MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Agri.)

Semester	: **IV (New)**	**Term**	: **II**	**Academic Year**	: **2011-12**
Course No.	: PATH 243	**Title**	: **Diseases of Field Crops and Their Management**		
Credits	: 3 (2+1)				
Day & Date	: Tuesday, 24.04.2012	**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) Comment on symptoms and transmission of bud necrosis disease of groundnut.
b) State causal organism and control measures of rust of soybean.

Q.2 a) Write cause and alternate hosts of rust of bajra and stem rust of wheat.
b) Describe control measures of loose smut of wheat.

Q.3 a) Write hosts of *Striga* and state why it is difficult to eradicate.
b) Write about causes, symptoms and management of red leaf blight of cotton.

Q.4 a) Describe symptoms and management of whip smut of sugarcane.
b) Give host range of 1) *Sclerotium rolfsii* 2) Sugarcane mosaic virus

Q.5 a) Describe symptoms of bacterial blight of rice.
b) Write mode of transmission of rice tungro and yellow mosaic of green gram.

Q.6 a) Describe symptoms of downy mildew of sunflower.
b) Give two resistant varieties for control of wilt of red gram and wilt of gram.

Q.7 a) Describe transmissions and management of pigeon pea sterility mosaic.
b) Write primary and secondary sources of inoculum of ergot of pearl millet and downy mildew of maize.

Q.8 a) Describe predisposing factors and management of downy mildew of pearl millet.
b) Give seed treatment for management of black arm of cotton and blast of rice.

Q.9 a) Write cause and symptoms of sesamum phyllody.
b) Write a short note on chickpea stunt disease.

Q.10 a) Describe in short leaf blight disease of castor caused by *Alternaria ricini.*
b) Describe in short wilt of linseed.

SECTION "B"

Q.11 State True or False.
1) White flies transmit TMV.
2) Long smut of sorghum is internally seed borne disease.

(P.T.O.)

agromind.in

Telegram - AgroMind

3) Sunflower rust is heteroecious in nature.
4) *Melampsora ricini* produces aeciospores on castor.
5) *Sphacelia sorghi* is imperfect state of *Claviceps sorghi*.
6) *Cercospora carthami* is externally seed borne.
7) Conidial stage of *Rhizoctonia bataticola* is *Macrophomina phaseolina*.
8) Asci without ascocarp are produced in *Taphrina* infecting turmeric.

Q.12 Fill in the blanks.

1) Primary source of inoculum of *Alternaria sesami* is _____.
2) *Fusarium oxysporum* f. sp. *carthami* is _____ borne in nature.
3) The sexual spore of downy mildew fungi is _____.
4) The perfect stage of *Ramularia areola* is _____.
5) Anthracnose of black gram is caused by _____.
6) Sclerotium cepivorum causes _____ disease of garlic.
7) Linseed rust is _____ in nature.
8) Orobanche is _____ parasite of tobacco.

✧ ✧ ✧ ✧ ✧ ✧ ✧ ✧ ✧ ✧ ✧

agromind.in