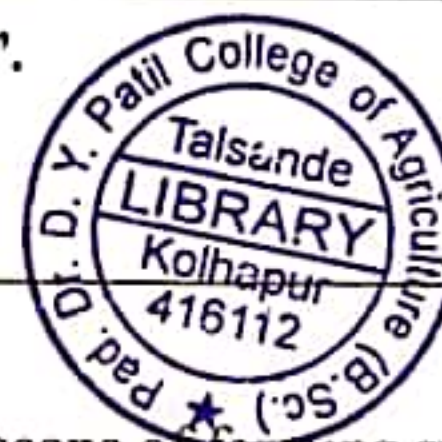


MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : VI (New)	Term : II	Academic Year : 2016-17
Course No. : AGRO 3610	Title : Farming Systems and Sustainable Agriculture	
Credits : 2 (1+1)		
Day & Date : Saturday, 06.05.2017	Time : 09.00 to 11.00	Total Marks : 40

- Note :**
1. Solve **ANY EIGHT** questions from **SECTION "A"**.
 2. All questions from **SECTION "B"** are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.



SECTION "A"

- Q.1 What is farming system? Give the objectives, concept and scope of farming system.
- Q.2 Define organic farming. Give the concept of organic farming and write the components of organic farming.
- Q.3 What is Cropping System? Give classification of Cropping Systems and explain sequential multiple cropping system.
- Q.4 Enlist the different indices used for evaluation of cropping scheme and explain economic evaluation.
- Q.5 Explain the differences between sustainable agriculture and modern agriculture.
- Q.6 Explain poor quality water. What are the most common problems that result from irrigation with poor quality water?
- Q.7 What is Integrated Farming System? Give the objectives, components and advantages of Integrated Farming System.
- Q.8 Define crop rotation and describe the principle of crop rotation.
- Q.9 Enlist the non monetary and low cost inputs and describe in detail about low cost inputs.
- Q.10 Write short notes (Any two).
 - 1) Agri-Horticulture System.
 - 2) Nutrient deficiency symptoms of nitrogen.
 - 3) Integrated pest management.

SECTION "B"

- Q.11 Define the following terms.

- | | |
|--------------------|---------------|
| 1) Mixed farming | 2) Guard crop |
| 3) Augmenting crop | 4) Sewage |

- Q.12 Match the following pairs.

'A'

- 1) Bee keeping
- 2) Problematic weed
- 3) Soil amendment
- 4) Non monetary input

'B'

- a) Gypsum
- b) Sowing time
- c) *Cyperus rotundus*
- d) *Apis mellifera*
- e) *Labeo Rohita*

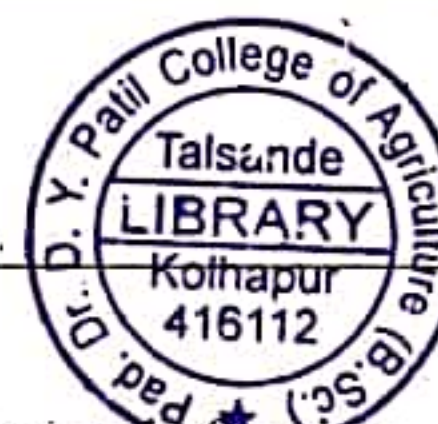


MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : VI (New)	Term : II	Academic Year : 2016-17
Course No. : AGRO 3611	Title : Organic and Rainfed Farming	
Credits : 2 (1+1)		
Day & Date : Saturday, 29.04.2017	Time : 09.00 to 11.00	Total Marks : 40

- Note :**
1. Solve **ANY EIGHT** questions from **SECTION "A"**.
 2. All questions from **SECTION "B"** are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.



SECTION "A"

- Q.1 What is organic farming? Enlist advantages and constraints of organic farming.
- Q.2 Explain contingency crop planning for aberrant weather situation.
- Q.3 Explain in brief the agronomic practices used in soil and water conservation.
- Q.4 What is water harvesting? Discuss in short the technique of water harvesting and recycling of run-off water.
- Q.5 Describe the recycling of crop residues and animal waste for organic farming.
- Q.6 Define antitranspirant and give its types used in agriculture.
- Q.7 What is green manuring? Explain its importance in agriculture.
- Q.8 Write in brief about certification, processing and marketing of organic produce.
- Q.9 Define watershed? Elaborate the concept and give the principles of watershed management.
- Q.10 Write short notes (Any two).
 - 1) Soil improvement and amendments in organic farming
 - 2) Vermi-compost.
 - 3) Drought.

