

# Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)

Class Test-4 (Microbiology & Pathology - MCQs) 13-02-2015

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Total Time: 45 Minutes

Total Marks: 25

- 
- Q1. Name all cytogenetic techniques. (5)
- Q2. a. Define septic shock. (1)  
b. Explain pathophysiology of septic shock. (4)
- Q3. Give an account of pathogenesis of Yersinia pestis infection. (5)
- Q4. Write pathogenesis & pathology, clinical types and laboratory diagnosis of Polio virus. (2+1+2)
- Q5. a. What are various important properties of Orthomyxoviruses? (3)  
b. Explain influenza type A virus under the following headings: (1)  
1. Antigenic drift (1)  
2. Antigenic shift (1)  
3. Genetic reassortment (1)

# Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)

Class Test-5 (Pathology & Microbiology - MCQs) 13-03-2015

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Total Time: 45 Minutes

Total Marks: 25

- 
- Q1. a. Enlist important chemical carcinogens. (2)  
b. Briefly discuss steps involved in chemical carcinogenesis. (2)  
c. Name oncogenic viruses. (1)
- Q2. Define adaptive immunity and briefly describe its types. (5)
- Q3. A skin vesicle smear was received by a hospital pathologist. He specifically stained this smear and observed following features under the microscope:  
a. Ballooning of infected cells  
b. Cowdry type intranuclear inclusions  
c. Margination of chromatin  
d. Formation of multinucleated giant cells  
What is your diagnosis of this disease? Write its clinical presentations & lab diagnosis? (5)
- Q4. Give an account of pathogenesis & lab diagnosis of Haemophilus influenzae infection. (5)
- Q5. Write laboratory diagnosis of syphilis. (5)

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# Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)  
Class Test-6 (Pathology & Microbiology - SEQs) 03-04-2015

Name: Janna

Roll No: 13135

Total Time: 45 Minutes

Total Marks: 25

- 
- Q1. a. Briefly discuss steps involved in hematogenous spread of cancer. (3)  
b. Enlist various tumor suppressor genes. (2)
- ✓ Q2. a. Briefly discuss the differences between benign & malignant tumors. (4)  
b. What are the main characteristics of Neoplasia? (2)
- ✓ Q3. a. What are the diseases caused by Chlamydia? (2)  
b. Write down its life cycle. (2)
- ✓ Q4. a. What are the clinical features of Mycoplasma pneumoniae infection? (3)  
b. How will you carry out its laboratory diagnosis? (2)
- Q5. a. Briefly explain important properties of non-oncogenic retro virus (3)  
under following headings.  
1) Virion  
2) Genome  
3) Proteins  
4) Envelop & Maturation  
5) Replication  
6) Outstanding features  
b. Write an overview of course of HIV infection? (2)

08/05/15

**Azra Naheed Medical College**  
MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)  
Class Test-7 (Pathology & Microbiology - SEQs) 08-05-2015

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Total Time: 45 Minutes

Total Marks: 25

- 
- Q1. a. Define tumor markers, enlist the important tumor markers, discuss their role in diagnosis. (3)  
b. Define paraneoplastic syndrome. Give at least three examples. (2)
- Q2. a. Explain the pathogenesis of hydatid disease of liver. (2)  
b. Draw and label the ova of following parasites: (3)  
a. *Trichuris trichiura*  
b. *H. nana*  
c. *Enterobius vermicularis*
- Q3. a. Draw and label the life cycle of *ascaris lumbricoides*. (1.5)  
b. Draw the life cycle of parasite causing cysticercosis and explain its pathogenesis. (3.5)
- Q4. a. Enumerate pathogenic dermatophytes. (1.5)  
b. Give an account of dermatophytoses. (3.5)
- Q5. a. The patient with blood group A was mistakenly transfused with blood group B. Name the type of hypersensitivity reaction involved. (2)  
b. Name the mediators of type I hypersensitivity reaction. (3)



**AZRA NAHEED MEDICAL COLLEGE**  
**MBBS 3<sup>rd</sup> YEAR (Session 2011)**  
**(GEN. PATHOLOGY) CLASS TEST-2**

Subject: Pathology (General Pathology) Total marks: 25  
Resource Person: Dr. Ayesha Imtiaz / Dr. Aliya Aslam  
Time Allowed: 45 Minutes  
**ATTEMPT ALL THE QUESTIONS:**

