LPM 121 FODDER PRODUCTION AND GRASSLAND MANAGEMENT (1+1)

PART A : OBJECTIVE TYPE

a) Fill up the blanks

1. Botanical name of butterfly pea is ............................................
2. Bio fertilizer suitable for legume fodders is .................................
3. Hedge Lucerne is harvested every ......................... days and number of harvests in one year is ........................times.
4. Fodder maize belongs to the plant family .................................
5. Under silvipasture ......................... grass may be recommended for growing with Acacia tortilis
6. Agrostology refers to the study of .................................
7. Good silage will be ready to feed within ................................. months.
8. Average green fodder yield of Guinea grass is ............... t/ha and that of Fodder Sorghum is
     ........................ t/ha
9. The total requirement of green fodder in India is ............... million tonnes where as the availability is
     ................ million tonnes.
10. Grass fodder highly suitable for drought prone area is ......................
11. Growing of Buffel grass in the existing Coconut orchard is termed as ................................. system of
    Agroforestry.
12. Right time of first harvest of Hybrid Napier is ................ days after sowing and the subsequent cut is
    done once in ............days
13. The optimum level of moisture content in the well-prepared hay should be ................%.
14. Two important physical factors that cause loss of feed and feed ingredients in storage are
    ................................. and .................................
15. Fodder Maize belongs to the plant family ................................. where as Lucerne belongs to the plant family.................................
16. Grass fodders contain more of ................................., while the legume group of fodders contain
    more of .................................
17. The botanical name of Soobabul is ................................., which contains a toxic substance namely.................................
b) Write True or False  

1. Stylo can be recommended for dry regions. (.................)  
2. Wastelage is a form of preserved fodder under anaerobic condition. (.................)  
3. Hedge Lucerne is a perennial legume fodder (.................)  
4. Hybrid Napier grass is propagated through seeds and the seed rate is 2.5 kg/ha. (.................)  
5. Warferin is a toxic alkaloid present in Fodder Cumbu (.................)  
6. The anti quality constituent present in Fodder Sorghum is Mimosine (.................)  
7. Acid treatment of fodder seeds having thick seed coat increases germination. (.................)  
8. Waste paper can also be considered as a Scarcity fodder (.................)  
9. Silage is a form of preserved fodder under anaerobic conditions. (.................)  
10. The moisture content in the green fodder should be brought down to 40 - 45 % for proper preparation of very good silage (.................)  
11. Sugarcane tops and leaves can be recommended for feeding to the livestock. (.................)  
12. Carotene content in Hay is more than that of Silage (.................)  
13. Many of the legume fodders fix atmospheric nitrogen in the root nodules. (.................)  
14. *Sehima – Dicanthium* grass cover is highly unpalatable (.................)  
15. Limestone is used as silage additive. (.................)  
16. *Stylo* is an ideal intercrop for Fodder maize (.................)  
17. Pollarding is a method of harvesting tree fodders (.................)  
18. Hamil is a variety of Para grass. (.................)  
19. Cenchrus is an ideal pasture grass for improving the grassland. (.................)  
20. The optimum level of moisture for storing the feed and feed ingredients is 15 % (.................)  
21. Average green fodder yield of Fodder maize var. African Tall is 42 tonnes/ha. (.................)  
22. In India, the forage production is in excess of the actual demand. (.................)  
23. Quartering is a method practiced once in 60 days in Hybrid Napier grass (.................)  
24. Seed rate for sowing Subabul for fodder purpose is 2 kg / hectare (.................)  
25. Hedge lucerne intercropped with Hybrid Napier grass is the ideal recommended Practice for irrigated conditions (.................)

c) Choose the best answer (Underline the correct answer)  

1. Which of the following is an annual legume fodder  
2. A perennial legume fodder suitable for dry area  
   a. Lucerne       b. Hedge lucerne       c. Cowpea       d. Stylo
3. Horti pasture refers to growing of
   a. Ber + Stylo
   b. Coconut + Subabul + Ruzigraas
   c. Albizia lebeke + Cenchrus.
   d. Subabul + Cenchrus

4. Which of the following has more Crude protein content
   a. Anjan grass
   b. Sorghum silage
   c. Subabul
   d. Desmodium

5. The ideal moisture content of the well processed hay should be
   a) 20 %
   b) Less than 15 %
   c) Less than 10 %
   d) 5 %

6. A perennial legume fodder suitable for intercropping with Hybrid Napier grass is
   a. Lucerne
   b. Hedge lucerne
   c. Cowpea
   d. Stylo

7. Poor silage contains
   a) More of Lactic acid
   b) More of Butyric acid
   c) More of Carotene
   d) More of Urea

8. Biofertilizer that releases unavailable phosphorus in the soil to make it available to the roots is
   a) Phosphobacterium
   b) Azatobacter
   c) Rhizobium
   d) Azospirillum

9. Fodder crops like Maize cut at flowering stage, dried to 65% moisture and stored in anaerobic conditions results in
   a) Hay
   b) Silage
   c) Haylage
   d) Stovers

10. Which one of the following gives the maximum yield of green fodder?
    a) Maize var. African Tall
    b) Lucerne var Co.1
    c) Guinea grass var Hamil
    d) Hybrid Napier grass var Co.3

  d) Match the following (Write the correct alphabet in brackets in column (2)) 10 x 0.5 = 5.0

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Define the following (Answer  not more than 2 -3 lines) 10 x 0.5 = 5.0
1. Hay
2. Roughage
3. Mixed farming
4. Hortipasture
5. Carrying capacity
6. Agroforestry
7. Quartering
8. ACU
9. Bio fertilizers
10. Seed treatment

PART B : SUBJECTIVE TYPE 60 marks
a) Write short answers on any five of the following 5 x 4 = 20
1. Desirable characteristics of a Fodder crop
2. Legume fodders
3. Rotational grazing
4. Additives used for ensiling
5. Losses of nutrients in hay making
6. Scarcity fodders

b) Write an essay on any four of the following 4 x 10 = 40
2. a. What is the condition of pastureland in our country? b. What are the steps you suggest to rejuvenate a poor pasture land? c. Explain Deferred cum Rotational grazing
3. a. How grass fodders are propagated? b. Write the agronomical practices for growing Hybrid Napier grass. c. Write the Seed rate, Fertilizer dose, Spacing and Green fodder yield of fodder Maize.
4. a. What are the storage losses of feed and feed ingredients? b. Explain the physical and biological factors responsible for the loss. c. Write the control measures to prevent those losses.
5. Define forage b. Write the various methods of forage classification. c. Cite any five examples in each along with botanical names.

............................................................ALL THE BEST.................................................................