SECTION "B"

- Q.11 Fill in the blanks.
 - 1) *Parthenium* is biologically controlled by _____ insect.
 - 2) *Rhizobium* culture is used for seed inoculation of _____ crops.
 - 3) In _____ farming, crops are grown on natural precipitation without irrigation.
 - 4) Farm yard manure contains _____ per cent nitrogen
- Q.12 Match the following pairs.

'A'	'B'
1) Predominant crop in rainfed area	a) Paddy
2) Erosion resisting crop	b) Dhaincha
3) Blue green algae	c) Groundnut
4) Green manuring crop	d) Bajra

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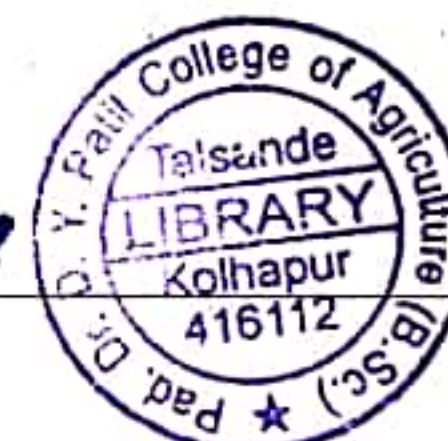
MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : V (New)	Term : I	Academic Year : 2017-18
Course No. : ASDS 353	Title : Technology of Milk and Milk Products	
Credits : 2(1+1)		
Day & Date : Thursday, 16.11.2017	Time : 14.00 to 16.00	Total Marks : 40

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

LIBRARY



SECTION "A"

- Q.1 Enlist different sources of contamination of milk and write in brief about feed and milker source.
- Q.2 Define milk. Draw tree diagram of milk constituents.
- Q.3 Define dahi. Give the classification and nutritional importance of dahi.
- Q.4 What are the different modes of transportation of milk followed in India? Which problems are faced during collection and transportation of milk under Indian conditions?
- Q.5 Enlist methods of pasteurization of milk. Explain in brief about uperization.
- Q.6 Give the factors affecting composition of milk. Explain in brief any two.
- Q.7 Classify the milk products on the basis of methods of production. Give classification of khoa with its specific use.
- Q.8 Which are the different materials used for packaging of milk and milk products? Give ideal characteristics of packaging material.
- Q.9 What is mean by standard? Enlist government agencies involved for the regulation of standards of traditional dairy products. Why there is necessity of standard for food?
- Q.10 Write short notes (Any Two).
 - a) Significance of microorganisms in milk
 - b) Operation flood programme
 - c) Nutritional importance of lactose in milk

SECTION "B"

- Q.11 Do as directed.
 - 1) Name the instrument used for determination of viscosity of milk.
 - 2) _____ is the principle protein present in milk.
 - 3) Single toned milk contains _____ per cent of SNF.
 - 4) Write full form of AMUL.
- Q.12 Define the following terms.
 - 1) Market milk
 - 2) Standardization
 - 3) Homogenization
 - 4) Over-run in ice cream



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MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : V (New)	Term : I	Academic Year : 2017-18
Course No. : BOT 356	Title : Principles of Plant Biotechnology	
Credits : 3(2+1)	Time : 14.00 to 17.00	Total Marks : 80
Day & Date : Wednesday, 15.11.2017		

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

LIBRARY



SECTION "A"