**SEQ's:**

- Q. 1. a. Define apoptosis 18 (1)
- b. Describe intrinsic pathway of apoptosis 19, 21 (4)
- Q. 2. a. What is cellular adaptation to injury (1)
- b. Explain in detail with examples (4)
- Q. 3. a. Give types of necrosis with examples. (2.5)
- b. Describe mechanisms of vascular permeability with their causes & mediators (2.5)
- Q. 4. a. Give morphological patterns of acute inflammation with one Example for each 43 (2)
- b. Describe cellular events of acute inflammation (3)
- Q. 5. a. Define Granuloma. Enumerate causes of granulomatous Inflammation *M. tuberculosis, immune reaction against br. of tubercle bacillus, yersinia pestis, infectious aetiology* (3)
- b. Enlist mediators of inflammation with their source 45 (2)

*severe inf. → skin blisters.*  
*P. brunnis inf. → Fibrinous pericarditis.*  
*suppurative inf. → suppurative + pyogenic infections.*  
*abrasions → scar formation.*  
*ulcers → thrombotic ulcers.*

• Complement  
 • Kinins  
 • Proteases  
 → *ulcer.*  
 • Histamine  
 • Serotonin  
 • Prostaglandin  
 • Leukotrienes  
 • NO  
 • Cytokines  
 • Chemokines

Q9. Ten villagers developed watery diarrhea, within 48 hours after drinking water from the same source. The stools from most of the patients revealed highly motile (shooting stars like) organisms on direct microscopy.

- Vibrio cholerae*
- a. What is the most likely pathogen and its mechanism of causing diarrhea? (2)
  - b. How will you isolate and identify the organism in the lab? (2.5)

Q10. A young child presented with 3 days history of fever, sore throat and swelling neck. Both of his tonsils were covered with a grayish white membrane. Throat swab specimen was collected & Gram's stained smear revealed pleomorphic Gram positive rods.

- Streptococcus pyogenes*
- a. What is the most probable diagnosis and name the pathogen? (2)
  - b. Describe the pathogenesis of membrane formation. (3)

Q11. A 25 year old man with AIDS presented with 2 months history of headache and 3-4 days of confusion. Considering meningitis, a CSF sample was obtained. Encapsulated yeast cells were present in CSF, stained with India Ink.

- Cryptococcus neoformans*
- a. Name the pathogen and write down the pathogenesis of the disease. (3)
  - b. Name other diseases caused by the organism. (2)

Q12. What are important properties of Rhabdoviruses. Give pathogenesis, pathology and laboratory diagnosis of Rabies virus. (1.5+1+1+1.5)

Q13. A slightly curved strictly aerobic bacillus produces infections characterized by two primary pulmonary lesions and subsequent dissemination of bacteria with or without subsequent reactivation disease. Chronic pulmonary disease in elderly is the most common clinical presentation. Write name of the organism, also write its pathogenesis, pathology and laboratory diagnosis. (1+1+1+2)

Q14. a. Write interpretation of HBV serologic markers in patients with hepatitis. (3)  
b. Explain the usage of Polio vaccine in Pakistan. (2)

Q15. a. Draw and label the life cycle of Plasmodium falciparum. (3)  
b. Tabulate the differences between amoebic and bacillary dysentery. (2)

*RNA Virus*  
*RNA - Enveloped*  
*Respiratory tract*

4

2

350

# Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (Session 2012)

Class Test-1 (Microbiology & Pathology - SEQs) 10-11-2014

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Total Time: 45 Minutes

Total Marks: 25

1. a. Define sterilization. (1)  
b. Write principle and procedure of sterilization by autoclave. (4)
2. a. Enumerate the mechanisms of antimicrobial drug resistance with examples. (3)  
b. Define plasmids and transposons. (2)
3. a. Draw and label bacterial growth curve. (3)  
b. Write Koch's postulates. (2)
4. a. Define apoptosis. Explain with the help of diagram the intrinsic and extrinsic pathways of cell death by apoptosis. (3)  
b. Enumerate the differences between necrosis and apoptosis. (2)
5. a. Explain in detail the mechanism of injury induced by free radicals. (2)  
b. Describe in detail the different types of necrosis with examples. (3)  
*Define necrosis & write its types with example.*

