

2018-19

Certificate Course in "Medical Mycology"

Department of Microbiology convened a meeting on 31/1/2019 to discuss on Certificate Course to be offered for this academic year. It was resolved that Certificate Course in "Medical Mycology" has to be offered for B.Sc (NBC & MZC) first year students from 31/1/2019 to 11/8/2019.

Objective of the Course :- The main objective of the course is to expose them to the human disease caused by fungi & their impact on human life & their treatment.

Duration of the Course :- The course was designed for 30 hrs for 28 days.

Intake of the Students :- Interested candidates (students) in this course - a maximum number of 20 were taken.

Evaluation :- Students were evaluated by conducting an exam at the end of the course and the certificate will be issued to them.

Faculty involved :- 1. Smt. B. Sajiya Rani - Asst Prof of Botany

2. Dr. K. Sarojini Chakravarthy.

3. P. Archana Mary, Lect. in Microbiology.

Certificate Course in Medical Mycology

Theory syllabus

UNIT – I (4 hours)

General properties of fungi – morphology, taxonomy, nomenclature and classification of fungi – virulence factors of fungi causing infection.

UNIT – II (14 hours)

Collection, transport and processing of clinical specimens for detection of superficial, subcutaneous and systemic mycoses. Dermatophytes – *Trichophyton* – *Microsporum* – epidermophyton – dermatophytosis, superficial mycoses – *Tinea versicolor*, *Tinea nigra*, Black piedra, White piedra

UNIT – III (14 hours)

Subcutaneous mycoses – mycetoma, dimorphic fungi causing systemic mycoses – *Histoplasma capsulatum* – *Blastomyces dermatitidis* – *Coccidioides immitis* – *Paracoccidioides brasiliensis*. Opportunistic mycoses – Candidiasis, Cryptococcosis, Aspergillosis, Zygomycosis.

Text Books

1. Chander J. (2009) Text Book of Medical Mycology, 3rd Edn. Mehta Publishers.
2. Ananthanarayan R. and Kapil A. (2013) Ananthanarayan & Panicker's Text book of Microbiology, 9th Edn. Paperback, Orient BlackSwan.

Government Degree College, Khairatabad
Department of Microbiology
Certificate Course in Medical Mycology, 2019

Name of the student: _____ Class and year: _____
Roll No.: _____ Medium: _____

Max. Marks: 15

Time: 1 hour

Answer ALL questions

- 1) What are the different types of medically important fungal infections? Select from all the options below?
 - a) Superficial mycoses
 - b) Subcutaneous mycoses
 - c) Opportunistic mycoses
 - d) Systemic mycoses

- 2) Which of the following is NOT the general characteristics of fungi?
 - a) They are heterotypic eukaryotic cells
 - b) Many fungi contain glucose polymers
 - c) Reproduce asexually only
 - d) The cell wall is composed of lipids

- 3) Which of the following dimorphic fungi is an important human pathogen?
 - a) *Cryptococcus neoformans*
 - b) *Blastomyces dermatitidis*
 - c) Mucor
 - d) *Aspergillus niger*

- 4) Which of the following statement is most correct about hyphae?
 - a) It is present in yeast and fungi
 - b) They are a group of mycelia
 - c) All fungi having hyphae consist of the separating wall called septa
 - d) The cell wall consists of a polysaccharide called chitin

- 5) What are different distinguishing characteristics between yeast and molds? Select from all the options given below
 - a) Yeast and molds both are multicellular organisms
 - b) Molds reproduce both asexually and sexually whereas Yeast reproduce asexually
 - c) Molds have fuzzy growth colonies and yeast form smooth colonies
 - d) Both molds and yeast appear in many different colors

- 6) Which of the following statement is most correct about Dermatophytosis?
 - a) *Microsporum canis* causes chronic dermatophytosis
 - b) Dimorphic fungi only cause dermatophytosis
 - c) It is the fungal invasion of tissues of hair, skin, and nails
 - d) The most common cause of lung infections