- Q.1 Define Micropropagation. Discuss the stages of micropropagation.
- Q.2 Define biotechnology. State importance of the biotechnology with suitable examples.
- Q.3 Describe the two different modes of obtaining somaclonal variation. State its application in crop improvement.
- Q.4 Define vector. Enlist various categories of vectors. Explain in precise manner Ti plasmid vector.
- Q.5 Explain the mechanism of polymerase chain reaction. Describe the steps of PCR reaction and state its applications.
- Q.6 Enlist the different methods of gene transfer in plants. Describe in brief gene transfer with liposome method. Give examples of transgenic plants.
- Q.7 Define marker. State various categories of markers. Discuss concisely RAPD and RFLP markers.
- Q.8 Enlist the various methods of protoplast fusion and explain in brief the procedure of PEG method. State the importance of protoplast fusion.
- Q.9 Write short notes (Any Four).
- | | |
|--------------------------------|--|
| a) Synthetic seed | b) Cytodifferentiation |
| c) Southern blotting technique | d) Cybrid |
| e) Test tube fertilization | f) <i>Arabidopsis thaliana</i> model plant for biotechnological work |
- Q.10 Give reasoning (Any Four).
- a) Milky white suspension is sometimes observed on tissue culture medium.
 - b) DNA amplification is semi- conservative approach.
 - c) Tissue cultured plants needs hardening.
 - d) Morphological markers are least useful during breeding procedure.
 - e) Vitrification is observed in tissue cultured plants.
 - f) During media preparation, growth regulators are filter sterilized.

(P.T.O.)

SECTION "B"

Q.11 Answer the following statements in a word or sentence.

- 1) When 25 mg NAA dissolved in 25 ml of water it constitutes how much ppm?
- 2) When 13 gm of NaCl dissolved in 100 ml of water it will form how much per cent?
- 3) Give the full form of NRCPB.
- 4) Vascular tissue differentiation within callus culture is called _____.
- 5) In Bt cotton plant the trans gene is borrowed from which foreign source?
- 6) Why furry or velvet growth rarely observed on tissue culture media?
- 7) *In vitro rhizogenesis* requires the supplement of which growth regulator in media?
- 8) During prolonged culture when callus mass proliferate on standard media devoid of hormones is called _____.

Q.12 Fill in the blanks.

- 1) _____ scientist developed *in - vitro* method of DNA amplification.
- 2) Hairy root disease is produced by bacterium _____.
- 3) A virus that infects and replicates in bacteria is called _____.
- 4) The complex organic molecule that can combine with cations and does not ionize is termed _____.
- 5) A cell with two or more identical nuclei as result of fusion is called _____.
- 6) The phenomenon of *in vitro* bamboo flowering is associated with the scientist _____.
- 7) Citric acid, Ascorbic acid and thio urea are used as _____ in tissue culture media.
- 8) Letham derived kinetin like substance form maize endosperm and named it _____.



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MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : V (New)	Term : I	Academic Year : 2017-18
Course No. : ECON 354	Title : Agricultural Marketing, Trade and Prices	
Credits : 2(1+1)		
Day & Date : Tuesday, 14.11.2017	Time : 14.00 to 16.00	Total Marks : 40

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Define Agricultural Marketing. Classify the markets on twelve dimensions and explain in short the classification of market on the basis of degree of competition.
- Q.2 Define Market Structure. Enlist the components of Market Structure and explain it in brief.
- Q.3 Classify the Marketing Functions according to Thomsen and explain in short the Grading and Standardization function.
- Q.4 Define Market Information and explain the criteria of good Market Information.
- Q.5 Define Marketable and Marketed Surplus. Explain in short the factors affecting Marketable Surplus.
- Q.6 Define Risk in Marketing and explain in short the types of Risk.
- Q.7 Write the meaning of warehousing and explain the important functions of warehouses.
- Q.8 Write the meaning of Market Integration? Enlist the types of Market Integration and explain in detail any one of them.
- Q.9 Define Co-operative Marketing. Enlist the types of Co-operative Marketing and explain functions of Co-operative Marketing.
- Q.10 Write short notes (Any Two).
- a) Salient features of Model Act -2003
 - b) Objectives of State Trading enterprise
 - c) Role of FCI

SECTION "B"

- Q.11 Fill in the blanks.
- 1) The products are transferred through marketing to persons having a higher utility from persons having a low utility is known as _____.
 - 2) _____ market is permanent in nature.
 - 3) _____ method, the produce in different lots is mixed and then sold as one lot.
 - 4) On the recommendation of Dunkel draft, WTO was established in the year _____.
- Q.12 Define the following terms.
- 1) Contract Marketing
 - 2) Oligopoly Market
 - 3) Regulated Market
 - 4) Marketing Efficiency

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B.Sc. (Agri.)