*Handwritten signature and date*  
7/11/2014

# Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (Session 2012)

Class Test-3 (Microbiology & Pathology - SEQs) 26-01-2015

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Total Time: 45 Minutes

Total Marks: 25

- 
1. Define and classify family Enterobacteriaceae. (2+3)
  2. Write down the laboratory diagnosis of enteric fever. (5)
  3. Give an account of the life cycle of Plasmodium falciparum. (5)
  4. Give an account of pathogenesis and pathogenicity of Entamoeba histolytica infection. (5)
  5. Write a note of viral replication cycle. (5)



Patho

<sup>13</sup>  
2014-15

Azra Naheed Medical College

BS 3<sup>rd</sup> Year Class (Session 2012)  
Class Test-1 (Microbiology & Pathology - SEQs) 10-11-2014

①

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Total Time: 45 Minutes

Total Marks: 25

General  
Microbiology

1. a. Define sterilization. (1)  
b. Write principle and procedure of sterilization by autoclave. (4)
2. a. Enumerate the mechanisms of antimicrobial drug resistance with examples. (3)  
b. Define plasmids and transposons. (2)
3. a. Draw and label bacterial growth curve. (3)  
b. Write Koch's postulates. (2)
4. a. Define apoptosis. Explain with the help of diagram the intrinsic and extrinsic pathways of cell death by apoptosis. (3)  
b. Enumerate the differences between necrosis and apoptosis. (2)
5. a. Explain in detail the mechanism of injury induced by free radicals. (3)  
b. Describe in detail the different types of necrosis with examples. (2)  
Define Necrosis + write its types with examples:-

cell  
injury

U.B.  
7/11/2014

(Batch - 2)  
(2014 - 15)

Patho

2014-15

Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (Session 2012)  
Class Test-3 (Microbiology & Pathology - SEQs) 26-01-2015

3

Name: Ayesha Javed

Roll No: 13113

Total Time: 45 Minutes

Total Marks: 25

1. Define and classify family Enterobacteriaceae. (2+3)
2. Write down the laboratory diagnosis of enteric fever. (5)
3. Give an account of the life cycle of Plasmodium vivax.
4. Give an account of pathogenesis and pathogenicity of Entamoeba histolytica infection.
5. Write a note of viral replication cycle.

Batch-2

Patho

2014-15

Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)  
Class Test-4 (Microbiology & Pathology - MCQs) 13-02-2015

Name: AP. Raza

Roll No: 13te7

Total Time: 45 Minutes

Total Marks: 25

- Q1. Name all cytogenetic techniques. (5)
- Q2. a. Define septic shock. (1)  
b. Explain pathophysiology of septic shock. (4)
- Q3. Give an account of pathogenesis of Yersinia pestis infection. (5)
- Q4. Write pathogenesis & pathology, clinical types and laboratory diagnosis of Polio virus. (2+1+2)
- Q5. a. What are various important properties of Orthomyxoviruses? (2)  
b. Explain influenza type A virus under the following headings: (1)  
1. Antigenic drift (1)  
2. Antigenic shift (1)  
3. Genetic reassortment (1)

Batch-2

Patho

2014-15

Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)  
Class Test-5 (Pathology & Microbiology - MCQs) 13-03-2015

Name: Ali Raza

Roll No: 13107

Total Time: 45 Minutes

Total Marks: 25

- Q1. a. Enlist important chemical carcinogens. (2)  
b. Briefly discuss steps involved in chemical carcinogenesis. (2)  
c. Name oncogenic viruses. (1)
- ✓ Q2. Define adaptive immunity and briefly describe its types. (5)
- Q3. A skin vesicle smear was received by a hospital pathologist. He specifically stained this smear and observed following features under the microscope:  
a. Ballooning of infected cells  
b. Cowdry type intranuclear inclusions  
c. Margination of chromatin  
d. Formation of multinucleated giant cells  
What is your diagnosis of this disease? Write its clinical presentations & lab diagnosis? (5)
- Q4. Give an account of pathogenesis & lab diagnosis of Haemophilus influenzae infection. (5)
- Q5. Write laboratory diagnosis of syphillis. (5)

