South Calcutta Girls' College

DEPARTMENT OF POLITICAL SCIENCE

The department assessed the learning level of the students through following methods:

- Periodic assessments through class tests .
- Assignments on the topics of the syllabus and assessments.
- Class work on different topics and students are asked to present their answer in class after finishing the work within stipulated time.
- For semesters 3 & 5 advanced and slow learners are segregated according to their performances in previous university exam along with their classroom assessments and regular assignments in google class room.

South Calcutta Girls' College

1.2.2021

Notice

This is to notify that an examination will be held on 11th February, 2021 for the students of 1st semester for assessing the learning level. The question paper will be uploaded in the Google Class room.

Dr. Satabdi Das

HOD

Department of Political Science

South Calcutta Girls' College

SAMPLE OF QUESTIONS OF 1ST SEMESTER FOR ASSESSING THE LEARNING LEVEL OF STUDENTS

Date: 11.2.21 Time: 25 minutes

10 MARKS EACH

1. What is power? Write its features. 4+6=10
2. What is citizenship? Write the methods of acquiring citizenship. 2+8=10
3. Describe the role of politics in Political Science. 10
4. What do you mean by authoritarianism? Write the salient features of authoritarianism. 4+6=10

South Calcutta Girls' College

LIST OF SLOW AND ADVANCED LEARNERS SEMESTER- I

ADVANCED LEARNERS	SLOW LEARNERS
Sejal Chaubey	Anjali Chowdhury
Zeenat Naaz	Farheen Laskar
Ayantika Haldar	Tanisha Ganguly Das
Aratrika Majumdar	Sreya Paul
Sneha Debnath	Mousumi Naskar
Priyanka Mondal	Sohana Ekram
Solanki Das	Meena Kumari Shaw
Rhythm Kumari Bhagat	Sanjukta Maity
Sony Dubey	Asfa Ahmed
Brintika Aich	Diksha Mahato
Jaba Mondal	Mano Biswas
Pramisha Agasti	Neha Prasad
	Anjali Mishra
	Zainab Hussain
	Kriti Prasad
	Rahmatun Nissa

South Calcutta Girls' College

RESOLUTION OF THE DEPARTMENTAL MEETING OF POLITICAL SCIENCE HELD ON 15th FEBRUARY 2021

Members Present:

1. Dr. Satabdi Das
2. Dr. Mohor Chakraborty
3. Dr. Namrata Kothari
4. Dr. Kamalika Banerjee
5. Smt. Lakshmi Sarkar

Resolutions:

1. The slow and advanced learners of Semester I (Session 2020-2021), Dept. of Political Science were identified and categorised.
2. It was resolved that the slow learners will be provided with simpler notes and assignments will be taken periodically in order to assess their progress.
3. It was resolved that the advanced learners will be provided with better and higher standard references, like journal articles from JSTOR, editorial paper cuttings and YouTube links of lectures and resources by subject experts to enable them to further improve their academic scores.

South Calcutta Girls' College

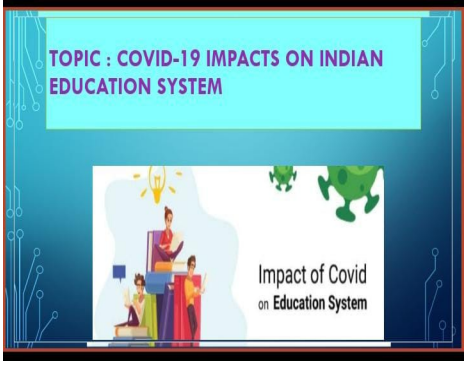
Notice No. 003/2021-2022 Date: 03.07.2021

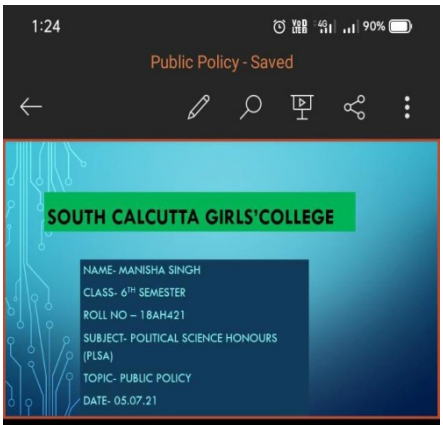
Department of Political Science will take the remedial classes according to the following routine from 5.7.2021.

