



قائمة الاسئلة

الطفيليات الطبية طب التخصص طب بشري - المستوى : الثالث الدراسي - درجة هذا الاختبار (90)

اسم أستاذ المادة: ا.د./ صلاح عبدالجليل حيدر

- 1) The infective stage of *Entamoeba histolytica* is:
 - 1) (A) quadrinucleate cyst.
 - 2) (B) uninucleate cyst.
 - 3) (C) binucleate cyst.
 - 4) (D) trophozoite.
- 2) For giardiasis, the factors that determine pathogenesis & disease severity are the following; EXCEPT:
 - 1) (A) Host's susceptibility
 - 2) (B) Hypogammaglobulinaemia & deficiency in secretory IgA in the small bowel.
 - 3) (C) Strain virulence.
 - 4) (D) Chlorhydria.
- 3) In infected human, *E. histolytica* trophozoites inhabit the following:
 - 1) (A) duodenum.
 - 2) (B) jejunum.
 - 3) (C) caecum.
 - 4) (D) all.
- 4) Concerning intestinal amoebiasis, the following statement is INACCURATE:
 - 1) (A) invasion of the mucosa by the trophozoites.
 - 2) (B) formation of flask-shaped ulcers.
 - 3) (C) inflammation that leads to toxic megacolon.
 - 4) (D) mechanical blockage affecting the absorption of fats.
- 5) The following factor does NOT determine the infection with *Trichomonas vaginalis*:
 - 1) (A) pH.
 - 2) (B) resistance of host.
 - 3) (C) bacterial flora.
 - 4) (D) physiological status of vagina.
- 6) The complications of balantidiasis are the following; EXCEPT:
 - 1) (A) Hemorrhage.
 - 2) (B) Perforation & peritonitis.
 - 3) (C) Liver abscess.
 - 4) (D) Appendicitis.
- 7) In stool sample, rounded cyst with four nuclei seen under light microscopy, should be reported as a cyst of:
 - 1) (A) *E. coli*.
 - 2) (B) *E. histolytica*.
 - 3) (C) *E. dispar*.
 - 4) (D) *E. histolytica*/ *dispar*.
- 8) The following parasite may cause malabsorption and steatorrhea:
 - 1) (A) *Entamoeba histolytica*.
 - 2) (B) *Balantidium coli*.
 - 3) (C) *Giardia lamblia*.
 - 4) (D) *Acanthamoeba* species.
- 9) One of the following statements does NOT refer to the life cycle of malaria parasite:
 - 1) (A) *Anopheles* mosquito is the vector.
 - 2) (B) Human is the definitive host.
 - 3) (C) The complete life cycle requires two hosts.
 - 4) (D) Gametocyte stage is the infective stage to the mosquito.





- 10) Pathogenicity of *Entamoeba histolytica* depends on: _x0000_
- 1) - (A) parasite virulence.
 - 2) - (B) host resistance.
 - 3) - (C) condition of intestinal tract.
 - 4) + (D) all.
- 11) In chronic intestinal amoebiasis, the patients suffer from the following:
- 1) - (A) dysentery, tenesmus with painful spasm of anal sphincter.
 - 2) - (B) fever, diarrhoea and tenesmus.
 - 3) + (C) recurrent attacks of dysentery alternating with constipation.
 - 4) - (D) none.
- 12) *Entamoeba histolytica* trophozoites encyst in:
- 1) - (A) the wall of lower part of small intestine.
 - 2) - (B) the wall of the recto-sigmoid colon.
 - 3) + (C) the lumen of the colon.
 - 4) - (D) none.
- 13) The following protozoan does NOT undergo the multiplication in the cyst stage:
- 1) - (A) *Entamoeba histolytica*.
 - 2) + (B) *Balantidium coli*.
 - 3) - (C) *Entamoeba coli*.
 - 4) - (D) *Giardia lamblia*.
- 14) Human immune response against helminths:
- 1) + (A) Th2 protective & Th1 counter protective.
 - 2) - (B) Th1 protective & Th2 counter protective.
 - 3) - (C) Th2 protective & Th4 counter protective.
 - 4) - (D) Th4 protective & Th2 counter protective.
- 15) In stool sample, the following findings suggest amoebic not bacillary dysentery infection:
- 1) - (A) Alkaline pH and presence of Charcot Leyden crystals_x0000_.
 - 2) - (B) Alkaine pH and absence of Charcot Leyden crystals.
 - 3) + (C) Acidic pH and presence of Charcot Leyden crystals.
 - 4) - (D) Massive exudate with presence of many pus cells_x0000_.
- 16) About the diagnosis of cutaneous leishmaniasis, the sample should be taken from:
- 1) - (A) skin surrounding the ulcer.
 - 2) + (B) edge of the ulcer.
 - 3) - (C) base of the ulcer.
 - 4) - (D) all.
- 17) There is NO cyst stage in the following parasite:
- 1) - (A) *Entamoeba histolytica*.
 - 2) - (B) *Giardia lamblia*.
 - 3) - (C) *Balantidium coli*.
 - 4) + (D) *Trichomonas vaginalis*.
- 18) For *Leishmania tropica*, the reservoir host is:
- 1) + (A) dog.
 - 2) - (B) rodent.
 - 3) - (C) sheep.
 - 4) - (D) human.
- 19) The protozoa that may cause diarrhoea:
- 1) - (A) *G. lamblia*.
 - 2) - (B) *C. parvum*.
 - 3) - (C) *C. cayetanensis*.