Batch-2

# Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)

Class Test-8 (Pathology & Microbiology - SEQs) 5-6-2015

*Handwritten signature*  
3/4/15

Name: Jannat Zafar

Roll No: 13135

Total Time: 45 Minutes

Total Marks: 25

- 
- Q1: a. Draw and label the life cycle of plasmodium falciparum. (2)  
b. Enumerate the differences between amoebic and bacillary dysentery. (3)
- Q2. a. Explain the pathogenesis of typhoid fever caused by Salmonella typhi. (2.5)  
b. Enumerate the diseases caused by Streptococcus pyogenes. (2.5)
- Q3. A 45 years old female presented with painless enlargement of thyroid gland her serum shows circulating anti thyroid antibodies. What is your most likely diagnosis. Enumerate four organ specific autoimmune diseases. (5)
- Q4. a. A 20 years young lady received sharp cut injury and rushes to emergency ward where wound was closed approximated with surgical sutures. Her wound healing will take place by which intension? (01)  
b. Describe morphological features of wound healing by primary union. (03)  
c. What are the systemic & local factors affecting the wound healing. (01)
- Q5. Write down brief resume of mycobacterium tuberculosis under the following heads: (01)
1. Pathogenesis (01)
  2. Pathology (02)
    - a. Two principle lesions (01)
    - b. Spread of organism in host (01)
    - c. Primary and reactivation of tuberculosis (01)

1 (5) \*

Patho 2016 (3)



Department of Pathology  
Azra Naheed Medical College  
Class Test-3, 16 February 2016  
(Subjective Part)

*Intake*  
Bacterio

Time Allowed: 35 minutes

Micro(2)

Total Marks: 15

Name: SZ

Roll No: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:**

- All subjective questions are to be answered on the paper and returned to the invigilator a day before the time after you have received the question paper.
- Neat hand writing, and use of margins will increase the out look and presentation of your paper.

**Attempt all Questions. Each Question carry 5 marks**

- Write pathogenesis and pathology of ETEC and EPEC. (2.5+2.5)
- Write laboratory diagnosis of Salmonella typhi. (05)
- A young boy had nasal surgery, nasal packing was done, which was followed by signs and symptoms of shock.
  - Which organism is responsible for his condition? (01)
  - Explain the pathogenesis of this disease. (02)
  - Describe briefly the laboratory diagnosis of this pathogen. (02)

Topics:  
→ Gram (+ve) Cocci (15)  
→ Gram (-ve) Cocci (16)  
→ Gram (-ve) related to Enteric tract (18)  
→ Gram (-ve) Respiratory (19)  
→ Gram (-ve) Zoonotic (20)

Batch - 3

# Patho 2016 (4)



Department of Pathology  
Azra Naheed Medical College  
Class Test-4, 07 March 2016  
MBBS 3<sup>rd</sup> Year Class  
(Subjective Part)

G + M

*Signature*

Time Allowed: 60 min

Total Marks: 25

Name: M. Hasan

Roll No: 1472

Date: 7/3/2016

### Instructions:

- All subjective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.
- Neat hand writing, and use of margins will increase the outlook and presentation of your paper.

Attempt all Questions. Each Question carry 5 marks

- Following caesarian section, gynecologist apply the surgical sutures in the incision.
  - Trace the Steps of healing in this patient in chronological order (3)
  - Briefly describe the phenomenon of wound contracture (2)
- Describe the factors that can delay the wound healing. (3)
  - Give the name of growth factors which help in Tissue Repair and Healing with at least one function. (2)
- Classify Mycobacterium. Discuss the pathogenesis of primary tuberculosis. (5)
- Define mutation & types of mutations. (3)
  - Name four autosomal dominant diseases. (2)
- Write a note on trisomy 21. (2)
  - Write down the indication for analysis of germ line genetic disorders. (3)

Wound Healing

Genetics

→ General → Misc  
Healy & Kasper  
Genetics  
Mycobacterium  
+  
Spirochetes

## Batch - 3

Patho 2016 CS



Department of Pathology

Azra Noheed Medical College

Class Test-S, 01 April 2016

(Subjective Part)

Gov

Time Allowed: 60 minutes

Total Marks: 25

Name: 14151

Roll No:

Date: 2-April 16

Instructions:

1. All subjective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.
2. Neat hand writing, and use of margins will increase the neat look and presentation of your paper.

