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REGINA PACIS INSTITUTE OF HEALTH SCIENCES

MAIN EXAMINATION

JANUARY – APRIL 2019 TRIMESTER

FACULTY OF SCIENCES

DEPARTMENT OF NURSING

REGULAR PROGRAMME

NUR 208: PARASITOLOGY

Date: APRIL 2019

Duration: 3 Hours

INSTRUCTIONS: Answer ALL Questions

PART -I: MULTIPLE CHOICE QUESTIONS (MCQs)

(20 MARKS):

- Q1. Which one of the following best suits the general feature of a parasites?
- a) They can either be unicellular and prokaryotes
 - b) Are both prokaryotes and Eukaryotes
 - c) They can be Unicellular and multicellular
 - d) All are classified as Eukaryotes
- Q2. Parasitology extends into antiquity in the middle ages. Which of the following is true:
- a) Friedrich Henley coined the term animalcule after discovering the microorganisms
 - b) Otto Muller proposed a criterion for proving the microorganism cause human diseases
 - c) Antonie Leeuwenhoek published his observations in a series of letters to the Royal society.
 - d) Van Leeuwenhoek organized the microorganisms into genera and species
- Q3. Which of the following definitions is correct:
- a) Closely related species are placed in the same phylum
 - b) The related genera are placed in the same genus
 - c) Related orders are placed in the same class
 - d) Related class are placed in the same family

- Q4. Binomial nomenclature:
- Is the formal system of naming bacteria and parasites according to binomial system
 - Is the formal system of naming species of living things with an name each having two parts
 - Also called Nomenclature of microorganisms
 - Was developed in 1900-1920 by Carl Linnaeus
- Q5. Intermediate host harbors the larval (immature) stage of a parasite. Which of the following is true:
- Human is an intermediate host for *T. saginata*
 - Cow is an intermediate host for liver flukes
 - Cows an intermediate host for *T. saginata*
 - Hymenolepis diminuta* is an intermediate host for rats and mice
- Q6. Chyluria is caused by:
- Micofilariae of *Schistosoma haematobium*
 - Wuchereria bancrofti*
 - Paragonimus westermani*
 - Trophozoites*
- Q7. Which one of the following parasites have a direct life cycle:
- Trichuris Trichiura
 - Leishmania species*
 - Wuchereria bancrofti*
 - Schistosoma soecies
- Q8. Protozoa have two phases of life cycles. Which of the statements justifies this:
- The phases alternate between trophozoites and cysts
 - Conversion of trophozoites to cysts is called excystation
 - Conversion of cysts to trophozoites is called encystation
 - As a cysts , protozoa cannot survive harsh conditions
- Q9. Medically important protozoa include:
- Schistosoma species*
 - Echinococcus granulosus* (larvae)
 - Giardia lamblia*
 - Trematodes*
- Q10. *Entamoeba histolytica*:
- Produces trophozoites by which it is transmitted
 - Lives in the intestine as cyst
 - Reproduces sexually by binary fission
 - Matures into trophozites showing motility and ability to grow, feed and reproduce

- Q11. Insects transmit the following parasites:
- a) *Trypanosomes and leishmania*
 - b) *Toxoplasma gondii*
 - c) *Hymenolipis nana*
 - d) *Enterobius vermicularis*
- Q12. Helminthes are classified into
- a) Trematodes (round worms)
 - b) Nematodes (Tapeworms)
 - c) Cestodes (flukes)
 - d) Trematodes and Cestodes making a group of flat worms
- Q13. The following round worms live in the intestines:
- a) *Echinococcus granulosus*
 - b) *Fasciola hepatica*
 - c) *Fasciola buski*
 - d) *Strongyloides stercoralis*
- Q14. Tissue nematode include the following:
- a) *Paragonimus westermani*
 - b) *Wuchereria bancrofti*
 - c) *Echinococcus* species
 - d) Hooksworms
- Q15. Parasitic factors that facilitate parasitic diseases include:
- a) Host factors
 - b) Strain of parasite and the adaptation to human host
 - c) Geographical distribution
 - d) Genetic factors
- Q16. Which of the following is a host factor that facilitate parasitic disease:
- a) Age and level of natural immunity
 - b) Metabolic processes of the parasite
 - c) Number of parasites
 - d) Site of infection(occupied in the body)
- Q17. Nematodes:
- a) Are acylindrical in shape
 - b) Have an excretory system and nervous system
 - c) Have no body cavity and skin
 - d) Males are viviparous (produce larvae) or oviparous(lay eggs)
- Q18. Which one of the following parasites causes auto-infection in human:
- a) *Cercaria*

- b) Echnococcus
- c) Enterobius vermicularis
- d) Geo-helminthes

- Q19. The presence of RBCs in the cytoplasm in case of dysentery is diagnostic of the following pathogenic parasites.
- a) *Plasmodium* species
 - b) *Fasciola buski*
 - c) *Ascaris lumbricoids*
 - d) *Entamoeba histolytica*
- Q20. Which one of the following best describes diagnostic stage of a pathogen?
- a) This is the stage of a parasite at which it is capable of entering a host.
 - b) This is the stage of a pathogenic organisms that can be detected in patients samples
 - c) This is the invasion of the body by a pathogen
 - d) When an individual harboring the parasite is reinfected.

PART-II: SHORT ANSWER QUESTIONS (SAQs) (40 MARKS):

Instructions: Answer all questions in this section. Each question carries (10 mrk)

- Q1. With an aid of well labelled diagrams discuss sexual reproduction among protozoa **(10 marks)**
- Q2. Define the following parasitological terms: **(10 marks)**
- a) Infection
 - b) Zoonosis
 - c) Biological incubation
 - d) Clinical incubation
 - e) Autoinfection
 - f) Super infection
 - g) Retro infection
 - h) Infective stage
 - i) Diagnostic stage
 - j) Parasitism
- Q3. Briefly discuss siting examples the effects/damage of pathogenic parasites on the host **(10marks)**
- Q4. Define the terms **host, parasite** and **symbiotic relationships** **(3marks)**
- Q5. State the host factors that facilitate the establishment of parasitic diseases **(7marks)**

PART III: LONG ANSWER QUESTIONS (LAQs) (40 MARKS)

Answer all the questions in this section. Each question carries (20 marks)

Q1. Infection is the result of invasion and development within the body of any injurious organism. This can attributed to a mutual relationship/association between the host and the parasite. Justify this statement by discussing different types of parasites and hosts citing examples of pathogens where appropriate

(20marks)

Q2. Microscopes are instruments designed to produce magnified visual or photographic images microorganisms such as parasites. In this context describe the microscope with an aid of a well labeled diagram the parts and their functions. **(20marks)**

END