- 4) (D) All.
- 20) Sporogony cycle of plasmodium parasite occurs in the following:
- 1) (A) Female Anopheles mosquito.
 - 2) (B) Human liver cells.
 - 3) (C) Human RBCs.
 - 4) (D) Cerebral blood vessels.
- 21) Unsporulated oocyst of Toxoplasma gondii is found in:
- 1) (A) stool of infected human.
 - 2) (B) stool of infected cat.
 - 3) (C) brain of infected human.
 - 4) (D) brain of infected cat.
- 22) Adherence of parasitized RBCs in falciparum malaria leads to:
- 1) (A) malarial recrudescence.
 - 2) (B) malarial relapse.
 - 3) (C) blackwater fever.
 - 4) (D) cerebral malaria.
- 23) In Yemen, the following protozoan is the most prevalent:
- 1) (A) Plasmodium falciparum.
 - 2) (B) Plasmodium vivax.
 - 3) (C) Plasmodium ovale.
 - 4) (D) Plasmodium malariae.
- 24) In the life cycle of Plasmodium, the following phase is INCORRECT:
- 1) (A) exo-erythrocytic schizogony cycle in the intermediate host.
 - 2) (B) gametogony cycle in the definitive host.
 - 3) (C) asexual schizogony cycle in the intermediate host.
 - 4) (D) sexual cycle in the definitive host.
- 25) Infections with the following parasites are most likely to be associated with dysentery; EXCEPT for:
- 1) (A) Giardia lamblia.
 - 2) (B) Plasmodium falciparum.
 - 3) (C) Entamoeba histolytica.
 - 4) (D) Leishmania donovani.
- 26) Congenital toxoplasmosis may exhibit the following classic manifestations; EXCEPT:
- 1) (A) Chorioretinitis.
 - 2) (B) Hydroencephaly
 - 3) (C) Intracranial calcification.
 - 4) (D) None.
- 27) Plasmodium merozoites could be masked from Kupffer cells by:
- 1) (A) host cell-derived vesicles"merosomes" that exit the dermal cells intact.
 - 2) (B) host cell-derived vesicles"merosomes" that exit the liver intact.
 - 3) (C) host cell-derived vesicles"merosomes" that exit the RBCs intact.
 - 4) (D) none.
- 28) The following organism uses cilia for locomotion:
- 1) (A) Entamoeba.
 - 2) (B) Giardia.
 - 3) (C) Balantidium.
 - 4) (D) Plasmodium.
- 29) In malaria, the form of plasmodia that is transmitted from mosquito to human is:
- 1) (A) Gametocyte.
 - 2) (B) Sporozoite.