Semester	: V (New)	Term	: I	Academic Year	: 2017-18
Course No.	: ENGG 353	Title	: Farm Power and Machinery		
Credits	: 2(1+1)	Time	: 14.00 to 16.00	Total Marks	: 40
Day & Date	: Saturday, 18.11.2017				

- Note :**
1. Solve **ANY EIGHT** questions from **SECTION "A"**.
 2. All questions from **SECTION "B"** are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.



SECTION "A"

- Q.1 Give the comparison between S.I. (petrol) engine and C.I. (diesel) engine.

Q.2 Enlist the different sources of farm power. Give merits and demerits of animal power and mechanical power.

Q.3 Calculate the BHP of a 2 cylinder 4 stroke cycle internal combustion engine which has cylinder bore = 12 cm, stroke length = 15 cm, mean effective pressure = 7 kg/cm^2 , crankshaft speed = 1200 rpm and mechanical efficiency = 75 per cent.

Q.4 What is tillage? Give objectives of tillage.

Q.5 Classify farm tractors. What are the factors to be considered for the selection of tractor?

Q.6 Determine the horse power required to pull a four bottom 30 cm plough, working to depth of 15 cm. The tractor is operating at a speed of 6 km/hr. The soil resistance is 0.7 kg/cm^2 .

Q.7 Enlist the different types of sprayers and state the purpose and functions of sprayers. Which are the desirable qualities of sprayers?

Q.8 Calculate the time required for sowing 1.6 hectares of land by five furrow seed drill going 12.5 cm deep. The speed of the seed drill is 3.2 km per hour and pressure exerted by the soil on the seed drill is 0.42 kg/cm^2 . The space between furrow openers is 10 cm and loss in turning is 10 per cent.

Q.9 What is principle of air cooling? Give advantages and disadvantages of air cooling system.

Q.10 Write short notes (Any Two).

a) Mould board plough b) Carburetor

c) Disc harrow

SECTION "B"

- Q.11 Define the following terms.
- | | |
|--------------------------|---------------|
| 1) Indicated horse power | 2) Tractor |
| 3) Mechanical efficiency | 4) Unit draft |
- Q.12 Fill in the blanks.
- 1) The range of compression ratio of diesel engine is from _____ to _____.
 - 2) An average man can develop maximum power of about ____ hp for doing farm work.
 - 3) The tilt angle varies from _____ to _____ for a good plough.
 - 4) _____ is the device used to remove soil that tends to stick to the working surface of disc.



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MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester	: V (New)	Term	: I	Academic Year	: 2017-18
Course No.	: ENTO 353	Title	: Crop Pests and Stored Grain Pests and their Management		
Credits	: 3(2+1)				
Day & Date	: Monday, 20.11.2017	Time	: 14.00 to 17.00	Total Marks	: 80

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

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SECTION "A"

- Q.1 Enlist four major pests of Mango with scientific names and describe nature of damage and suggest control measures for Mango Mealy bug.
- Q.2 Explain in detail Bollworm complex of Cotton and their management practices.
- Q.3 Write the scientific name of sorghum shoot fly, grape udadya beetle and describe their nature of damage and management practices.
- Q.4 Write in detail nature of damage and management practices of pod borer complex on Pigeon pea.
- Q.5 Enlist preventive measures recommended against stored grain pests and describe in detail any three of them.
- Q.6 Write short notes (Any Two).
- | | |
|------------------|----------------------|
| a) White grub | b) Anar caterpillar |
| c) Chilli thrips | d) Sugarcane pyrilla |
- Q.7 Write the scientific name, nature of damage and management practices of Brown plant hopper and Yellow stem borer of rice.
- Q.8 List out four important pest of Citrus along with their scientific name and explain nature of damage and management practices for Fruit sucking moth.
- Q.9 Enlist four insect pests of Brinjal and explain in detail nature of damage and management practices of *Leucinodes orbonalis*.
- Q.10 Explain the nature of damage and management practices of Rhinoceros beetle and termite.

(P.T.O.)

SECTION "B"

Q.11 Answer in one sentence.