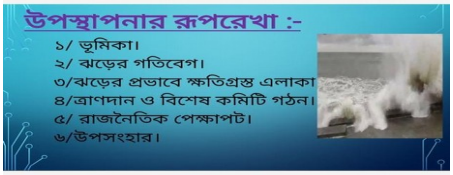
DAYS	TIME	SEM 2	SEM 4	SEM 6
MONDAY	9am-10am	NK	SD	MC
THURSDAY	9am-10am	KB	NK	SD
FRIDAY	9am-10am	SD	MC	KB
SATURDAY	9am-10am	MC	KB	NK

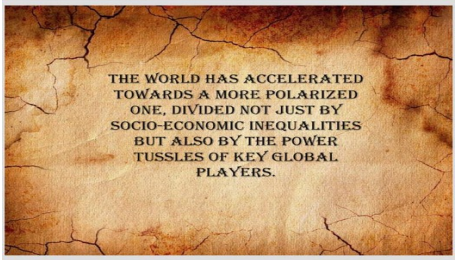
South Calcutta Girls' College

SAMPLE OF ADVANCED LEARNING









Power point

Presentations on recent topics

Q. What is Power? Characteristic features of Power.

Ans ⇒ In social and political theory, power refers to the ability to do things and capacity to produce effects within social interaction. In this sense, power becomes a type of behaviour that is derived from existance of social relationships having an organised social interactions. Power has two conceptions in history of modern political thought — one is a simple generalized phenomena, the capacity to act, while the other notion defines not only a capacity but also right to do so with both capacity and right to be exercised on those whose consent makes power to rule. The most accepted definition of power has been given by Robert Dahl as: "A has power over B to the extent that A can get B to do something which B would not otherwise do." Basically, power has two assumption — it is an attribute of individuals which is exercised over other individuals and is also a kind of domination over others wherein power makes others to do what one wants against their own will. Execution of power can be done in two ways — positive sanction i.e. by showing rewards or by negative sanction i.e. by threat.

Features of Power:

Firstly, the very concept of power in real world politics can be understood by determining the various relationships and their basis — which is both important and a core area of politics. Power is viewed as a means of exploitation in the hands of powerholder wherein surplus produce gets unequally distributed in society through the veil of power.

Secondly, power is more a social issue than a political or economic issue, but basically this

concept of power involves human relations. Power is to be seen as having an element of domination in it, wherein the majority is ruled by a few (= minority) thus putting preference to wants and interests of the few i.e. powerholders.

Thirdly, power is a kind of ability or capacity to make others follow few which in real world is done with hegemony i.e. molding minds of people in such a way that they feel the consent is given by them itself — obviously people will abide by rules and terms dictated from the powerholder. This is known as "hegemonic power — power based on consent".

Fourthly, power is relational, its existence and effectiveness can be achieved only through interpersonal relationships which results in behavioural change of both who exercises power and also on those who are ruled — as power is neither a person's personal thing nor an inanimate object.

Fifthly, power is behavioural as it is effective only if its execution leads to some behavioural changes to which power is applied as per the applied context. Thus, the very expression of power can be seen only through such behavioural changes.

Sixthly, power is situational depending on the place, event or area wherein one can become powerful with respect to others for that time thus causing a change of behaviour within that institutional store by use of one's position.

Seventhly, power is a structural phenomena whose mapping in society is unsymmetrical thus taking form as given by constitutional - institutional structure of society - wherein power is only in hands of minority or few.

Eighthly, there are both qualitative and quantitative aspects of power as it has a ~~recd~~ feature of norms or rules although it does not get explicitly expressed.

Ninthly, power comes in ways of influence and authority - wherein if some special kind of sanction is added to respect then it becomes power; whereas if legitimacy (i.e. norms) get attached to power it becomes authority.

Lastly, power may involve use of force or coercion, but political power will be obligatory and effective only if it get connected with legitimacy (= capacity to acquire willing obedience).

Thus, power relation in society get its expression through terms of command and obedience - which are the two basic parts and features of power. If command is based on genuine motivation, then it will get willing obedience - resulting in legitimate power.