Attempt all Questions. Each Question carry 5 marks

cell injury

1. a. Discuss the two pathways of apoptosis. (2)  
b. Describe the free radical mediated injury to the cell. (2)
2. a. Define necrosis. Discuss its morphological types with examples. (3)  
b. Differentiate between dystrophic and metastatic calcification. Give two examples of each. (2)
3. Define metaplasia. Discuss its mechanism and give two examples. (5)
4. a. What are the functions of complement system and name serum proteins involved? (3)  
b. Differentiate between innate and adaptive immunity in tabulated form. (2)
5. Name Antigen presenting cells. Explain mechanism for endogenous antigen-presentation. (5)

Immunity

Cell injury + Immunity  
1<sup>st</sup> half

Batch-3



A granuloma is focus of chronic inflammation consisting of microscopically aggregation of macrophages that are transformed into epithelioid cells surrounded by collar of mononuclear leukocytes, principally lymphocytes and occasionally plasma cells.

# Patho (General)

## AZRA NAHEED MEDICAL COLLEGE

MBBS 3<sup>rd</sup> YEAR (Session 2011)

IGN. PATHOLOGY CLASS TEST-2 2013-14

Subject: Pathology (General Pathology)

Total marks: 25

Resource Person: Dr. Ayesha Imtiaz / Dr. Aliya Aslam

Time Allowed: 45 Minutes

ATTEMPT ALL THE QUESTIONS:

2

### SEQ's:

- Q. 1. a. Define apoptosis (1)  
 b. Describe intrinsic pathway of apoptosis (4)
- Q. 2. a. What is cellular adaptation to injury (1)  
 b. Explain in detail with examples (4)
- Q. 3. a. Give types of necrosis with examples (2.5)  
 b. Describe mechanisms of vascular permeability with their causes & mediators (2.5)
- Q. 4. a. Give morphological patterns of acute inflammation with one example for each (2)  
 b. Describe cellular events of acute inflammation (3)
- Q. 5. a. Define Granuloma. Enumerate causes of granulomatous inflammation (3)  
 b. Enlist mediators of inflammation with their source (2)

cell injury.

Inflammation

(A) Process of programmed cell death that is induced by suicide mechanism in which cell induced to die by activating enzymes that destroy the cell organelles, DNA and nuclear cytoplasmic proteins.

(B) Hypertrophy, hyperplasia, atrophy, metaplasia. Adaptations are reversible functional and structural responses to various physiological stress and pathological stimuli, which may be altered body state are achieved.

Granuloma = mass of cells in an organ or tissue usually resulting from chronic inflammation.

# Batch-1

AZRA NAHEED MEDICAL COLLEGE

MBBS 3<sup>rd</sup> YEAR (Session 2013-14)

(Microbiology Class Test)

2013-14

Patho (Micro)

Subject: Pathology (Microbiology)

Total marks: 25

Resource Person: Prof. Ishtiaq Ahmad / Dr. M. Tahir Majeed

Time Allowed: 45 Minutes

Obtained Marks:

Dated: 03.02.2014

3

ATTEMPT ALL THE QUESTIONS:

SEQ's:

1. Enumerate the diseases caused by different species of Clostridium? (5)
2. What is the pathogenesis of tetanus? (5)
3. Classify Mycobacterium. What is the pathogenesis of primary tuberculosis? (5)
4. Classify Staphylococci. Enlist the diseases caused by Staphylococcus? (5)
5. What diseases are caused by Streptococcus pyogenes? (5)

(Batch-1)

Patho

2014-15

Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)