- 1) Write the name of insect pest which causes silvery shoots in paddy.
- 2) Give the site of oviposition of sesamum hawk moth.
- 3) Write the name of insect pest which causes white patches of onion leaves.
- 4) Give the site of oviposition of Black headed caterpillar.
- 5) Write one cultural control measure for management of White grub.
- 6) Give the name of pest causes drooping and drying of shoot in cotton.
- 7) Write the site of oviposition of Grasshopper.
- 8) Write the name of insect pest causes glistering zigzag tunnels on citrus leaves.

Q.12 a) Match the following pairs.

"A"

"B"

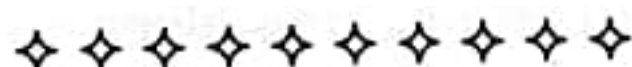
- 1) Chrysanthemum aphid
- 2) *Pentalonia nigronervosa*
- 3) *Helicoverpa armigera*
- 4) *Metarrhizium anisopliae*

- a) Banana bunchy top
- b) Polyphagus pest
- c) Bio-pesticide
- d) Aspermy virus disease

b) State the name of damaging stage.

- 1) Lemon Butterfly
- 3) Rice hispa

- 2) Cucurbit fruit fly
- 4) Tea mosquito



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MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : V (New)	Term : I	Academic Year : 2017-18
Course No. : EXTN 353	Title : Extension Methodologies for Transfer of	
Credits : 2(1+1)	Agriculture Technology	
Day & Date : Tuesday, 21.11.2017	Time : 14.00 to 16.00	Total Marks : 40

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

LIBRARY



SECTION "A"

- Q.1 Explain the steps in programme planning process.
- Q.2 Define the term communication and give different models of communication.
- Q.3 Give the different adopter categories and their important characteristics.
- Q.4 Give the functions of extension teaching methods and describe the factors affecting selection of extension teaching methods.
- Q.5 Define the term training. Give the types of training according to stages of career.
- Q.6 Define the term extension teaching methods. Give the classification of extension teaching methods according to use and form.
- Q.7 Explain the different group discussion techniques.
- Q.8 Enlist all elements of communication system. Write the characteristics of good message.
- Q.9 Define the term Transfer of Technology (TOT). Give the difference between result demonstration and method demonstration.
- Q.10 Define the term news. Give different kinds of news story and write down advantages and limitations of the news.

SECTION "B"

- Q.11 State True or False.
 - 1) Video conferencing is audio plus visual conferencing for groups of people located in distant cities.
 - 2) The purpose of treatment of message is to make the message clear, understandable and realistic and audience.
 - 3) Monitoring is a continuous process, while evaluation is a one shot operation.
 - 4) Summative evaluations are conducted before programme completion.
- Q.12 Fill in the blanks.
 - 1) _____ is the process or method of determining the worth or quality of something.
 - 2) _____ are the bridges between the sender and the receiver of messages.
 - 3) _____ is the process by which innovations is spread to members of a social system.
 - 4) The word communication is derived from the Latin word _____.

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MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : V (New)	Term : I	Academic Year : 2017-18
Course No. : PATH 354	Title : Diseases of Horticultural Crops and their Management	
Credits : 3(2+1)		
Day & Date : Monday, 13.11.2017	Time : 14.00 to 17.00	Total Marks : 80

- Note :**
1. Solve **ANY EIGHT** questions from **SECTION "A"**.
 2. All questions from **SECTION "B"** are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 a) State the causal organism of panama wilt of banana and describe its etiology and perpetuation.
b) Describe the symptoms and management of white rust of crucifers
- Q.2 a) Describe the symptoms and transmission of papaya ring spot.
b) Explain the symptoms and management of citrus tristeza.
- Q.3 a) State the causal organism; describe etiology and management of downy mildew of grapes.
b) Describe the symptoms of mango malformation.
- Q.4 a) Explain the symptoms, perpetuation and management of black spot of rose.
b) Describe in short about apple scab.
- Q.5 a) Enlist important diseases of guava along with their causal organisms.
b) Name the causal organism, describe the symptoms and management of fig rust.
- Q.6 a) Explain in detail the oily spot disease of pomegranate.
b) Enlist the diseases of cucurbits along with their causal organisms.
- Q.7 a) Describe the symptoms, mode of spread and management of yellow vein mosaic of okra.
b) Describe symptoms and management of bacterial wilt of brinjal.
- Q.8 a) Explain the symptoms of onion smudge.
b) Discuss etiology, perpetuation and management of potato scab.
- Q.9 a) Describe symptoms perpetuation and management of ripe fruit of chili.
b) Explain in detail about early blight of tomato.
- Q.10 a) Describe in detail about Koleroga of arecanut.
b) Describe symptoms and management of foot rot of betel vine.