DEPARTMENT OF ZOOLOGY

The department assessed the learning level of the students through following methods:

- Virtual class interaction are conducted to assess the extent of progress made by students.
- Assignments based on the topics related to the syllabus.
- Class work on various topics. Students are asked to present their topics in the class.
- For semesters 3 & 5 advanced and slow learners are segregated according to their performances in previous university exams along with their classroom assessments and regular assignments in google class room.

South Calcutta Girls' College

22.2.2021

Notice

This is to notify that an examination will be held on 1st March, 2021 for the students of 1st semester for assessing the learning level.

Dr. Roni Sarkar
HOD
Department of Zoology

DEPARTMENT OF ZOOLOGY

QUESTIONS OF 1ST SEMESTER FOR ASSESSING THE LEARNING LEVEL OF STUDENTS

Date: 01.03.2021
Time: 45 minutes
2 MARKS EACH only question number 10 contains 6 marks

1. What is periodicity of microfilaria? 2
2. Write short notes on Filariasis or Ascariasis or Fascioliosis. 2
3. What do you mean by obstructive jaundice? 2
4. Write down the differences between male and female *Ascaris*. 2
5. What is onchosphere? 2
6. Why onchosphere is called hexacanth embryo? 2
7. What is measly pork? 2
8. What is gravid proglottid? 2
9. How helminthes can resist host digestive juice or enzymes? 2
10. Mention 3 points each for morphological and physiological adaptations of helminthes. (3+3)= 6
11. How helminthes gets energy in gut of hosts? 2

LIST OF SLOW AND ADVANCED LEARNERS SEMESTER- I

ADVANCED LEARNERS	SLOW LEARNERS
UPASANA CHAKRABORTY	ANINDITA CHATTERJEE
SONI SINGH	AFROJA KHATUN
NANDINI RAM	ANINDITA DAS
TRISHA MANNA	SAGARIKA PAL
SWASTIKA SHAW	DEEPSHIKHA DAS
SRIJA ROY	TITIR CHOUDHURI
AYANTIKA SAHA	SREEJITA BASU
ANKITA BEPARI	RESHMINA KHATUN
ANURIMA NATH	
PUJA BERA	

South Calcutta Girls' College

RESOLUTION OF THE DEPARTMENTAL MEETING OF ZOOLOGY HELD ON 4th MARCH, 2021

Members Present:

1. Dr. Roni Sarkar

2. Dr. Rajasri Chakraborty

3. Dr. Sudipta Ghosh

4. Dr. Pubali Mitra

5. Ms. Sucheta Bose

Resolutions:

1. The categories of slow and advanced learners of Semester I (Session 2020-2021), Dept. of Zoology were prepared after identification.

2. The slow learners will be provided with study materials and assignments will be taken to assess their progress during the class tests.

3. The advanced learners will be provided with better reference books from various e-portals (NPTEL etc) and YouTube links of topics and resources from subject experts to enable them to further improve their academic scores.

DEPARTMENT OF ZOOLOGY

ADVANCE LEARNING
POWERPOINT PRESENTATION

Social Organisation In Termites

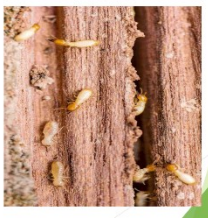
ANJALI SHAW
ZOOLOGY
DEPARTMENT
18SH 170

FEEDING AND SWARMING

- Swarming occurs for feeding, migration and mating.It also occurs as a means of alleviating congestion in the overcrowded colony or as a means of distribution.
- The termites commonly feed on living as well as dead plant material.
- They are able to digest cellulose with the help of symbiotic protozoa, such as Trichosympha.
- The termites also take fungi and dead bodies of their fellows.
- In the rainy season true king and queen are produced in large numbers.
- They leave the termitarium through holes made by the workers and fly away to new sites.This is called swarming or dispersal flight.

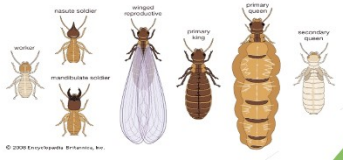
ECONOMIC IMPORTANCE OF TERMITES

- The Workers and Soldiers leave their nest at night to attack furniture, woods and books.
- Thus they damage human properties in several ways.
- The only way to get rid of termite menace is to destroy the queen.
- Inspite of its destructive role, the termites are considered important from the point of view of agriculture.
- Like earthworms, the termites also pulverise the soil and make it fertile.
- Swarming termites are taken as food by birds and other animals.



