

National Testing Agency

Question Paper Name :	Plant Physiology and Metabolism 30 Sep 2020 Shift 1
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Plant Physiology and Metabolism

Group Number :	1
Group Id :	89951446
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100
Is this Group for Examiner? :	No

Plant Physiology and Metabolism

Section Id :	89951448
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	100
Number of Questions to be attempted :	100

Section Marks : 100
Mark As Answered Required? : Yes
Sub-Section Number : 1
Sub-Section Id : 89951470
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 8995144105 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The opening and closing of guard cell is favored by

- (i) Na^+
- (ii) K^+
- (iii) Mg^{2+}
- (d) Fe^{2+}

Options :

- 89951416355. 1
- 89951416356. 2
- 89951416357. 3
- 89951416358. 4

Question Number : 2 Question Id : 8995144106 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Translocation of organic molecule mostly occurs through

- (i) Tracheid
- (ii) Trachea
- (iii) Sieve tube
- (iv) Sieve cell.

Options :

- 89951416359. 1
- 89951416360. 2

89951416361. 3

89951416362. 4

Question Number : 3 Question Id : 8995144107 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The mycorrhizal fungi help in the absorption of

(i) H^+

(ii) Na^+

(iii) NO_3^-

(iv) Any mineral ion.

Options :

89951416363. 1

89951416364. 2

89951416365. 3

89951416366. 4

Question Number : 4 Question Id : 8995144108 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The following is not a macro element for plants

(i) N

(ii) K

(iii) Fe

(iv) Mg.

Options :

89951416367. 1

89951416368. 2

89951416369. 3

89951416370. 4

Question Number : 5 Question Id : 8995144109 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The following nutrient is a micronutrient for plant but macronutrient for bacteria

- (i) Mg
- (ii) Cu
- (iii) Fe
- (iv) Mn.

Options :

- 89951416371. 1
- 89951416372. 2
- 89951416373. 3
- 89951416374. 4

Question Number : 6 Question Id : 8995144110 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The maximum nitrogen in a living cell remains trapped within

- (i) membrane protein
- (ii) nucleic acid
- (iii) enzymes
- (iv) polypeptide.

Options :

- 89951416375. 1
- 89951416376. 2
- 89951416377. 3
- 89951416378. 4

Question Number : 7 Question Id : 8995144111 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

In LDP, the following amino acid is accumulated

- (i) glutamine
- (ii) asparagines
- (iii) glutamate
- (iv) aspartate.

Options :

- 89951416379. 1
- 89951416380. 2
- 89951416381. 3
- 89951416382. 4

Question Number : 8 Question Id : 8995144112 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Cdk 4 is associated with what type of cyclin?

- (i) D
- (ii) E
- (iii) A
- (iv) B.

Options :

- 89951416383. 1
- 89951416384. 2
- 89951416385. 3
- 89951416386. 4

Question Number : 9 Question Id : 8995144113 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The following amino acid does not contain Sulphur

- (i) cysteine
- (ii) cystine
- (iii) alanine
- (iv) methionine.

Options :

- 89951416387. 1
- 89951416388. 2
- 89951416389. 3
- 89951416390. 4

Question Number : 10 Question Id : 8995144114 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The following element is involved in protein synthesis

- (i) Ca
- (ii) Mn
- (iii) Mo
- (iv) Fe.

Options :

- 89951416391. 1
- 89951416392. 2
- 89951416393. 3
- 89951416394. 4

Question Number : 11 Question Id : 8995144115 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following hormones can replaces vernalisation?

- i. Auxin
- ii. ethylene
- iii. gibberellins
- iv. cytokinins

Options :

- 89951416395. 1
- 89951416396. 2
- 89951416397. 3
- 89951416398. 4

Question Number : 12 Question Id : 8995144116 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following process is called Springization or Springification?

