

Tanta University

Faculty of Medicine

Time allowed: 3 hours

Date: 21/3/2021

All questions to be answered



Dermatology and Venereology  
Mycology, Immunology, Molecular  
Biology

MD, First semester, Final exam

Total marks: 90

1. **Acute type of tinea pedis (eczematized form) is commonly caused by: (1 mark)**
  - A. *T. mentagrophytes* var *interdigitalis*
  - B. *T. rubrum*
  - C. *T. mentagrophytes* var *mentagrophytes*
  
2. **The most common agent in tinea corporis is: (1 mark)**
  - A. *T. tonsurans*
  - B. *T. rubrum*
  - C. *M. canis*
  
3. **This is not correct in chronic mucocutaneous candidiasis: (1 mark)**
  - A. Often genetic
  - B. There is tendency to visceral dissemination
  - C. Begins before age of 3 years

**4. Candidiasis is best demonstrated in clinical specimen by: (1 mark)**

- A. H&E
- B. Giemsa's stain
- C. Meyer mucicarmine stain
- D. Gram stain

**5. This agar media helps the formation of conidia: (1 mark)**

- A. Corn meal agar
- B. CHROM agar
- C. Caffeic acid agar

**6. Classification of fungi depending on sexual reproduction includes: (4 marks)**

- a).....
- b).....
- c).....
- d).....

**7. Chlamyospores are produced by : (2 marks)**

- a).....
- b).....

**8. Yeasts are characterized by the following: (3 marks)**

- a).....
- b).....
- c).....

**9. These are biological importance of spores: (4 marks)**

- a).....
- b).....
- c).....
- d).....

**10. Virulence factors in the pathogenesis of fungal disease are: (4 marks)**

- a).....
- b).....
- c).....
- d).....

**11. Expression of T-cell mediated immunity to fungi includes: (3 marks)**

- a).....
- b).....
- c).....

**12. On using Gomori's methenamine silver stain (GMS) stain: (3marks)**

- a) Outline of fungi are .....
- b) Internal parts stain .....
- c) Background stains .....

**13. Causative fungi in two feet – one hand syndrome are: (2 marks)**

- a).....
- b).....

**14. These are zoophilic dermatophytes: (3 marks)**

- a).....
- b).....
- c).....

**15. Pityriasis versicolor is caused by some types of Malassezia as:**

**(4 marks)**

- a).....
- b).....
- c).....
- d).....

**16. These tests are used for molecular biology detection of fungi: (3 marks)**

a).....

b).....

c).....

**17. These are the advantages of using MALDI-TOFMS device for dermatophyte identification: (2 marks)**

a).....

b).....

**18. Systemic treatment of tinea capitis includes: (3 marks)**

a).....

b).....

c).....

**19. Summarize the role played by the complement in the innate immune response (5 marks)**

**20. Give an account on inflammasomes (5 marks)**

**21. Identify costimulatory signals for a T-cell immune response (5 marks)**

22. Discuss Keratinocytes as immune targets and initiators (5 marks)

23. Mention how to measure spatial distribution of DNA or RNA within tissues (5 marks)

24. Explain genetically engineered mouse models (5 marks)

25. Illustrate gene-based therapy for skin diseases targeting DNA (5marks)

26. Mark as True or False (10 marks)

A. Tumor cells often down-regulate MHC class I molecules to escape recognition by cytotoxic T-cells ( )

B. Toll-like receptors aren't involved in the recognition of viral component ( )

C. T-helper 17 cells produce IL-17, IFN $\gamma$  and IL-4, whereas T-helper 22 produces IL-22 only ( )

D. RNA is easy to purify but it is much more readily degraded than DNA ( )

E. Western blot assay can determine protein level and size ( )

**Good Luck**



28/2/2021

Doctorate exam - Semester 2

All questions must be answered

Q1 : Discuss sub-epidermal bullous diseases with neutrophilic infiltrate. (30 Marks)

Q2 : Discuss and illustrate pathological picture of different types of leprosy (20 Marks)

Q3 : Give a short account on pathological feature of:

A. Pustular psoriasis (10 Marks)

B. Sarcoidosis (10 Marks)

Q4: Choose only one answer: (20 Marks)

1- Gouty tophi is formed by an intense inflammatory reaction “of macrophages, lymphocytes and large foreign body giant cells” which surround a center formed of:

- a. Lipid
- b. Mucin
- c. Urate crystals
- d. Fibrin

2 - Cowdry Type A bodies are seen in:

- a. Herpes zoster
- b. Lichen planus
- c. Verruca vulgaris
- d. Molluscum contagiosum

3. Which of the following is NOT a pathological finding of psoriasis:

- a. Parakeratosis
- b. Supra-papillary thinning
- c. Pautrier's microabscesses
- d. Test tube acanthosis

4. Grover disease is characterized pathologically by:

- a. Acantholysis
- b. Eosinophilic spongiosis
- c. Superficial dermal infiltrate of lymphocytes and eosinophils
- d. All of the above