CASTE SYSTEM

- A termite community includes two forms:
- (i) Reproductive form or Fertile Cast.
- (ii) Sterile form or Caste.



DESCRIPTION

- Termites are commonly known as white ants.
- They belong to Class- Insecta, Order-Isoptera, Family- Termitidae and are widely distributed in tropical, subtropical and temperate regions of the world.
- These are small, hemimetabolous, soft bodied, cellulose eating, nocturnal, social and polymorphic insects having two pairs of similar wings.
- These termites use a sophisticated chemical (Pheromone) communication system.
- Ecologically, termites are good decomposer of dead wood and vegetable products and aid in agriculture by enriching the soil with their fecal matter and by making the soil permeable to air and moisture, like earthworms.
- These are very significant pests damaging wooden structure.
- Termites dislike daylight.
- Some species lives in nests called termitaria.

INTRODUCTION

- Termites were first animals which started living in colonies and developed a well organised social system about 300 million years ago,much earlier than honey bees,ants and human beings.
- Termites are polymorphic social insects and live in large communities in above ground earthen mound called termitarium or in subterranean galleries.
- Termites nest is very intricate network of galleries and sub galleries.Some species of termites builds nests upto 6 meters in height.
- Termites colony has three class of individuals and each class includes both sexes.
- Termites cause damage to crops,trees, timber, furniture,books and other materials in subtropical and tropical environment.
- In general rainfed crops are infested more than irrigated ones.

Assignment:

1. Write the cellular varieties found in sponges?

Ans. Different cell types found in sponges are as follows:-

a. Pinacocytes: These are large, flat and thin scale like polygonal cells with a central nucleus. The cells are highly contractile and lie with their edges touching. They form the external layer (dermal layer) and line the incurrent canal and spongocoel. Their contractions can cause a small change in size of the entire sponge.

b. Porocytes: These are modified pinacocytes and are also called pore cells. The cells are large sized and contractile. Porocytes are perforated by pores called prosopyle which connect incurrent canals to the radial canal (flagellated chambers).

c. Choanocytes: Choanocytes are flagellated entoderm cells, are larged oval or rounded and arranged in a loose layer upon the mesenchyme. Each cell possesses a single nucleus, one or tw contractile vacuoles, rhizoplast, blepheroplast and a single basal granule original or kinetosome.

d. Amoebocytes: These cells are amoeboidal in nature i.e. irregular in and possess pseudopodia. They are very important in life cycle of the sponges and are capable of developi into other cells (eg. chromocytes, Archeocyts (totipotent trophocytes etc.).

These are modified type of collagen protein. It is secreted by sponge cells called sporocytes. It give flexibility to the body of the sponge. It is exclusive only to the members of Demospongiae.

6. what is spongocoel?

ans. A spongocoel is the large, central cavity of sponges. Water enters the spongocoel through hundreds of tiny pores (ostia) and exits through the larger opening (osculum). Depending on the body plan of the sponge the spongocoel could be a simple interior space of the sponge or a more complexly branched inner structure. Regardless of the body plan or class, the spongocoel is lined with choanocytes, which are round flagellated cells that push water through the spongocoel out via the osculum thus creating the current.

It is lined by other cells namely porocytes and amoebocytes (with its different modified cells).

7. - what is canal system?

The water circulatory system of sponges, also called the canal system is the characteristic feature of the phylum Porifera. canal system is also known as aquiferous system. The canal system of sponges helps in food aquisition, respiratory gas exchange and also in excretion.

The numerous perforations on the body surface of the sponges for ingression and egression of water current are the main constituent of the canal system. Inside the body, the water current flows through the certain system of spaces, where by the food is captured from the incoming water and the excretory material is sent out into the outgoing water.

canal system is of different types:

8. → Asconoid: simple plan.
→ leuconoid: more complex with introduction of radial and incurrent canals.
→ Syconoid: more branchings of radial canals and hence increase in surface area.
→ Rhagon: mostly found in spongilla, and considered to be an intermediate phase before attaining leuconoid structure (like asconoid and syconoid in others).

(1) What is phyllobranch?

Ans:- The gills are the primary respiratory organs in prawn. On each lateral side of the cephalothorax and beneath the branchiostegites they are present. There are total eight gills present in prawn, exopod - insha and their size gradually increases from anterior to posterior direction. Each of the gill has a slender axis on which there present double rows of lamboidal leaf like gill-plate which are arranged like the pages of book.