- 7) The pH level of the fungal culture media is an important growth factor for fungi, what is the best pH range for the growth?
a) pH 7 to 9 b) pH 3 to 5 c) pH 2 to 7 d) pH 4 to 6
- 8) All of the following are the common stain used in the direct microscopic examination for the fungal infection specimens, EXCEPT?
a) India Ink stain
b) Silver stain
c) Lactophenol cotton blue stain
d) Leishman's stain
- 9) What color does the fungal cell wall appear when dyed with Periodic acid-Schiff stain?
a) Black b) Red c) It appears colorless d) Violet
- 10) Which of the following fungi produces poisonous substance mycotoxin called aflatoxin and can
a) *Candida albicans* b) *Mucor* c) *Aspergillus flavus* d) *Rhizopus*
- 11) The growth temperature is an important factor for dimorphic pathogenic fungi which exists both in yeast and mold.
a) True b) False
- 12) Which of the following is the most correct statement regarding the Deuteromycetes also known as fungi imperfecti?
a) They are the causative agent of subcutaneous mycoses
b) The sexual reproduction method is not clearly known
c) They produce basidiospores through asexual reproduction method
d) None of the above
- 13) The yeast *Saccharomyces cerevisiae* is most commonly used in the production of which of the following product?
a) Wine b) Orange juice c) Cheese d) Sausages
- 14) What are the general characteristics of water molds? Select from all the options below
a) They are also called slime molds
b) The causative agent for potato and tomato diseases
c) They can also grow on freshwater
d) All of the above
- 15) What are the most common laboratory culture media for fungal growth? Select from all the options below
a) Sabouraud dextrose agar b) Brain heart infusion agar
c) Thayer Martin medium d) Cornmeal agar



**GOVERNMENT DEGREE COLLEGE, KHAIRATHABAD
HYDERABAD-500004**

**RE-ACCREDITED WITH 'B' GRADE BY NAAC
DEPARTMENT OF MICROBIOLOGY
CERTIFICATE OF PARTICIPATION**



This is certify that _____ of _____

Has successfully completed the Certificate Course in **"MEDICAL MYCOLOGY"**

of one month duration held from **03.01.2019 to 11.02.2019**. His / Her enthusiasm

to learn about the fungal organism causing diseases is highly appreciated.

CONVENER

INCHARGE

PRINCIPAL



Certificate Course in "Haematology" (31-12-2020)

Department of Microbiology Convened a meeting on 31/12/2020 to discuss on Certificate Course in "Haematology" to be offered for this academic year. It was resolved that certificate Course in "Haematology" has to be offered for B.Sc MBZ first year students of from 01/01/2020 to 31/12/2020.

Objective of the Course :- To make the students understand about the components of the blood and its composition, Blood group Typing and haemoglobin estimation and differential count of RBC & WBC. By this course they can seek employment in diagnostic labs as Medical Lab Technician.

Duration of the Course :- The course was designed for 30 hrs for 15 days.

Intake of the students :- Interested students in the course. Maximum number of 20 were taken.

Evaluation :- Students were taken evaluated by conducting an exam at the end of the course & certificate will be issued to them.

Faculty involved :-

1. Smt. B. Sofia Pami Asst. Prof of Botany
2. Ms. P Archana Mary Lec. in Microbiology.

CERTIFICATE COURSE IN HAEMATOLOGY

Theory syllabus

UNIT – I (6 hours)

Blood: Definition, characters, composition. Collection of Blood-Capillary Blood , Venous blood.

Precautions of handling Blood.

Composition of Blood (RBC, WBC, Plasma, Serum, Platelet cells).

UNIT – II (6 hours)

Staining of blood films, Total blood picture, Differential count.

Blood Grouping, Rh typing, Blood haemoglobin. – sahli's haemoglobino meter ,

Tall Quist& Cyan meth Haemoglobin.

UNIT – III (10 hours)

Coagulation mechanism; factors , bleeding time , clotting time.

Anticoagulants: Preparation of anticoagulants- Double oxalate, sodium citrate , EDTA, Heparin.

Reticulocyte Count [dry & wet] staining , diluting, fluids, normal Morphology And Values.

ESR (Erythrocyte sedimentation rate) Principle-determination.

UNIT – IV (8 hours)

Principles of blood transfusion, Blood Preservation.

Genetic disorder of haemoglobin- Thalassaemia Syndrome.

Hemophilia and Anaemia.

General account on spread of Diseases through blood(Serum hepatitis, HIV).

Laboratory diagnosis by ELISA, Estimation of PCV (Packed cell volume) Macro & Micro methods.

References:

1. Kawthalkar, Essentials of Immunology.
2. Lokwani.D.P. The ABC of CBC interpretation of Complete Blood Count and Histograms.
3. Ramnik Sood.Medical laboratory technology Methods and Interpretation, Jaypee Publications.
4. ShirishMKawathalkar. Essential of Haematology, Jaypee Publications.