- i. Fertilization
- ii. Pollination
- iii. Vernalization
- iv. None of the these

Options :

- 89951416399. 1
- 89951416400. 2
- 89951416401. 3
- 89951416402. 4

Question Number : 13 Question Id : 8995144117 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The practice of subjecting seeds to low temperatures for a period of time in order to cause growth & flowering during summer season is called

- i. Wintering
- ii. Vernalization
- iii. Devernalization
- iv. Thermolysis

Options :

- 89951416403. 1
- 89951416404. 2
- 89951416405. 3
- 89951416406. 4

Question Number : 14 Question Id : 8995144118 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Vernalization is done at

- i. Low temperature
- ii. Low light intensity
- iii. High temperature
- iv. High light intensity

Options :

- 89951416407. 1
- 89951416408. 2
- 89951416409. 3
- 89951416410. 4

Question Number : 15 Question Id : 8995144119 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The low temperature treatment that reduces the period between sowing & flowering is called

- i. Chemotaxis
- ii. Vernalization
- iii. Freezing injury
- iv. None of above

Options :

- 89951416411. 1
- 89951416412. 2
- 89951416413. 3
- 89951416414. 4

Question Number : 16 Question Id : 8995144120 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Vernalization reduces which phase in plants?

- i. Growth phase
- ii. Vegetative phase
- iii. Differential phase
- iv. Flowering phase

Options :

- 89951416415. 1
- 89951416416. 2
- 89951416417. 3
- 89951416418. 4

Question Number : 17 Question Id : 8995144121 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The term vernalization was coined by

- i. Gregory
- ii. Melchers
- iii. Lysenko
- iv. Purvis

Options :

- 89951416419. 1
- 89951416420. 2
- 89951416421. 3
- 89951416422. 4

Question Number : 18 Question Id : 8995144122 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Flowering dependent on cold treatment is

- i. cryotherapy
- ii. cryogenics
- iii. cryoscopy
- iv. vernalisation

Options :

- 89951416423. 1
- 89951416424. 2
- 89951416425. 3
- 89951416426. 4

Question Number : 19 Question Id : 8995144123 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Treatment of seeds at low temperature under moist conditions to break its dormancy is called

- i. stratification
- ii. scarification
- iii. vernalization
- iv. chelation

Options :

- 89951416427. 1
- 89951416428. 2
- 89951416429. 3
- 89951416430. 4

Question Number : 20 Question Id : 8995144124 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Induction of flowering by low temperature in plants is

- i. crybiology
- ii. vernalization
- iii. phototropism
- iv. pruning.

Options :

- 89951416431. 1
- 89951416432. 2
- 89951416433. 3
- 89951416434. 4

Question Number : 21 Question Id : 8995144125 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

From glucose by hexokinase

- i. Glucose 6 phosphate is produced
- ii. Fructose 6 phosphate is produced
- iii. Fructose 1,6 bi phosphate is produced
- iv. None of the above

Options :

- 89951416435. 1
- 89951416436. 2
- 89951416437. 3
- 89951416438. 4

Question Number : 22 Question Id : 8995144126 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

By Phosphoglucose isomerase from glucose 6 phosphate

- i. Glucose 6 phosphate is produced
- ii. Fructose 6 phosphate is produced
- iii. Fructose 1,6 bi phosphate is produced
- iv. None of the above

Options :

- 89951416439. 1
- 89951416440. 2
- 89951416441. 3
- 89951416442. 4

Question Number : 23 Question Id : 8995144127 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Phosphofructokinase produces

- i. Glucose 6 phosphate
- ii. Fructose 6 phosphate
- iii. Fructose 1,6 bi phosphate
- iv. None of the above

Options :

- 89951416443. 1
- 89951416444. 2
- 89951416445. 3
- 89951416446. 4

Question Number : 24 Question Id : 8995144128 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Triose phosphate isomerase produces

- i. Glyceraldehyde 3 phosphate
- ii. Dihydroxy acetone phosphate
- iii. Fructose 1,6 bi phosphate
- iv. None of the above

Options :

- 89951416447. 1
- 89951416448. 2
- 89951416449. 3
- 89951416450. 4

Question Number : 25 Question Id : 8995144129 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Glyceraldehyde-3-phosphate dehydrogenase produces

