

# GURUDAS COLLEGE

**B. Sc. SEMESTER VI (Honours) Examination, 2021**

**Online Internal Assessment, 2021**

**Subject: BOTA**

**Subject Category: Honours**

**CORE COURSE - 14**

**Course: - BOT-A-CC-14-TH**

**Course Name: Plant Metabolism**

**Date of Examination: 22/07/2021, 3:30 PM**

All questions carry equal marks

**Time: 30 minutes**

**FM:10**

**Answer the following (Any 5) :**

**2X5=10**

Q.1. Rieske centre is

- a) Cytochrome b<sub>6</sub>f complex
- b) Core complex 1
- c) Core complex 2
- d) None of the above

Q.2. Non cyclic electron transport and O<sub>2</sub> evolution are inhibited by

- a) 2, 4-dinitrophenol
- b) Atractylic acid
- c) CMU and DCMU
- d) None of the above

Q.3. Dimorphic chloroplasts are found in leaves of

- a) C<sub>3</sub> plants
- b) C<sub>4</sub> plants
- c) Both a and b
- d) None of the above

Q.4. Photorespiration is inhibited by

- a) 2,4-Dinitrophenol
- b) Hydroxysulphonate
- c) CMU and DCMU
- d) None of the above

Q.5. How many molecules of ATP will be formed from complete oxidation of one molecule of palmitic acid (16-C) to CO<sub>2</sub> and H<sub>2</sub>O?

- a) 35
- b) 33
- c) 96
- d) 129

Q.6. In symbiotic nitrogen fixation, function of leghaemoglobin in nodule is

- a) To provide protein to the symbiotic bacteria
- b) To provide oxygen to the respiring symbiotic bacteria
- c) To provide oxygen to nitrogenase enzyme
- d) To attract Rhizobia to the root hair of the plants

Q.7. Which of the following statement is not correct about the Pentose Phosphate Pathway?

- a) Reactions of Pentose Phosphate Pathway occur in the mitochondria
- b) Pentoses can provide glycolytic intermediates
- c) The Pentose Phosphate Pathway produces ribose 5-phosphate, required in the synthesis of DNA and RNA
- d) None of the above.

Q.8. Net gain of ATP from one molecule of glucose in glycolysis is

- a) 4
- b) 6
- c) 2
- d) 8

### **Instructions for submission of answer scripts**

1. Write the front page/top sheet as per instruction.
2. Scan the pages in sequence and make a single PDF file.
3. Rename file as per instruction.
4. Email the PDF file within the stipulated time to the following

### **Email IDs :**

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