## Advertisement Number - 038/2008

Date - 31st May, 2008

Name of the Post -District Malaria Officers / Filaria Officers / Biologist, in the Directorate of Health Services, General State Service, Group-B.

## **DETAILS REGARDING SYLLABUS & SCREENING TEST:**

If it is decided to hold Screening Test, the syllabus and other details of the test will be as under --The Screening Test will be held in Mumbai only on 31st August, 2008. The candidates should note that the purpose of the Screening test is only to short-list candidates for interview. While assessing Objective type answersheets, no penalty marks will be deducted for wrong answers marked by a candidate in his/her answersheet. Only correct answers given by candidate will be considered for the purpose of valuation. The marks obtained in the Screening Test will not be taken into account for final selection, which will be decided on performance in the interview alone. Marks obtained in the Screening Test will not be communicated to candidates and no result will be communicated to unsuccessful candidates nor will any correspondence be entertained in this regard including representations for verification of marks.

**Details of the Screening Test :--** The Screening test will consist of a single paper of objective type (i.e. having multiple choice questions) The question paper will carry maximum 100 marks and will be of one hour duration. The question paper will be set in English language only and the standard of the paper will be of at Master degree level.

The syllabus and topicwise distribution of marks will be as under.

- (1) Parasitism: Concept, origin, evolution, advantages & disadvantages in the parasitic life.
- (2) Classification of parasites according to habitat.

(2 Marks)

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( 2 Marks )

- (3) Kinds of hosts: definitive, intermediate, primary, secondary, specific, paratenic, carrier, susceptible, resistant, accidental, reservoir, vector. (2 Marks)
- (4) Modes of parasitic invasion, passive, mechanical, active, contact, transovarial, pathways of entry, sites of habitation.

  (2 Marks)
- (5) Host specificity.

(2 Marks)

- (6) Habitats & environments of parasites: vertebrate digestive system, environmental conditions in different parts of the system, blood, reticulo-endothelial system, tissues & other microhabitals, invertebrate habitats.

  (5 Marks)
- (7) Structural, physiological & biological adaptations of parasites for infectiousness, establishment & transmission, shape, size, attachment & protective devices, feeding aids, locomotion, respiration, metabolism, reproduction, life cycles, regressive changes, resistant & quiescent free living stages.

(10 Marks)

(8) Host-parasite system : effects of parasites on hosts, mechanical, nutritional, destructive, toxic, biological

Hosts reactions to parasites: resistance, compatibility, immunity, cellular and tissue reactions, e.g. phagocytosis, inflamation, repair, abnormal growth, Humoral reaction.

- ( Physiological resistance, immune response ) : premunition, avoidance of parasites by hosts, influence of host of parasite life cycle. (10 Marks )
- (9) Disease cycles: concept of diffusion (dissemination), principles of control; protection of host, control in and outside the host.

  (2 Marks)
- (10) Parasites & Zoonosis, vital reckettsial, bacterial, protozoan, helminthic & arthropod diseases. Leptospirosis, Leishmaniasis (5 Marks)
  - (11) Vector Biology: taxonomic groups, methods of transmision, stages which act as vector characteristics of arthropods in transmission cycles effect of environment on vector transmission. ( 5 Marks )
  - (12) Study of the following parasites with respect to geographical distribution, habitat, structure, life cycle, pathogenicity, treatment and prophylaxis. (10 Marks)
    - 1. Trypansoma Spp.

2. Leishmania donovani.

3. Plasmodium

4. Wachereria bancrofti.

(13) Insects as causes and vectors of disease & their life cycles in brief. (8 Marks) (i) Mosquitoes (Anapheles, Culex, Aedes etc.) (ii) Rat Flea (Xenopsylla) (iii) Tse-tse fly (Glossina) (iv) Sandfly (Phlebotomus) (14) Insecticides: Classification, Chemical-nature, mode of action. Pesticide application equipments -Dusters, prayers, Hazards of pesticides, (5 Marks) (15) a) Principles and methods of insect control in brief e.g. mechanical, chemical & biological, Phenomones in pest control, Integrated Pest Control. (3 Marks) b) Personal Protection Methods: Bed net & repellents etc. (2 Marks) (16) Chemotherapy. (5 Marks) (a) Antimalarial drugs. (b) Leishmanicidal drugs. (c) Antifilarial drugs. (17) Human Immunology, National Immunization Schedule. (5 Marks) (8 Marks) (18) Laboratory Examinations. (i) Collection of blood smear. (ii) Staining of blood smear. (iii) Examination of blood smear & identification of species. (19) Organisation and management of the Clinical Laboratory. (2 Marks) (a) Setting goal & objectives (b) Laboratory facilities (c) Laboratory Set up (d) Storage, stock inventory and checking etc. (20) (a) World Health Organisation (WHO) - Objectives, Structure Work & programmes. (2 Marks) (3 Marks) (b) (i) National Health Policy (ii) Health care system in India. (iii) National Health programme & scheme & particularly Malaria and Filaria.

Candidates who are eligible and whose applications are complete in all respect & are accompanied by the prescribed fee will be admitted to the Screening Test. The venue and the time table of the Screening Test will be informed by admission letter to the candidates admitted to the Screening Test. Such letters will be issued by the Commission's Office well in advance & will be sent on the address mentioned by the candidate in his/her application form. If however, candidates do not receive the admission letters three working days before the test, they should contact the Commission's office personally, to obtain duplicate admission letters.

Duplicate letters will be issued to only such candidates who are admitted for the Screening Test. No correspondence in this regard will be entertained by the Commission. Duplicate letters will also not be sent by post. Only eligible candidates in terms of this advertisement will be admitted for the Screening Test. However, a candidate whose eligibility is disputed, will be admitted provisionally subject to the verification of his eligibility. If at any stage of selection, it is found that the information given by the candidate in the application form is false or wrong or that the candidate does not satisfy the conditions of prescribed qualifications for the post, his candidature for the post will be cancelled. Candidates should appear for the examination at their own expenses.

**Viva - Voce and Personality Test**: The candidates who attain qualifying marks in the Screening Test and who are eligible for the post according to the provisions mentioned in this advertisement, will only be called for interview by the Commission. They will have to attend the interview at their own expenses at Mumbai.

Place : Mumbai S.N.HANUMANTE
Date : 31<sup>st</sup> May, 2008 Deputy Secretary,
Maharashtra Public Service Commission.