This type of gills are called ~~phyllo~~ phyllobranch. Histologically they have three layers:-

(i) Outer cuticle.
(ii) Middle epidermis
(iii) Inner connective tissue.

(2) What type of gill is found in Pila?

Ans:- The type of gill present in Pila is monopectinate type. This type of gill consists of numerous triangular lamellae arranged in a single row running parallel to one another along the central axis of the gill.

(3) How many types of gills are found in Prawn?

25 SUNDAY

Ans:- There are three types of gills found in Prawn according to the position of origin.

(i) Podobranch (1st gill)
(ii) Arthrobranch (2nd and 8th gill)
(iii) Pleurobranch (3rd to 7th gill)

2012 Silence is argument carried out by other means.

20

(4) What do you mean by nuchal lobe?

Ans:- Two fleshy projections over the gill chamber which forms the dipleur (respiratory cavity) during the aquatic respiration in Pila from which the water flows inside and

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4) What do you mean by nuchal lobe?

Ans:- Two fleshy projections over the gonad which forms the siphon (respiratory siphon) during the aquatic respiration in Pila from which the water flows inside and outside the mantle cavity is called the nuchal lobe.

5). State the function of osphradium.

Ans:- Pila (apple snail) has a special sense organ which helps the animal to estimate the oxygen concentration in the water and thus help in determination whether it will respire in aquatic mode or aerial mode. This sense organ is called osphradium which is a comb like structure, present close to the left nuchal lobe.

10

① What is periodicity of microfilariae? (2marks)

Ans:- A most interesting phenomenon in blood parasitology and one of the practical importance in the transmission of the parasite is the periodicity of filaria. This term has come to mean a periodic increase in numbers in peripheral capillary blood of the embryos of filariae. This is the case of Wuchereria sp., occurs during the hours of sleep, and of Filarioidea, during the hours of activity. Thus, signified the periodic appearance and disappearance of microfilariae in the peripheral blood.

② Write short note on Filariasis, Ascariasis, Fascioliosis (2marks)

Ans:- Filariasis :-
It is a parasitic disease transmitted by mosquitoes. This parasites are thin, round, worm-like organisms. They appear white or translucent when observed under a microscope.
The general filariasis symptoms during early stages include:
Fever, chills, headache, etc.
The general filariasis symptoms during later stages include:
Swelling, redness, pain, etc.
This disease can be prevented if we can prevent the bite of mosquito.

Ascariasis :-
This disease is caused by an intestinal parasite called Ascaris sp. also known as round worms. They are pale white in colour, long slender tube-like worm. Present in the faeces of a person infected with it, in the form of eggs. Flies generally are considered the vector for round worm in humans.
The general symptoms are:
Fever, shortness of breath, abdominal swelling, etc.
Improved access to sanitation would be the biggest step towards ridding the disease.

P.T.O

22

Fasciolosis :-
It is a parasitic worm infection caused by the common liver fluke Fasciola hepatica. It affects humans, but its main host is ruminants such as cattle and sheep.
The general symptoms are:-
Fever, anemia, jaundice, abdominal pain, etc.
In the later/chronic stage, the disease cause inflammation of the bile ducts, gall bladder, etc.

③ What do you mean by obstructive jaundice? (2marks)

Ans:- Obstructive jaundice is a condition in which there is the blockage of the flow of bile out of the liver.
This results in the regurgitation of excess bile and it's by products into the blood and the bile excretion from the body of the host is incomplete.

④ Write down the difference between male and female Ascaris (2marks)

Ans:-

Male Ascaris	Female Ascaris

P.T.O

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(4) Write down the differences between male and female Ascaris. (2marks)

Ans:-	Male Ascaris	Female Ascaris
(i)	Thin, short and hooked	Wide, long and straight.
(ii)	15-30 cm in length	20-40 cm in length
(iii)	Pineal spicules and the papillae are seen in the posterior opening.	No such structures found.
(iv)	No such opening is found.	Reproductive opening is present in the posterior end of the body.

2/4

(5) What is onchosphere ? (2marks)

Ans:- Onchosphere is a six-hooked larva derived from micromeres, which is the definitive product of embryogenesis. It invades the first intermediate host. Enclosed by one or two embryonic envelopes.

