



BIOLOGY

BOOKS - TRUEMAN BIOLOGY

NCERT Exemplar Questions +1

(PHOTOSYNTHESIS IN HIGHER PLANTS)

Mcqs

1. Which metal ion is a constituent of chlorophyll?

A. Iron

B. Copper

C. Magnesium

D. Zinc

Answer: c



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2. Which pigment acts directly to convert light energy to chemical energy?

A. Chlorophyll a

B. Chlorophyll b

C. Xanthophyll

D. Carotenoid

Answer: a



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3. Which range of wavelength (in nm) is called photosynthetically active radiation (PAR)?

A. 100-390

B. 390-430

C. 400-700

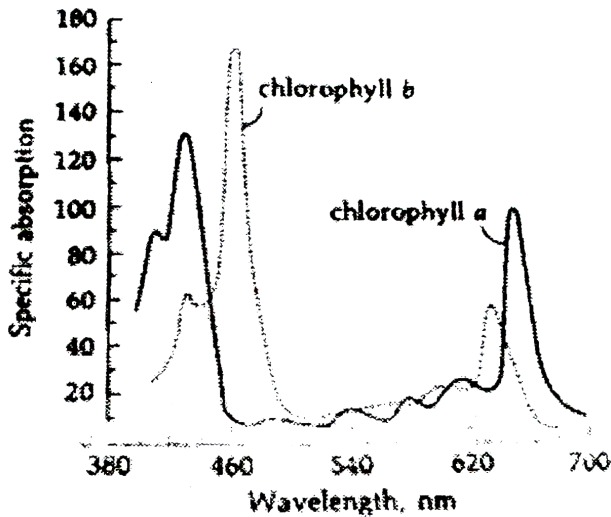
D. 760-100,00

Answer: c



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4. Which light range is most effective in photosynthesis



Absorption spectra of chlorophylls a and b

- A. Blue
- B. Green
- C. Red
- D. Violet

Answer: c



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5. Chemosynthetic bacteria obtain energy from

A. Sun

B. Infra red rays

C. Organic substances

D. Inorganic chemicals

Answer: d



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6. Energy required for ATP synthesis in PSII comes from

- A. proton gradient
- B. electron gradient
- C. reduction of glucose
- D. oxidation of glucose

Answer: a



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7. During light reaction in photosynthesis the following are formed.

A. ATP and sugar

B. Hydrogen, O_2 and sugar

C. ATP , hydrogen donor and O_2

D. ATP , hydrogen and O_2 donor

Answer: c



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8. Dark reaction in photosynthesis is called so because

- A. it can occur in dark also
- B. it does not depend on light energy
- C. it cannot occur during day light
- D. it occurs more rapidly at night

Answer: a



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9. PEP is primary CO_2 acceptor in

A. C_4 plants

B. C_3 plants

C. C_2 plants

D. Both C_3 & C_4 plants

Answer: a



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10. Splitting of water is associated with

- A. photosystem I
- B. lumen of thylakoid
- C. both photosystem I and II
- D. inner surface of thylakoid membrane

Answer: d



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11. The correct sequence of flow of electrons in the light reaction is

A. PSII, plastoquinone, cytochromes, PSI, ferredoxin

B. PSI, plastoquinone, cytochromes, PSII, ferredoxin

C. PSI, ferredoxin, PSII

D. PSI, plastoquinone, cytochromes, PSII, ferredoxin

Answer: a



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12. The enzyme that is not found in a C_3 plant is

A. RuBP Carboxylas

B. PEP Carboxylase

C. NADP reductase

D. ATP synthase

Answer: b



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13. The reaction that is responsible for the primary fixation of CO_2 is catalysed by

- A. RuBP carboxylase
- B. PEP carboxylase
- C. RuBP carboxylase and PEP carboxylase
- D. PGA synthase

Answer: c



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14. When CO_2 is added to PEP. The first stable product synthesised is

A. Pyruvate

B. Glyceraldehyde-3-phosphate

C. Phosphoglycerate

D. Oxaloacetate

Answer: d



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