- i. 1,3 biphosphoglycerate
- ii. 2 phosphoglycerate
- iii. 3 phosphoglycerate
- iv. None of the above

Options :

- 89951416451. 1
- 89951416452. 2
- 89951416453. 3
- 89951416454. 4

Question Number : 26 Question Id : 8995144130 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Phosphoglycerate kinase produces

- i. 1,3 biphosphoglycerate
- ii. 2 phosphoglycerate
- iii. 3 phosphoglycerate
- iv. None of the above

Options :

- 89951416455. 1
- 89951416456. 2
- 89951416457. 3
- 89951416458. 4

Question Number : 27 Question Id : 8995144131 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Phosphoglycerate mutase produces

- i. 1,3 biphosphoglycerate
- ii. 2 phosphoglycerate
- iii. 3 phosphoglycerate
- iv. None of the above

Options :

- 89951416459. 1
- 89951416460. 2
- 89951416461. 3
- 89951416462. 4

Question Number : 28 Question Id : 8995144132 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Enolase produces

- i. 1,3 biphosphoglycerate
- ii. 2 phosphoglycerate
- iii. 3 phosphoglycerate
- iv. Phosphoenolpyruvate

Options :

- 89951416463. 1
- 89951416464. 2
- 89951416465. 3
- 89951416466. 4

Question Number : 29 Question Id : 8995144133 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Pyruvate kinase produces

- i. Pyruvate
- ii. 1,3 biphosphoglycerate
- iii. 2 phosphoglycerate
- iv. 3 phosphoglycerate

Options :

- 89951416467. 1
- 89951416468. 2
- 89951416469. 3
- 89951416470. 4

Question Number : 30 Question Id : 8995144134 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Glycolysis is regulated by

- i. Glucose uptake
- ii. Phosphofructokinase 1
- iii. Allosteric regulation
- iv. All of the above

Options :

- 89951416471. 1
- 89951416472. 2
- 89951416473. 3
- 89951416474. 4

Question Number : 31 Question Id : 8995144135 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Transpiration topic will include

- i. To understand transpiration and its types.
- ii. To understand the significance of transpiration.
- iii. To study the factors affecting the transpiration
- iv. All of the above

Options :

- 89951416475. 1
- 89951416476. 2
- 89951416477. 3
- 89951416478. 4

Question Number : 32 Question Id : 8995144136 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Root pressure is

- i. Pressure on soil by root
- ii. it is the transverse osmotic pressure within the cells
- iii. it is not concerned with root
- iv. none of the above

Options :

- 89951416479. 1
- 89951416480. 2
- 89951416481. 3
- 89951416482. 4

Question Number : 33 Question Id : 8995144137 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

For plants macronutrients are

- i. Carbon
- ii. Hydrogen
- iii. Oxygen
- iv. All of the above

Options :

- 89951416483. 1
- 89951416484. 2
- 89951416485. 3
- 89951416486. 4

Question Number : 34 Question Id : 8995144138 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For plants the micronutrients are

- i. Chlorine
- ii. Iron
- iii. Boron
- iv. All of the above

Options :

- 89951416487. 1
- 89951416488. 2
- 89951416489. 3
- 89951416490. 4

Question Number : 35 Question Id : 8995144139 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Guttation is

- i. exudation of drops of xylem sap
- ii. shoot drop
- iii. root drop
- iv. leaf drop

Options :

- 89951416491. 1
- 89951416492. 2
- 89951416493. 3
- 89951416494. 4

Question Number : 36 Question Id : 8995144140 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

CAM is

- i. crassulacean acid metabolism
- ii. cascade metabolism
- iii. cassette metabolism
- iv. none of the above

Options :

- 89951416495. 1
- 89951416496. 2
- 89951416497. 3
- 89951416498. 4

Question Number : 37 Question Id : 8995144141 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Photosynthates are