(P.T.O.)

SECTION "B"

Q.11 Match the following pairs.

"A"

"B"

- | | |
|--|--------------------------|
| 1) <i>Colletotrichum lindemuthianum</i> | a) Partial stem parasite |
| 2) <i>Hemilia vasatarics</i> | b) Viroid |
| 3) <i>Fusarium oxysporum</i> f.sp. <i>gladioli</i> | c) Crown gall |
| 4) <i>Phytophthora</i> spp. | d) Seed borne |
| 5) <i>Agrobacterium</i> | e) Uredospores |
| 6) <i>Dendrophthoe falcate</i> | f) Aeciospores |
| 7) Coconut cadang cadang | g) Wilt |
| 8) <i>Uromyces hobsoni</i> | h) Rainy season |

Q.12 Do as directed.

- 1) The perfect stage of *Colletotrichum gloeosporioides* is _____.
- 2) Cashew die back is caused by _____.
- 3) State the vector of grapevine fan leaf virus.
- 4) Write the different hosts of *Erysiphe cichoracearum*.
- 5) Onion smut organism does not form basidiospores. (State true or false)
- 6) In which genus the sporangia are produced in chain?
- 7) Bunchy top of banana is transmitted by _____.
- 8) Black leaf spot of ber is caused by _____.

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MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester : V (New)	Term : I	Academic Year : 2017-18
Course No. : SSAC 354	Title : Biochemistry	
Credits : 3(2+1)	Time : 14.00 to 17.00	Total Marks : 80
Day & Date : Friday, 17.11.2017		

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

LIBRARY

SECTION "A"

- Q.1 a) Define cell and draw a neat diagram of plant cell organelles and give its role.
b) Define protein and classify them on the basis of their composition.
- Q.2 a) Define phosphorylation. Describe cyclic photophosphorylation.
b) Explain the β -oxidation of fatty acids.
- Q.3 a) Define biochemistry. Explain the scope and importance of biochemistry in agriculture.
b) What are nucleic acids? State the hydrolytic products of RNA and DNA
- Q.4 a) What is vitamin? Discuss the important functions of fat soluble vitamins.
b) Define plant pigment and state different types of plant pigment with their physiological role.
- Q.5 a) What is enzyme? Explain its important properties.
b) Distinguish between amylose and amylopectin.
- Q.6 a) What is Glycosides? Give the classification of glycosides with suitable examples.
b) What is polysaccharide? Classify the polysaccharides with suitable examples.
- Q.7 Write short notes on (Any Four).
a) Photosynthesis
b) Essential amino acids
c) Tannins
d) Saponification reaction
e) Oxidative rancidity
- Q.8 a) What are lipids? Explain the significance of lipids.
b) Define alkaloids and explain their physiological role in agriculture.
- Q.9 a) Define fatty acids and give its classification with suitable examples.
b) Define free energy and explain the difference between endergonic and exergonic reaction.
- Q.10 a) What is glycolysis and explain the steps in glycolysis along with enzymes.
b) Distinguish between gums and mucilages.

(P.T.O.)

SECTION "B"

Q.11 Define the following terms.

- | | |
|------------------|---------------------|
| 1) Carbohydrates | 2) Transamination |
| 3) Iodine number | 4) Peptides |
| 5) Biomolecules | 6) Catabolism |
| 7) Amino acid | 8) Prosthetic group |

Q.12 Fill in the blanks.

- 1) _____ is an example of sulphur containing amino acid.
- 2) Nicotin alkaloid is present in _____ plant.
- 3) The glycosidic linkage present in cellulose is _____ type.
- 4) The transformation of sugar to glycogen is known as _____.
- 5) Linoleic acid is _____ fatty acid.
- 6) Agar agar is example of _____.
- 7) _____ is father of modern enzymology.
- 8) The example of trisaccharide is _____.

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