

THE OPEN UNIVERSITY OF SRI LANKA

B.Sc. DEGREE PROGRAMME

BOTANY- LEVEL 05

BYU5301/BYE5301 - PLANT PATHOLOGY

ASSESSMENT TEST II (NO BOOK TEST)

DURATION: ONE (01) HOUR



Date: 28th July 2018

Time: 4.00-5.00 pm

Registration No:

Answer ALL questions in the space provided.

1 .Name the disease of the plant caused by the following fungi:

- i. *Plasmopara viticola* on grapes -
- ii. *Oidium hevea* on rubber -
- iii. *Alternaria solani* on potato -
- iv. *Fusarium oxysporum* on tomato -
- v. *Xylaria thwaitesii* on rubber -
- vi. *Rigidoporus lignosus* on rubber -
- vii. *Exobasidium vexans* on tea -
- viii. *Corynespora cassicola* on rubber -
- ix. *Hamilea vastatrix* on coffee -
- x. *Pythium debaryanum* on chilli -

(4 x 10 marks)

2. Certain structures/events in the life cycle of fungi are described below. State **one (01) species or genus** of a fungus you have studied as an example which best fits each of these descriptions.

i. Barrel-shaped asexual spores in chains -

.....

ii. Conidia formed in asexual fruiting bodies known as sporodochia -

.....

iii. A genus of fungi forming sclerotia in its life cycle -

.....

iv. A vegetative body consisting of an amoeboid structure without a definite cell wall -

.....

v. A fungus with of macro-conidia and micro-conidia in its life cycle -

.....

vi. Fusion of spermatia of one mating type with the receptive hyphae of the other mating type (spermatization) -

.....

vii. Coloured conidia with cross and longitudinal septa -

.....

(4 x 7 marks)

3. Give the **best two (02)** answers in response to the following:

i. **Two (02)** functions of uredospores of coffee rust disease -

(a)

(b)

ii. **Two (02)** functions of teliospores of wheat rust -

(a)

(b)

- iii. **Two (02)** mechanisms by which white root disease of rubber spreads to a healthy tree -
- (a)
- (b)
- iv. **Two (02)** spore types which are capable of spreading powdery mildew disease of roses caused by *Sphaerotheca pannosa* -
- (a)
- (b)
- v. **Two (02)** characteristic features of the conidiospores of the genus *Colletotrichum* which causes anthracnose disease in plants -
- (a)
- (b)
- vi. **Two (02)** economically important fungal diseases of potatoes -
- (a)
- (b)
- vii. **Two (02)** phases during seed germination where damping-off of seedling may occur -
- (a)
- (b)
- viii. **Two (02)** host plants in the life cycle of *Puccinia graminis* -
- (a)
- (b)

(4 x 8 marks)

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