- i. soluble organic compounds
- ii. photosynthesis
- iii. inorganic compounds
- iv. none of the above

Options :

- 89951416499. 1
- 89951416500. 2
- 89951416501. 3
- 89951416502. 4

Question Number : 38 Question Id : 8995144142 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Hatch and Slack pathway is

- i. C1 pathway
- ii. C2 pathway
- iii. C4 pathway
- iv. none of the above

Options :

- 89951416503. 1
- 89951416504. 2
- 89951416505. 3
- 89951416506. 4

Question Number : 39 Question Id : 8995144143 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Chemiosmotic mechanism is related to

- i. glycolysis
- ii. TCA cycle
- iii. electron transport chain
- iv. all of the above

Options :

- 89951416507. 1
- 89951416508. 2
- 89951416509. 3
- 89951416510. 4

Question Number : 40 Question Id : 8995144144 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Nitrogen metabolism in plant is

- i. nitrogen fixation
- ii. Nitrate and ammonia assimilation
- iii. Role of Microbes in N,P,K utilization
- iv. All of the above

Options :

- 89951416511. 1
- 89951416512. 2
- 89951416513. 3
- 89951416514. 4

Question Number : 41 Question Id : 8995144145 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The catalytic triad of chymotrypsin contains

- i. Serine
- ii. Histidine
- iii. Aspartate
- iv. All of the above.

Options :

- 89951416515. 1
- 89951416516. 2
- 89951416517. 3
- 89951416518. 4

Question Number : 42 Question Id : 8995144146 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Complex enzyme is

- i. Catalase
- ii. Urease
- iii. Both a and b
- iv. None of the above

Options :

- 89951416519. 1
- 89951416520. 2
- 89951416521. 3
- 89951416522. 4

Question Number : 43 Question Id : 8995144147 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Homodimeric enzyme is

- i. citrate synthase
- ii. Pyruvate kinase
- iii. Both a and b
- iv. None of the above.

Options :

- 89951416523. 1
- 89951416524. 2
- 89951416525. 3
- 89951416526. 4

Question Number : 44 Question Id : 8995144148 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Evidences of protein nature of enzyme include

- i. Identical physico-chemical properties
- ii. Amphoteric nature
- iii. Denaturation by temperature and pH
- iv. All of the above

Options :

- 89951416527. 1
- 89951416528. 2
- 89951416529. 3
- 89951416530. 4

Question Number : 45 Question Id : 8995144149 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Similarities of enzyme with inorganic catalyst include

- i. Enzyme remains unchanged—very small amount is needed.
- ii. Can not initiate the reaction that does not occur spontaneously
- iii. Accelerate reversible reaction
- iv. All of the above

Options :

- 89951416531. 1
- 89951416532. 2
- 89951416533. 3
- 89951416534. 4

Question Number : 46 Question Id : 8995144150 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Characteristics of enzyme include

- i. Colloidal nature.
- ii. Chemical nature
- iii. Catalytic nature of effectiveness
- iv. All of the above

Options :

- 89951416535. 1
- 89951416536. 2
- 89951416537. 3
- 89951416538. 4

Question Number : 47 Question Id : 8995144151 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Catalytic nature of enzyme effectiveness include

- i. Virtual absence of any side products
- ii. Catalyses the *in vivo* reactions
- iii. Catalyst function as lowers activation energy
- iv. All of the above

Options :

- 89951416539. 1
- 89951416540. 2
- 89951416541. 3
- 89951416542. 4

Question Number : 48 Question Id : 8995144152 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Mitochondrial ATP synthase is

- i. Non identical oligomeric enzyme
- ii. single chain enzyme
- iii. Identical homomeric enzyme
- iv. None of the above

Options :

- 89951416543. 1
- 89951416544. 2
- 89951416545. 3
- 89951416546. 4

Question Number : 49 Question Id : 8995144153 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Highly alkaline enzyme

- a. Fumerase
- b. cellobiase
- c. invertase
- d. None of the above

Options :