- 3) - (C) Merozoite.
- 4) - (D) Hypnozoite_x0000_.
- 30) Entero-test can be used as a technique of obtaining a sample to reveal trophozoites of:
- 1) - (A) Entamoeba histolytica.
- 2) - (B) Balantidium coli.
- 3) + (C) Giardia lamblia.
- 4) - (D) Acanthamoeba spp.
- 31) The following statement refers to the opportunism/ opportunistic:
- 1) - (A) Toxoplasma gondii.
- 2) - (B) Cryptosporidium parvum.
- 3) - (C) Balantidium coli.
- 4) + (D) A & B.
- 32) As regards Trichomonas vaginalis, the following statement is wrong:
- 1) - (A) T. vaginalis is transmitted sexually.
- 2) - (B) T. vaginalis causes white- yellowish/ green frothy vaginal discharge.
- 3) + (C) T. vaginalis infection can be diagnosed by visualizing cyst.
- 4) - (D) T. vaginalis infection should include local and systemic treatment.
- 33) Babesia differs from Plasmodium in:
- 1) - (A) No exo-erythrocytic cycle.
- 2) - (B) No schizogony cycle.
- 3) - (C) No gametocytes.
- 4) + (D) All above.
- 34) One of the following statements does NOT refer to the Amoebic keratitis:
- 1) - (A) is caused by Acanthamoeba spp.
- 2) - (B) is associated with the use of contact lens.
- 3) + (C) can spread and cause amoebic encephalitis.
- 4) - (D) is diagnosed by detection of the amoebic cyst in corneal scrapings.
- 35) The definitive host of Toxoplasma gondii is:
- 1) + (A) cat.
- 2) - (B) human.
- 3) - (C) rat.
- 4) - (D) cow.
- 36) Host becomes partially immune to the following cases, EXCEPT:
- 1) - (A) Schistosomiasis.
- 2) - (B) Falciparum malaria.
- 3) - (C) Toxoplasmosis.
- 4) + (D) Leishmaniasis.
- 37) It is used as a radical therapy for malaria:
- 1) - (A) Quinine.
- 2) + (B) Primaquine.
- 3) - (C) Pyrimethamine.
- 4) - (D) mefloquine.
- 38) A 8 years old boy eating food in a restaurant. Later, he complained of sudden abdominal pain together with anorexia, flatulence and diarrhoea. Stool analysis revealed a protozoan parasite. The boy is probably infected with:
- 1) - (A) Entamoeba histolytica.
- 2) - (B) Balantidium coli.
- 3) + (C) Giardia lamblia.





- 4) - (D) None.
- 39) The following statements concerning *Plasmodium vivax* are correct, EXCEPT:
- 1) - (A) it is associated with the occurrence of liver hypnozoites.
 - 2) - (B) it is associated with the occurrence of enlarged RBCs.
 - 3) - (C) it is associated with the occurrence of relapse.
 - 4) + (D) it is associated with the occurrence of cerebral malaria.
- 40) One of the following statements does NOT relate to the progressive visceral leishmaniasis:
- 1) + (A) liver affection causing hypoalbuminaemia & hypogammaglobulinaemia.
 - 2) - (B) bone marrow suppression causing neutropenia & thrombocytopenia.
 - 3) - (C) immune complexes causing mild glomerulonephritis.
 - 4) - (D) deposition of C.I.C. in glomerular capillaries causing nephrotic syndrome.
- 41) Bilharzial granuloma formation is mainly attributed to:
- 1) - (A) toxin of parasite.
 - 2) + (B) immune response against miracidium antigens of eggs.
 - 3) - (C) immune response against antigens of immature stages.
 - 4) - (D) immune response against antigens of adults.
- 42) It is recently recommended for treating chloroquine-resistant malaria cases:
- 1) - (A) artemether.
 - 2) - (B) lumefantrine.
 - 3) + (C) artemether and lumefantrine (combination).
 - 4) - (D) mefloquine.
- 43) For cutaneous and mucocutaneous leishmaniasis of the New World; the following statement is INCORRECT:
- 1) - (A) The female sandfly (*Lutzomyia*) transmits the causative parasites.
 - 2) - (B) *L. Peruviana* and *L. braziliensis* are among the causative parasites.
 - 3) - (C) Chiclero's ulcer caused by infection with *L. mexicana*.
 - 4) + (D) Cutaneous ulcer (like a volcano) is an example.
- 44) The severity of toxoplasmosis in fetal damage is dependent upon the following factors:
- 1) - (A) protective immunity of mother.
 - 2) - (B) the age of fetus at the time of infection.
 - 3) + (C) all.
 - 4) - (D) none
- 45) Which of the following is an example of propagative transmission?
- 1) + (A) plague bacilli in rat flea.
 - 2) - (B) leishmania parasite in sand fly.
 - 3) - (C) malaria parasite in mosquito.
 - 4) - (D) microfilaria in mosquito.
- 46) Concerning diffuse cutaneous leishmaniasis, one of the following statements is wrong:
- 1) - (A) it is caused by *Leishmania aethiopica*.
 - 2) + (B) it is caused by *Leishmania mexicana*.
 - 3) - (C) it is due to deficient cell mediated immunity.
 - 4) - (D) the lesion is non self-healing and similar to lepromatous leprosy.
- 47) Which of the following statements does NOT refer to the cerebral malaria:?
- 1) + (A) It is a complication of vivax malaria.
 - 2) - (B) It is due to cytoadherence phenomenon.
 - 3) - (C) It is fatal if not treated.
 - 4) - (D) Develops knobs to be formed on the surface of infected RBCs.
- 48) Cutaneous leishmaniasis or "oriental sore" in humans is caused by:
- 1) - (A) *Leishmania donovani*.





