

P. S. SCIENCE & H. D. PATEL ARTS COLLEGE, KADI

Internal Examination

B. Sc. SEM - IV

[Mark : 40

18-3-2016]

Biotechnology (CC - 5)

[1-30 to 3-00

Cellular Metabolism II (401)

1. Attempted all questions

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- (1) stable product of C3 & C4 cycles
(A) PGA & OAA (C) PGA & PEP
(C) PEP & PGA (D) PGA & G3P
- (2) beta oxidation occurs in
(A) Chloroplast (C) Mitochondria
(B) Bundle sheath (D) Plasma membrane
- (3) PS-I and PS-II
(A) P700 & P680 (C) P680 & P700
(B) P720 & P680 (D) P680 & P720
- (4) Insulin produced by
(A) Adipose tissue (C) Beta cell of liver
(B) Alpha cell of islets (D) B + C
- (5) Na⁺ / K⁺ pump is example of
(A) Diffusion (C) Passive diffusion
(B) Active diffusion (D) Osmosis
- (6) Receptors
(A) Allow ions to move in/out
(B) Allow move signal
(C) Allow molecules to in/out
(D) All

- (7) Answering the followings
- (A) NADP Full form
 - (B) Example of Active diffusion
 - (C) Types of fatty acid biosynthesis
 - (D) Other Name of C3 and C4 cycles

2. Answer any four (4) questions

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- (1) Define Photophosphorylation in bacteria
- (2) Describe cyclic and non cyclic Photophosphorylation in plants
- (3) Explain beta oxidation of lipids
- (4) Differentiate C3 and C4 cycles
- (5) Explain pigment system and types
- (6) Describe active diffusion with example

3. Answer any one (1) question

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- (1) Explain types of signalling receptors and mechanism
 - (2) Describe insulin pathway
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