89951416547. 1

89951416548. 2

89951416549. 3

89951416550. 4

Question Number : 50 Question Id : 8995144154 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

pH optima of pepsin is

- i. 1.5
- ii. 2.8
- iii. 8
- iv. None of the above

Options :

89951416551. 1

89951416552. 2

89951416553. 3

89951416554. 4

Question Number : 51 Question Id : 8995144155 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

TCA cycle is discovered by

- i. Hans Krebs and William Arthur Jonson
- ii. Davson and Danielli
- iii. Watson and Crick
- iv. None of the above

Options :

- 89951416555. 1
- 89951416556. 2
- 89951416557. 3
- 89951416558. 4

Question Number : 52 Question Id : 8995144156 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Citrate is isomerized to isocitrate by the enzyme

- i. Aconitase
- ii. Triose phosphate isomerase
- iii. Glucose 6 Phosphate dehydrogenase
- iv. None of the above

Options :

- 89951416559. 1
- 89951416560. 2
- 89951416561. 3
- 89951416562. 4

Question Number : 53 Question Id : 8995144157 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

..... catalyzes the conversion of isocitrate to oxalosuccinate and then to alpha ketoglutarate

- i. Isocitrate dehydrogenase
- ii. Aconitase
- iii. Triose phosphate isomerase
- iv. Glucose 6 Phosphate dehydrogenase

Options :

- 89951416563. 1
- 89951416564. 2
- 89951416565. 3
- 89951416566. 4

Question Number : 54 Question Id : 8995144158 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Conversion of alpha keto glutarate to succinyl CoA

- i. by alpha ketoglutarate dehydrogenase
- ii. by aconitase
- iii. by triose phosphate isomerase
- iv. none of the above

Options :

- 89951416567. 1
- 89951416568. 2
- 89951416569. 3
- 89951416570. 4

Question Number : 55 Question Id : 8995144159 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Conversion of succinate to fumarate by

- i. succinate dehydrogenase
- ii. Isocitrate dehydrogenase
- iii. Aconitase
- iv. Triose phosphate isomerase

Options :

- 89951416571. 1
- 89951416572. 2
- 89951416573. 3
- 89951416574. 4

Question Number : 56 Question Id : 8995144160 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Malate is oxidised to oxaloacetate by

- i. malate dehydrogenase
- ii. Isocitrate dehydrogenase
- iii. Aconitase
- iv. Triose phosphate isomerase

Options :

- 89951416575. 1
- 89951416576. 2
- 89951416577. 3
- 89951416578. 4

Question Number : 57 Question Id : 8995144161 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Complex I is

- i. NADH-coenzyme Q oxidoreductase
- ii. succinate dehydrogenase
- iii. cytochrome c oxidoreductase
- iv. None of the above

Options :

89951416579. 1

89951416580. 2

89951416581. 3

89951416582. 4

Question Number : 58 Question Id : 8995144162 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Complex II consists of

- i. NADH-coenzyme Q oxidoreductase
- ii. succinate dehydrogenase
- iii. cytochrome c oxidoreductase
- iv. None of the above

Options :

89951416583. 1

89951416584. 2

89951416585. 3

89951416586. 4

Question Number : 59 Question Id : 8995144163 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Complex III is

- i. NADH-coenzyme Q oxidoreductase
- ii. succinate dehydrogenase
- iii. cytochrome c oxidoreductase
- iv. None of the above

Options :

- 89951416587. 1
- 89951416588. 2
- 89951416589. 3
- 89951416590. 4

Question Number : 60 Question Id : 8995144164 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Complex IV contains

- i. cytochrome c oxidase
- ii. succinate dehydrogenase
- iii. cytochrome c oxidoreductase
- iv. None of the above

Options :

- 89951416591. 1
- 89951416592. 2
- 89951416593. 3
- 89951416594. 4

Question Number : 61 Question Id : 8995144165 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Enzyme can be regulated by

- i. Allosteric Control
- ii. Covalent Modification
- iii. Protein Processing.
- iv. All of the above

Options :

