Page No. Date Subject Name - Biology for Engineers Name - Shreering Mhatre. Division - 11 Rollno - 111056 Assignment 3

Paga N	10.	
Data		

(a) what are the different kind of adaptations explain with examples?

Ans > The different kind of adaptations are-

D Behavioural-Responses made by an organism that help it to survive I reproduce.

Eg - A adult male perguins huddle together during winter. This helps them to avoid heat loss and survive until spring

3 Physiological - Abady process that helps an organism to survive I reproduce

Eg - A penguin's resting heart rate can slow down greatly during a dive so that it can conserve exygen underwater and spend more time finding food.

(3) structural - A feature of an organism's body that helps it to survive /reproduce.

Eg- Penguins have a short stiff tail. They can lean backwards and balance on their heels and their tail. This reduces heat loss from their feet to the ground.

	Page No.
	and the second of the second o
1	Explain the steps involved in cellular respiration process?
(82)	Explain the stops involves in seminary
	vespiration processi
1-1	The steps involved in Cellular respiration are-
ANG>	the steps involves in actions and programs
0	Chinal acid Land Harrifal self yel processor
- U	To discallistic allacose asix car bon sular
160011	undergoes a series of chemical transformations
6	Pyrovate oxidation - la favor alucqueis ares
	Each Mariale Novi allering
30	into the mitochandrial matrix-the innermost
	compartment of mitochandria
3,01	regrest that willowtops of social regret
3	citric acid cycle- The acetyl COA made in the last step
	combines with a four-carbon molecula and
	goes through a cycle of reactions, ultimately
	regenerating the four-carbon starting
	molecule more a di dipodique atali
tds	11 to me of sonsignone polls born along
4	oxidative phosphorylation- At the end of the electron transport
d	At the end of the electron transport
	chain, oxygen accepts electrons and takes up protons to form water.
	up protons to tom water.

	Paga No. Data
	(Dais)
(3)	Define endotherm and ectotherm.
	cost Explain the steps involved to cellular
Ans > 0	Endo thorm -
	An endotherm is an organism that
-9YD	maintains its body at a metabolically forwards temperature, largely by the use of heat
	temperature, largely by the use of heat
	released by its internal bodily functions
-YD)	instead of relying almost purely on ambient
acidos	heatend Instruents of content to the high
(2)	Ectothem apitabixa stovery (a)
29	An octotherm is an organism in which
Teom	internal physiological sauces of heat are of relatively small or of quite negligible importance in controlling body temporature.
	relatively small or of quite negligible
	importance in controlling body temporatore,
	2012 000 01 VII 0
- claris	The acetyl (cA made in the last
04)	pefine photosynthesiso-dia anidano
VISITE	notes through a evelle of reachons, chimic
Ans-	Photogynthesis - vod od pritorposis
	photosynthesis is a process used by plants and other organisms to convert light
	plants and other organisms to convert light
+	energy into chemical energy that, through
100	cellular respiration, can later be released to fuel the organism's activities.
230	the organism's activities.
	WALL TO FOUND WALLY

	Page No. Date
@5)	what are the different kinds of symmetry present in biological organisms? Mention examples of each symmetry.
	The different kinds of symmetry present in biological organism are-
0	Radial symmetry - organisms with radial symmetry show

1) Radial symmetry organisms with radial s a repeating pattern around a control axis such that they can be separated into several identical pieces when cut through the contral point, much like pieces of a pie. Eg-sea anemone jelly fish, star fish etc.

2) Is as a hedral symmetry -Icosahadral symmetry occurs in an organism which contains so subunits generated by 20 foces, each an equilatoral triangles and 12 corners. Eg- Circoporus, octahedrus, Lithocubs geometricus

3 Spherical Symmetry-Spherical symmetry is characterised by the ability to draw an endless, or great but finite, number of symmetry axes through the body.

Eg-Radiolaria Etteliozog. etc.

	Paga No.
99	Bilateral Symmetry-116 off syn John So
	Organisms with bilatoral symmetry
	contain a single plane of symmetry, the
	sagittal plane, which divides the organism
013	into two roughly mirror image left and
	right halves - orn melaporo losipoloid
	Eg-saturnia pavonia, orchideta
(5)	Biradiala Symmetry Englavoro
21X	Bixadial symmetry is found in consuming
Lover	Biradial symmetry is found in organisms which show morphological features of both bilateral and vadial symmetry.
	bilateral and vadial symmetry.
1	Eg - ctenophores, Hydra etc.
	Fa - sea anomer jelly fish star fish of
-	(2) Isosahedval symmetry -
	Treschedyal symmetry cours in an
Inc	tolinos as doses, each as equilate
	frignales and 12 corpoers.
apindo	Eg- (weeponus, echahedrus) Lithouns geom
~	
· .	(3) Spherical symmetry
- ydo	spherolal symmetry is characterise
100	the ability to draw an endless or dilide enti
0	Finite number of symmetry axes through
	the body. the body. the podiologia & Heliozog. etc.
	FG - KODDIAL EL COLOR - C-
-	
6	