- 2) - (B) *Leishmania infantum*_x0000_ .
- 3) + (C) *Leishmania tropica*.
- 4) - (D) *Leishmania chagasi*.
- 49) Kala-azar is transmitted by the following vector:
- 1) + (A) *Phlebotomus*.
- 2) - (B) *Simulium*.
- 3) - (C) *Triatoma*.
- 4) - (D) *Chrysops*.
- 50) Manifestations of congenital toxoplasmosis can be first seen in:
- 1) - (A) neonatal period.
- 2) - (B) childhood period.
- 3) - (C) adulthood period.
- 4) + (D) all above.
- 51) For the diagnosis of toxoplasmosis; positive IgM refers to:
- 1) - (A) no infection.
- 2) - (B) false positive.
- 3) + (C) congenital infection.
- 4) - (D) chronic infection.
- 52) The infection with *Babesia* occurs via:
- 1) + (A) bite of hard tick.
- 2) - (B) bite of female anopheles.
- 3) - (C) bite of female *Culex*.
- 4) - (D) bite of female *Aedes*.
- 53) In cutaneous leishmaniasis, treatment for non inflamed-non ulcerated lesion is:
- 1) - (A) I.D. injection of interferon gamma around lesion.
- 2) + (B) Intra-lesional injection of pentavalent injection.
- 3) - (C) Local application of heat.
- 4) - (D) Surgical removal.
- 54) After ingestion of *Giardia lamblia*, excystation takes place in the:
- 1) + (A) upper part of small intestine.
- 2) - (B) lower part of small intestine.
- 3) - (C) stomach.
- 4) - (D) colon.
- 55) The following statements concerning *Giardia lamblia* are correct, EXCEPT:
- 1) - (A) Cyst is the infective stage to human.
- 2) + (B) Trophozoites are attached to caecal mucosa & stool of infected patients contains mucous with blood.
- 3) - (C) It may extend to inhabit the bile ducts.
- 4) - (D) It may cause hypoproteinemia, fat soluble vitamin deficiency, jaundice and biliary colic.
- 56) A baby was born with a malformation and the most important clinical manifestation/sign was bigness (an enlarged) of his head, accompanied by convulsions. The provisional diagnosis of this case is:
- 1) - (A) Acquired toxoplasmosis with hydrocephaly.
- 2) - (B) Acquired toxoplasmosis with microcephaly.
- 3) + (C) Congenital toxoplasmosis with hydrocephaly.
- 4) - (D) Congenital toxoplasmosis with microcephaly.
- 57) In diagnosing kal-azar by an aspirate from bone marrow, the stained smear shows:
- 1) - (A) Promastigote.
- 2) + (B) Amastigote.
- 3) - (C) Epimastigote.