- 89951416595. 1
- 89951416596. 2
- 89951416597. 3
- 89951416598. 4

Question Number : 62 Question Id : 8995144166 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Allosteric enzyme may be

- i. K type
- ii. V-type
- iii. None of the above
- iv. Both K and V type

Options :

- 89951416599. 1
- 89951416600. 2
- 89951416601. 3
- 89951416602. 4

Question Number : 63 Question Id : 8995144167 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Allosteric enzyme may have

- i. T state
- ii. R state
- iii. Both T and R state
- iv. None of the above

Options :

- 89951416603. 1
- 89951416604. 2
- 89951416605. 3
- 89951416606. 4

Question Number : 64 Question Id : 8995144168 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In K type enzyme

- i. K_M changes
- ii. V_{max} change
- iii. Both K_m and V_{max} change
- iv. None of the above

Options :

- 89951416607. 1
- 89951416608. 2
- 89951416609. 3
- 89951416610. 4

Question Number : 65 Question Id : 8995144169 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In V-type of enzyme

- i. K_M changes
- ii. V_{max} change
- iii. Both K_M and V_{max} change
- iv. None of the above

Options :

- 89951416611. 1
- 89951416612. 2
- 89951416613. 3
- 89951416614. 4

Question Number : 66 Question Id : 8995144170 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Covalent modification of enzyme include

- i. Phosphorylation
- ii. Adenylation
- iii. ADP ribosylation
- iv. All of the above

Options :

- 89951416615. 1
- 89951416616. 2
- 89951416617. 3
- 89951416618. 4

Question Number : 67 Question Id : 8995144171 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Protein processing include

- i. Zymogen activation
- ii. Covalent modification
- iii. genetic control
- iv. None of the above

Options :

- 89951416619. 1
- 89951416620. 2
- 89951416621. 3
- 89951416622. 4

Question Number : 68 Question Id : 8995144172 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Homotropic effector is

- i. substrate
- ii. Product
- iii. Other than substrate or product
- iv. May be substrate or product

Options :

- 89951416623. 1
- 89951416624. 2
- 89951416625. 3
- 89951416626. 4

Question Number : 69 Question Id : 8995144173 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Heterotropic effector is

- i. substrate
- ii. Product
- iii. Other than substrate or product
- iv. May be substrate or product

Options :

- 89951416627. 1
- 89951416628. 2
- 89951416629. 3
- 89951416630. 4

Question Number : 70 Question Id : 8995144174 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Symmetry model is

- i. MWC model
- ii. Concerted Model
- iii. Both a and b
- iv. None of the above

Options :

- 89951416631. 1
- 89951416632. 2
- 89951416633. 3
- 89951416634. 4

Question Number : 71 Question Id : 8995144175 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Glycolysis is part of

- i. Only anaerobic respiration
- ii. Krebs cycle
- iii. Only aerobic respiration
- iv. Both aerobic and anaerobic respiration

Options :

- 89951416635. 1
- 89951416636. 2
- 89951416637. 3
- 89951416638. 4

Question Number : 72 Question Id : 8995144176 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In fermentation, yeast secretes one of the following enzyme

- i. Invertase
- ii. Zymase
- iii. Dehydrogenase
- iv. Anolase

Options :

- 89951416639. 1
- 89951416640. 2
- 89951416641. 3
- 89951416642. 4

Question Number : 73 Question Id : 8995144177 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

During anaerobic respiration, decarboxylation reaction occurs in

- i. Cytoplasm
- ii. Mitochondrial matrix
- iii. Cristae
- iv. F1 particles

Options :

- 89951416643. 1
- 89951416644. 2
- 89951416645. 3
- 89951416646. 4

Question Number : 74 Question Id : 8995144178 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

End product of glycolysis is

- i. Acetyl CoA
- ii. Pyruvic Acid
- iii. Glucose 1 – phosphate
- iv. Fructose 1 – Phosphate

Options :