Certificate Course in "Haematology"

Roll number	Name of the Student	8/1	3/1	4/1	6/1	7/1	20/1	21/1	22/1	23/1	24/1	25/1	27/1	28/1	29/1	30/1	Signature of student
114019341002	Begari Murali	P	P	P	A	A	P	P	A	P	P	P	P	P	P	P	Murali
114019341003	Bijju Krishnaveni	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P	Bijju
114019341006	Gona Parmesh	P	P	P	P	A	P	P	P	A	P	P	P	A	A	P	Parmesh
114019341007	Jukanti Rekha	P	P	A	A	P	P	P	P	A	P	P	P	A	P	P	Rekha
114019341008	Kamble Nikhil	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	Nikhil
114019341010	Koppadi Ramya Sree Satya	P	P	P	P	P	P	P	P	P	A	P	P	P	A	P	Ramya
114019341011	Mami Bhavana	P	P	P	P	P	A	P	P	P	P	A	P	P	P	P	Bhavana
114019341014	Ragula Nikhil	P	P	P	P	P	A	P	P	P	A	P	P	P	A	P	Nikhil
114019341016	Tadkala Abhinay	P	P	P	P	P	A	P	P	P	A	P	P	P	A	P	Abhinay
114019341017	T. BalRaj	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P	Balraj

GOVERNMENT DEGREE COLLEGE KHAIRATABAD

Department Of Microbiology

Certificate Course in Haematology -2019

Name of the Candidate:

Hall Ticket No.:

Group & Year :

Max: 15Marks

Time:

1hr

Answer All Questions

1. What is the major metabolically available storage form of iron in the body []
(a) Hemosiderin (b) Ferritin (c) Transferrin (d) Haemoglobin

2. Rh Blood grouping is discovered by []
(a) Karl Landsteiner & Weiner (b) Weiner, Alexander Fleming (c) Robert Koch
(d) Louis Pasteur

3. The Life span of RBC is []
(a) 120 days (b) 100 days (c) 200 days (d) 80 days

4. Which of the following forms of Hb molecule has the lowest affinity for oxygen []
(a) Tensed (b) Relaxed (c) Arterial (d) Venous

5. Total count of RBC for women is []
(a) 4.4-6 million (b) 4.2-5 million (c) 4- 5 million (d) 4.2-5.2 million

6. Which test can be used to detect haemolytic anaemia []
(a) Coombs test (b) Genetic testing (c) Peripheral blood smear (d) Shilling test

7. Allergic reactions are frequently associated with an increase in the presence of []
(a) Lymphocytes (b) Neutrophils (c) Monocytes (d) Eosinophils

8. Which of the following cells may develop in sites other than the bone marrow []
(a) Monocyte (b) Lymphocyte (c) Megakaryocyte (d) Neutrophil

9. Which of the following would correlate with an elevated ESR value []
(a) Osteoarthritis (b) Polycythemia (c) Decreased globulins (d) Inflammation

10. During blood coagulation, thromboplastin is released by []
(a) RBC (b) Blood plasma (c) Leucocytes (d) Clumped platelets
11. Anticoagulant suitable for storing blood for transfusion is []
(a) Dextrose, phosphate, & citrate (b) Glucose, phosphate & oxalate
(c) Dextrose, EDTA & saline (d) Dextrose, heparin and citrate
12. The condition in which bleeding time does not become prolonged is []
(a) Deficiency of Vitamin K (b) Hemophilia (c) Thrombocytopenia
(d) Aibrinoginemia
13. Which of the following is the better indicator of need or transfusion []
(a) Urine output (b) Hematocrit (c) Colour of skin (d) Clinical examination
14. The disease that cannot be transmitted through transfusion of blood is []
(a) Hepatitis B (b) AIDS (c) Cancer (d) Malaria
15. Mismatched blood transfusion in anesthetic patient presents []
(a) Hyperthermia &hypertension (b) Hypotension &bleeding from site of infection
(c) Bradycardia and hypertension (d) Tachycardia & hypertension



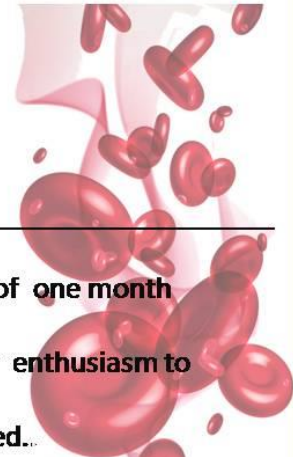
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HYDERABAD - 500004



RE-ACCREDITED WITH 'B' GRADE BY NAAC

DEPARTMENT OF MICROBIOLOGY

CERTIFICATE OF PARTICIPATION



This is to certify that _____ of _____

Has successfully completed the Certificate course "**HAEMATOLOGY**" of one month

duration held from _____ to _____. His/Her enthusiasm to

learn about the different haematological techniques is highly appreciated...

CONVENER

INCHARGE

PRINCIPAL