- 4) - (D) Trypomastigote.
- 58) Fleas can transmit the following diseases; EXCEPT for:
- 1) (A) Epidemic relapsing fever.
 - 2) - (B) Endemic typhus.
 - 3) - (C) Plague.
 - 4) - (D) Chigger's disease.
- 59) The following parasite can evade and inhibit immune factors by cleavage of the antibodies produced:
- 1) - (A) Giardia lamblia.
 - 2) - (B) Trichuris trichiura.
 - 3) (C) Trypanosoma cruzi.
 - 4) - (D) Schistosoma mansoni.
- 60) Red cell structure can provide some resistance against infection with plasmodia in the following conditions, EXCEPT:
- 1) (A) Absence of Haemoglobin S.
 - 2) - (B) Presence of Haemoglobin S.
 - 3) - (C) Absence of Duffy antigen.
 - 4) - (D) Deficiency of the enzyme G6PD.
- 61) The following Protozoan is associated with GAE & keratitis:
- 1) - (A) Toxoplasma gondii.
 - 2) (B) Acanthamoeba spp.
 - 3) - (C) Naegleria fowleri.
 - 4) - (D) Entamoeba histolytica.
- 62) The risk groups for toxoplasmosis:
- 1) - (A) immunocompromised patients.
 - 2) - (B) pregnant women.
 - 3) (C) all.
 - 4) - (D) none.
- 63) For Wuchereria bancrofti, mechanism of transmitting microfilara inside culex is:
- 1) - (A) direct mechanical transmission.
 - 2) - (B) indirect mechanical transmission.
 - 3) (C) cyclo- developmental transmission.
 - 4) - (D) cyclo- propagative transmission.
- 64) Phlebotomus (sand fly) can transmit the following diseases:
- 1) - (A) Bartonellosis.
 - 2) - (B) Leishmaniasis.
 - 3) - (C) Papatasii (Phlebotomus) fever.
 - 4) (D) All.
- 65) The following statement does Not refer to Plasmodium malariae:
- 1) - (A) causes quartan malaria.
 - 2) (B) causes infected RBCs to be enlarged.
 - 3) - (C) causes recrudescence after the primary attack.
 - 4) - (D) causes glomerulonephritis in longstanding condition.
- 66) Immune evasion by movement can be achieved by the following:
- 1) - (A) Ancylostoma duodenale.
 - 2) - (B) Larva migrans.
 - 3) - (C) Ascaris lumbricoides.
 - 4) (D) A & B above.
- 67) A 19-year-old male Yemeni patient, admitted to a private hospital in Zabeed city, with fever for one wk, chills and sweating together with nausea, vomiting and headache. His skin looked yellowish two days ago





before admission. His urine is dark coloured. Blood smear revealed rounded bodies like structure intra RBCs.

This condition is probably infected with:

- 1) - (A) *Leishmania donovani*.
 - 2) + (B) *Plasmodium falciparum*.
 - 3) - (C) *Plasmodium malariae*.
 - 4) - (D) *Toxoplasma gondii*.
- 68) For diagnosing *T. vaginalis* infection, the sample may be taken from all of the following; EXCEPT:
- 1) - (A) Urine of female or male patient.
 - 2) - (B) Vaginal discharge.
 - 3) - (C) Prostate secretion.
 - 4) + (D) Faeces.
- 69) Metronidazole is NOT used to treat the following disease:
- 1) + (A) *Toxoplasmosis gondii*.
 - 2) - (B) *Entamoebiasis histolytica*.
 - 3) - (C) *Balantidiasis coli*.
 - 4) - (D) *Trichomoniasis vaginalis*.
- 70) *Aedes mosquito* can transmit the following diseases; EXCEPT for:
- 1) - (A) Dengue fever.
 - 2) - (B) Yellow fever.
 - 3) + (C) Typhoid fever.
 - 4) - (D) Filariasis.
- 71) One of the following statements is INCORRECTLY matched:
- 1) - (A) agent changes in form and number: cyclopropagative transmission.
 - 2) - (B) agent undergoes only development but no multiplication: cyclodevelopmental transmission.
 - 3) - (C) agent merely multiplies in vector but no change in form: propagative transmission.
 - 4) + (D) agent transmitted from nymph to adult vector: transovarial transmission.
- 72) A 32-year-old male Yemeni farmer, came from a rural area with multiple moist ulcers "with serous exudates" on his RT leg that resist medication by known antibiotics. This farmer was diagnosed as an infection with:
- 1) - (A) *Leishmania tropica*.
 - 2) + (B) *Leishmania major*.
 - 3) - (C) *Leishmania aethiopia*.
 - 4) - (D) Post-kala-azar dermal leishmaniasis.
- 73) Primary amoebic meningoencephalitis (PAM) is caused by one of the following:
- 1) - (A) *Balamuthia mandrillaris*.
 - 2) + (B) *Naegleria fowleri*.
 - 3) - (C) *Acanthamoeba spp.*
 - 4) - (D) None
- 74) The trophozoites of *Naegleria fowleri* reach its habitat through the:
- 1) - (A) blood.
 - 2) - (B) lymphatic system.
 - 3) + (C) olfactory nerve.
 - 4) - (D) sensory nerve.
- 75) A 20-year-old male Yemeni patient presented with low grade fever together with anorexia and pain in the RT upper quadrant. Three-year months back, he suffered from dysentery. Physical exam revealed an enlarged liver. Blood picture showed leucocytosis with eosinophilia and CT scan showed the presence of cavitory lesion in the RT liver. An aspirate from the liver revealed trophozoites in wet preparation. The case is potentially infected with:
- 1) - (A) *Giardia lamblia*.
 - 2) + (B) *Entamoeba histolytica*.