- 89951416647. 1
- 89951416648. 2
- 89951416649. 3
- 89951416650. 4

Question Number : 75 Question Id : 8995144179 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Energy currency (reservoir) of the cells is

- i. AMP
- ii. ATP
- iii. RNA
- iv. DNA

Options :

- 89951416651. 1
- 89951416652. 2
- 89951416653. 3
- 89951416654. 4

Question Number : 76 Question Id : 8995144180 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Fermentation produces

- i. Protein and acetic acid
- ii. Alcohol and lipoprotein
- iii. Alcohol, lactic acid, etc.
- iv. Ethers and acetones

Options :

- 89951416655. 1
- 89951416656. 2
- 89951416657. 3
- 89951416658. 4

Question Number : 77 Question Id : 8995144181 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The end products of fermentation are

- i. CO_2 and O_2
- ii. CO_2 and $\text{C}_2\text{H}_5\text{OH}$
- iii. O_2 and $\text{C}_2\text{H}_5\text{OH}$
- iv. CO_2 and acetaldehyde

Options :

- 89951416659. 1
- 89951416660. 2
- 89951416661. 3
- 89951416662. 4

Question Number : 78 Question Id : 8995144182 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Who discovered the process of fermentation?

- i. Jones
- ii. Pasteur
- iii. Buchner
- iv. Krebs

Options :

- 89951416663. 1
- 89951416664. 2
- 89951416665. 3
- 89951416666. 4

Question Number : 79 Question Id : 8995144183 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Anaerobic respiration was first of all reported by

- i. Maguene
- ii. Kostychev
- iii Klein
- iv. Pfeffer

Options :

- 89951416667. 1
- 89951416668. 2
- 89951416669. 3
- 89951416670. 4

Question Number : 80 Question Id : 8995144184 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Only partial breakdown of glucose molecule ($C_6H_{12}O_6$) takes place in

- i. Aerobic respiration
- ii. Anaerobic respiration
- iii. Passive respiration
- iv. Active respiration

Options :

- 89951416671. 1
- 89951416672. 2
- 89951416673. 3
- 89951416674. 4

Question Number : 81 Question Id : 8995144185 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The C1 cycle is not exhibited by

- (i) Archea
- (ii) Bacteria
- (iii) diatoms
- (iv) methanogen.

Options :

- 89951416675. 1
- 89951416676. 2
- 89951416677. 3
- 89951416678. 4

Question Number : 82 Question Id : 8995144186 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

SAM is a derivative of

- (i) valine
- (ii) cystine
- iii) alanine
- (iv) methionine.

Options :

- 89951416679. 1
- 89951416680. 2
- 89951416681. 3
- 89951416682. 4

Question Number : 83 Question Id : 8995144187 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The amino acid produced as the ultimate product of C1 cycle is

- (i) glycine
- (ii) serine
- (iii) methionine
- (iv) valine.

Options :

- 89951416683. 1
- 89951416684. 2
- 89951416685. 3
- 89951416686. 4

Question Number : 84 Question Id : 8995144188 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The numbers of organelles involved in C2 cycle are

- (i) 2
- (ii) 3
- (iii) 4
- (iv) 5.

Options :

- 89951416687. 1
- 89951416688. 2
- 89951416689. 3
- 89951416690. 4

Question Number : 85 Question Id : 8995144189 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The first stable product of C4 cycle is

- (i) glycolate
- (ii) glyoxalate
- (iii) oxalo acetate
- (iv) glycerate.

Options :

- 89951416691. 1
- 89951416692. 2
- 89951416693. 3
- 89951416694. 4

Question Number : 86 Question Id : 8995144190 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The following component increases during photorespiration

- (i) CO₂
- (ii) O₂
- (iii) N₂
- (iv) Argon.

Options :

- 89951416695. 1
- 89951416696. 2
- 89951416697. 3
- 89951416698. 4

Question Number : 87 Question Id : 8995144191 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The CAM plants accumulate

- (i) oxalate
- (ii) malate
- (iii) acetate
- (iv) citrate.