P.T.O

(6) Why onchosphere is called hexacanth embryo ? (2marks)

Ans:- Since the onchosphere is the tapeworm embryo having six (hexa) hooks, it is also known as hexacanth embryo.

(7) What is measly pork ? (2marks)

Ans:- Measly pork is the flesh of a pig which consists of many pork worms called measly tapeworm (Taenia solium). This tapeworm infects the flesh of the pig and makes it poisonous. It is the major cause of transmission of disease caused by Taenia solium to humans when they consume the undercooked pork.

(8) What is gravid proglottids ? (2marks)

Ans:- Gravid proglottids also known as ripe proglottids are the oldest and the last 150 to 500 proglottids, with the posterior end of body they are longer than broad in outline.

(9) How helminthes can resist host digestive juice on ea[illegible]? (2marks)

Ans:- The cuticle of Helminth is highly modified and adapted to resist against digestive juices and [illegible] secretion.

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(iv)	No such opening is found.	Reproductive opening is present in the posterior end of the body.

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(9) How helminthes can resist host digestive juice on ea[illegible]? (2marks)

Ans:- The cuticle of Helminth is highly modified and adapted to resist against digestive juices and for adhesion. The cuticle becomes thick, impregnated with impermeable chitin like substances and enzyme resistent, so that it is not digestable by the digestive juices of the host.

(10) Mention three points each for morphological and physiological adaptations of helminthes. (3+3=6 marks).

Ans:- Morphological adaptations :-

(i) Shape: Dorso-ventrally flattened and this is related to the need to cling onto the host.

(ii) Locomotor organs: As they live entirely in the body of the host, the locomotor organs are not necessary for them.

P.T.O

3/4

(iii) Size: May be large compared with their free living relatives to be related to increased egg production.

Physiological adaptations :-

(i) Intra-cellular digestion: common as feeding on tissue elements.

(ii) Osmoregulation: The osmotic pressure in the interior of the parasite's worms remains less than or same to the host so that there is no difficulty in the exchange of water.

(iii) Anaerobic respiration: Since completely devoid of free O_2.

(11) How helminthes get energy in gut of hosts? (2marks).

Ans:- In the adult form of helminthes, they are unable to multiply in humans and utilise numerous mechanisms of transmission to ensure reproductive success.

It is the major cause of transmission of disease caused by Taenia solium to humans when they consume the under-cooked pork.

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(i) Shape: Dorso-ventrally flattened and this is related to the need to cling onto the host.
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P.T.O

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(iii) Anaerobic respiration: Since completely devoid of free O_2.

(11) How helminthes get energy in gut of hosts? (2marks).

Ans:- In the adult form of helminthes, they are unable to multiply in humans and utilise numerous mechanisms of transmission to ensure reproductive success.
These parasites live in and feed on hosts which allow them to obtain nourishment while disrupting the host's nutrient absorption.
This is how they get get energy in gut of hosts.

~ The End ~

and of body. They are longer than broad in outline.

(9) How helminthes can resist host digestive juice or enzymes? (2marks)

Ans:- The cuticle of Helminth is highly modified and adapted to resist against digestive juices and for adhesion.
The cuticle becomes thick, impregnated with impenetrable chitin like substances and enzyme resistant, so that it is not digestable by the digestive fluids of the host.

(10) Mention three points each for morphological and physiological adaptations of helminthes. (3+3=6 marks).

Ans:- Morphological adaptations :-
(i) Shape: Dorso-ventrally flattened and this is related to the need to cling onto the host.
(ii) Locomotor organs: As they live entirely in the body of the host, the locomotor organs are not necessary for them.

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(iii) Size: May be large compared with their free living relatives to be related to increased egg production.

Physiological adaptations :-
(i) Intra-cellular digestion: common as feeding on tissue elements.
(ii) Osmoregulation: The osmotic pressure in the intestine of the parasitic forms remains less than or same to the host so that there is no difficulty in the exchange of water.
(iii) Anaerobic respiration: Since completely devoid of free O_2.

(11) How helminthes get energy in gut of hosts? (2marks).

Ans:- In the adult form of helminthes, they are unable to multiply in humans and utilise numerous mechanisms of transmission to ensure reproductive success.
These parasites live in and feed on hosts which allow them to obtain nourishment while disrupting the host's nutrient absorption.
This is how they get get energy in gut of hosts.

~ The End ~