- 3) - (C) *Entamoeba histolytica*/ *dispar*.
4) - (D) *Balantidium coli*.
- 76) In which of the following protozoal genera does NOT cause brain infections?
1) + (A) *Leishmania*.
2) - (B) *Entamoeba*.
3) - (C) *Naegleria*.
4) - (D) *Acanthamoeba*.
- 77) For treatment of scabies, the lesions must be rubbed with the following:
1) - (A) Crotamiton.
2) + (B) Pyrethrin.
3) - (C) Lindane.
4) - (D) All.
- 78) The following are obligatory intracellular parasites; with EXCEPTION of:
1) - (A) *Toxoplasma gondii*.
2) - (B) *Plasmodium falciparum*.
3) - (C) *Leishmania donovani*.
4) + (D) *Acanthamoeba* spp.
- 79) The following parasite can evade human immunity by antigen disguise:
1) + (A) *Schistosoma mansoni*.
2) - (B) *Ascaris lumbricoides*.
3) - (C) *Ancylostoma duodenale*.
4) - (D) *Enterobius vermicularis*.
- 80) Scabies is caused by infestation with:
1) - (A) male itch mite.
2) - (B) male *Sarcoptes scabiei*.
3) + (C) female *Sarcoptes scabiei* var. *hominis*.
4) - (D) male and female *Sarcoptes scabiei* var. *hominis*.
- 81) The trophozoites of the following protozoa are the infective stages; EXCEPT:
1) - (A) *Trichomonas vaginalis*.
2) + (B) *Balantidium coli*.
3) - (C) *Naegleria fowleri*.
4) - (D) *Acanthamoeba* spp.
- 82) *Balamuthia mandrillaris* is associated with ONE of the following:
1) - (A) Primary amebic encephalitis.
2) - (B) GAE and granulomatous skin and lung lesions (primarily immunocompromised).
3) + (C) GAE and granulomatous skin and lung lesions (primarily healthy)
4) - (D) Amebic keratitis.
- 83) If the immune system or treatment fails to eliminate all RBCs infected with certain Plasmodia and the numbers of these Plasmodia in RBCs begin to increase again with subsequent clinical symptoms of the patient. This is called:
1) - (A) Relapse.
2) + (B) Recrudescence.
3) - (C) Latency.
4) - (D) Re-infection.
- 84) A family lives in one-room apartment. Three members of family complain of severe itching in their hands and interdigitals, especially at night. The most likely cause of these conditions is:
1) + (A) Scabies.
2) - (B) Pediculosis.
3) - (C) Atopic dermatitis.





- 4) - (D) Dermatitis herpetiformis.
- 85) The route of human infection with *Ancylostoma* occurs via:
- 1) - (A) ingestion.
 - 2) + (B) penetration.
 - 3) - (C) inhalation.
 - 4) - (D) none.
- 86) A five years old female Yemeni child was complained of severe pain in her right ear with purulent discharges. Her mother took her to the PHC unit. On examination, physician found few small worm- like structures in her ear. The proposed diagnosis is:
- 1) - (A) A case of ear myiasis due to nymph of certain fly.
 - 2) - (B) A case of auditory myiasis due to pupae of certain fly.
 - 3) + (C) A case of aural myiasis due to larvae of certain fly.
 - 4) - (D) A & B above.
- 87) Regarding nasal myiasis, the clinical manifestations are as follows; EXCEPT:
- 1) - (A) obstruction of nasal passages.
 - 2) - (B) facial edema.
 - 3) - (C) fever.
 - 4) + (D) none.
- 88) The following statement does NOT relate to the classic symptoms / signs of scabies:
- 1) + (A) Fever & pain.
 - 2) - (B) Itchiness.
 - 3) - (C) Pimple like rash.
 - 4) - (D) Blisters.
- 89) *Sarcoptes scabiei* is mainly transmitted by the following:
- 1) - (A) Clothing.
 - 2) - (B) Bedding.
 - 3) + (C) Direct contact.
 - 4) - (D) All.
- 90) *Leishmania* multiply within:
- 1) - (A) RBCs.
 - 2) + (B) Macrophages.
 - 3) - (C) Hepatocytes.
 - 4) - (D) Splenocytes.