Options :

- 89951416699. 1
- 89951416700. 2
- 89951416701. 3
- 89951416702. 4

Question Number : 88 Question Id : 8995144192 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

PEPC is not present in

- i) paddy
- (ii) maize
- (iii) sugarcane
- (iv) cacti.

Options :

- 89951416703. 1
- 89951416704. 2
- 89951416705. 3
- 89951416706. 4

Question Number : 89 Question Id : 8995144193 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The HSK pathway is the other name of

- (i) C1 cycle
- (ii) C2 cycle
- (iii) C4 cycle
- (iv) CAM cycle.

Options :

- 89951416707. 1
- 89951416708. 2
- 89951416709. 3
- 89951416710. 4

Question Number : 90 Question Id : 8995144194 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Kranz anatomy is found in

- (i) CAM plants
- ii) any green plants
- (iii) C4 plants
- (iv) C1 bacteria

Options :

- 89951416711. 1
- 89951416712. 2
- 89951416713. 3
- 89951416714. 4

Question Number : 91 Question Id : 8995144195 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The process of transpiration can occur through

- (i) stomata
- (ii) lenticel
- (iii) cuticle
- (iv) all of them.

Options :

- 89951416715. 1
- 89951416716. 2
- 89951416717. 3
- 89951416718. 4

Question Number : 92 Question Id : 8995144196 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The dark phase occurs in the

- (i) stroma
- (ii) stoma
- (iii) grana
- (iv) thylakoid.

Options :

- 89951416719. 1
- 89951416720. 2
- 89951416721. 3
- 89951416722. 4

Question Number : 93 Question Id : 8995144197 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The universal photosynthetic pigment is

- (i) Chl. a
- (ii) Chl. b
- (iii) Chl. c
- (iv) Chl. d.

Options :

- 89951416723. 1
- 89951416724. 2
- 89951416725. 3
- 89951416726. 4

Question Number : 94 Question Id : 8995144198 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The pigment that is responsible for starch biosynthesis is

- (i) Chl. A
- (ii) Chl. B
- (iii) Chl. c
- (iv) Chl. d.

Options :

- 89951416727. 1
- 89951416728. 2
- 89951416729. 3
- 89951416730. 4

Question Number : 95 Question Id : 8995144199 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The oxygenic photosynthesis is not observed in

- (i) bacteria
- ii) cyanobacteria
- (iii) green plants
- (iv) algae.

Options :

- 89951416731. 1
- 89951416732. 2
- 89951416733. 3
- 89951416734. 4

Question Number : 96 Question Id : 8995144200 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The first stable product in photosynthesis is

- (i) PGAld
- (ii) PGA
- (iii) Fr-6-PO₄
- (iv) RuDP.

Options :

- 89951416735. 1
- 89951416736. 2
- 89951416737. 3
- 89951416738. 4

Question Number : 97 Question Id : 8995144201 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The number of pyrrole rings in the chlorophyll head is

- (i) 2
- (ii) 4
- (iii) 6
- (iv) 8.

Options :

- 89951416739. 1
- 89951416740. 2
- 89951416741. 3
- 89951416742. 4

Question Number : 98 Question Id : 8995144202 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The vitamin that is required actively during dark phase is

- (i) B2
- (ii) B4
- (iii) B6
- (iv) B12.

Options :

- 89951416743. 1
- 89951416744. 2
- 89951416745. 3
- 89951416746. 4

Question Number : 99 Question Id : 8995144203 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The following is an isomer of PGA is

- (i) PGAl
- (ii) DHAP
- (iii) Er-4-PO₄
- (iv) Ru-DP.

Options :

- 89951416747. 1
- 89951416748. 2
- 89951416749. 3
- 89951416750. 4

Question Number : 100 Question Id : 8995144204 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The number of ATP required to fix 6 CO₂ molecules is

- (i) 8
- (ii) 12
- (iii) 18
- (iv) 24.

Options :

- 89951416751. 1
- 89951416752. 2
- 89951416753. 3
- 89951416754. 4