vegetable shorter growth cycle

C. Increase demand of vegetable increase the price

D. Higher potential to household income

7 .Which of the following is **not** the major constraint of vegetable crop production and consumption in the country, Ethiopia?

A. high cost of agricultural production inputs

B. Small size of vegetable processing facilities

C. Adequate knowledge of improved method of production

D. High price of fuel for pumping water for irrigation

8. Climacteric fruits are characterized by:

A. The fruits that split open during fully mature stage

B. The fruits do not release seed at maturity

C. The fruits characterized by the lack of ethylene

D. The fruits characterized by presence of ethylene as major coordinator

9.FAO classified roots and tuber into___primary crops

A. Three C. Six

B. Four D. Seven

10.A farm land allocated for growing fruits crop is___

A. Nursery B. Fruit set C. Chilling D. Orchard

11.The type of fruits consists of a number of mature ovaries formed in a single flower:

A. Simple fruits C. Aggregate fruits

B. Multiple fruits D. Tree fruits

12. The backbone of Ethiopian economy is___

A. Education C. Floriculture

B. Agriculture D. Health sector

13.The highest Cassava producer country from Africa is:

A. Nigeria C. Egypt

B. South Africa D. Ethiopia

14.The major principles of vegetable production involve:

A. careful site selection

B. Selection of planting material

C. Appropriate water management practice D. All

15. Which one is **incorrect** about the post-harvest consideration of fruits?

A. Sorting according to size and quality level should be done

B. Packaging material reduce moisture loss from the fruits

C. Fruits have to be pre cooled to storage temperature after harvest

D. Fruits should be careful handed to increase mechanical injury

16. Among the following one is **not** the benefits of protection and mechanism for root and tuber crops? A. Losses that occurs during storage C.To prevent disease and pest
B. To prevent from spoilage D.To increase perishability of root and tubers

17. Vegetables grow more than two growing season known as__
A. Annuals vegetables C. Perennials Vegetables
B. Biennials vegetables D. Seasonal vegetables

18. All are the advantage of sexual plant propagation **except**?
A. It is the easiest and least expensive method
B. Allows propagation of plant is difficult by vegetative parts
C. Seedling takes more time to bear fruits
D. Seedling trees are hardier and have long life span

19 .Which of the following different from the other?
A. Propagation by Cutting C. Propagation by Seed formation
B. Propagation by Grafting D. Propagation by air layering

20. Water is sprayed to the air and allowed to fall to the ground as rain. This type irrigation is___
A. Sprinkler irrigation C. Drip irrigation
B. pressurized irrigation D. Surface irrigation

21. All of coffee cherries are picked from tree at the same time is___
A. Strip picking C. Hand picking
B. Selective picking D. been picked

22. The **disadvantage** of gravity or surface irrigation:
A. level land require high accuracy C. It require low cost
B. Do not any modern technology D. Technical skill is not required

23. One is **not** the opportunities and expansions of floriculture in Ethiopia:
A. Harsh climatic condition C. Increase domestic market
B. Government policy D. Investment incentives

24. The the major indigenous root and tuber crops found in Ethiopia include:
A. cassava and tania C. tania and taro
B. anchote and yams D. potato and sweet potato

25. Currently, the fourth most important food crop from the world is:

A. *Ipomoea batatas* C. Manihot esculenta

B. Solanum tuberosum D.*Colocasia esculenta*

26. Which one is **incorrect** the production status and economic importance of coffee in Ethiopia?

A. Most important agricultural commodities C. Coverd 5% of GDP

B. Ethiopia is top five producer countries D. Total export earning 20-30%

27. The main purpose of rolling tea leaves:

A. Damage the cell wall of tea leaves C. Reduce moisture contents of leaf

B. Shaping the leaves by hand D. The color leaves gradually change

28. Why plucking tea leaves should be done in the morning?

A. Damage cell wall in the morning C. No enough time to pluck

B. There is less soluble in the mornig D. The flavor of tea lower in the morning

29. The purpose of roasting the coffee is:

A. Change green coffee into aromatic brown bean

B. Remove the entire dried husk

C. Sorting of bean by size and weight

D. Avoid the moisture contents of coffee

30. The two major processing methods coffee is:

A. Drying and wetting C. Hulling and polishing

B. Grading and sorting D. Grinding and milling

31`.The most producing area of Ginger is:

A.Amhara C.SNNPR

B.Tigray D.Gambala

32.The common process of coffee and tea is__

A. Fermentation C. Drying

B. Roasting D. Rolling

33. Which one is **incorrect** about the history, origin of coffee, tea leaves and spice?

A. Tea was introduced to Ethiopia during the time of Queen Zewditu

B. Spice was originate from Egypt

C. Tea was originated in southwest China

D. All commercial coffee species originate from china

34. Which of the following are considered as "**Queen**" and '**King of Spice**", respectively?

A. Ginger and Basil C. Korerima and Turmeric

B. Cardamom and Pepper D. Chilies and coriander

35. Which countries **not** include the five spice producer countries worldwide?

A. China C. India

B. Bangladish D. Brazil

36. All are the advantage of genetic engineering for crop production **except**?

A. It allows for faster growth rate C. Greater yield can be produces

B. Pathogen adapt to the new genetic profile D. Specific traits can be developed

37. The conventional breeding is:

A .Limited to exchanging of gene between the same or closely related species

B. Has high guarantee of any particular gene combination from the millions cross

C. Allows the direct transfer of gene between either closely or distantly related

D. Take short time to achieve desired results

38. Which one is **not** the application of genetic engineering in plant breeding?

A. Resistance against bacterial and fungal pathogens

B. Improvement of the nutritional quality in plants

C. Increase the yield of dairy and beef products

D. Improvement of crop against abiotic stress

39. The most rapidly growing areas of plant biotechnology is:

A. Conventional breeding C. Tissue culture

B. Selective breeding D. Conventional breeding

40. Which laboratory instruments not used during tissue culture?

A. Autoclave C. Flasks

B.Vaccum pump D. Stethoscope