Class Test-6 (Pathology & Microbiology - SEQs) 03-04-2015

Name: Ali Raza

Roll No: 13107

6

Total Time: 45 Minutes

Total Marks: 25

- Q1. a. Briefly discuss steps involved in hematogenous spread of cancer. (3)  
b. Enlist various tumor suppressor genes. (2)
- Q2. a. Briefly discuss the differences between benign & malignant tumors. (3)  
b. What are the main characteristics of Neoplasia? (2)
- Q3. a. What are the diseases caused by Chlamydia? (2) } Penicillin  
b. Write down its life cycle. (3)
- Q4. a. What are the clinical features of Mycoplasma pneumoniae infection? (3)  
b. How will you carry out its laboratory diagnosis? (2)
- Q5. a. Briefly explain important properties of non-oncogenic retro virus under following headings. (3)  
1) Virion  
2) Genome  
3) Proteins  
4) Envelop & Maturation  
5) Replication  
6) Outstanding features  
b. Write an overview of course of HIV infection? (2)

Batch-2

Patho

2014-15

Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)

Class Test-7 (Pathology & Microbiology - SEOs) 08-05-2014

7

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Total Time: 45 Minutes

Total Marks: 25

- Q1. a. Define tumor markers, enlist the important tumor markers, discuss their role in diagnosis. (3)
- b. Define paraneoplastic syndrome. Give at least three examples. (2)
- Q2. a. Explain the pathogenesis of hydatid disease of liver. (2)
- b. Draw and label the ova of following parasites: (3)
- a. *Trichuris trichiura* -
- b. *H. nana*
- c. *Enterobius vermicularis*
- Q3. a. Draw and label the life cycle of ascaris lumbricoides. (1.5)
- b. Draw the life cycle of parasite causing cysticercosis and explain its pathogenesis. (2.5)
- Q4. a. Enumerate pathogenic dermatophytes. (1.5)
- b. Give an account of dermatophytoses. (3.5)
- Q5. a. The patient with blood group A was mistakenly transfused with blood group B. Name the type of hypersensitivity reaction involved. (1)
- b. Name the mediators of type I hypersensitivity reaction. (3)

Batch-2

Patho

2014-15

Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (2<sup>nd</sup> Entry)  
Class Test-8 (Pathology & Microbiology - SEQs) 5-6-2015

Name: Ali Raza

Roll No: 13107

3/4/15  
8

Total Time: 45 Minutes

Total Marks: 25

- Q1. a. Draw and label the life cycle of plasmodium falciparum. (2)  
b. Enumerate the differences between amoebic and bacillary dysentery. (3)
- Q2. a. Explain the pathogenesis of typhoid fever caused by Salmonella typhi. (2.5)  
b. Enumerate the diseases caused by Streptococcus pyogenes. (2.5)
- Q3. A 45 years old female presented with painless enlargement of thyroid gland her serum shows circulating anti thyroid antibodies. What is your most likely diagnosis. Enumerate four organ specific autoimmune diseases. (5)
- ✓ Q4. a. A 20 years young lady received sharp cut injury and rushes to emergency ward where wound was closed approximated with surgical sutures. Her wound healing will take place by which intension? (01)  
b. Describe morphological features of wound healing by primary union. (03)  
c. What are the systemic & local factors affecting the wound healing. (01)
- Q5. Write down brief resume of mycobacterium tuberculosis under the following heads:  
1. Pathogenesis (01)  
2. Pathology (02)  
a. Two principle lesions (02)  
b. Spread of organism in host (01)  
c. Primary and reactivation of tuberculosis (01)

(Batch-2)

Patho (Micro)

2013-14

AZRA NAHEED MEDICAL COLLEGE

Pathology (Microbiology) Class Test-1

Subject: Pathology (General Microbiology)

Total Marks: 25

Resource person: Dr. Tahir Majeed/ Dr. Sarita Khan

Obtained Marks

Time Allowed: 45 minutes

①

Short Essay Questions (SEQ's)

- (a) Enumerate the differences between endotoxins and exotoxins? (3)  
(b) Name at least three bacteria that produce exotoxins. (2)
- (a) Draw and label the cell walls of Gram positive and Gram negative bacteria. (3)  
(b) Why Gram positive and Gram negative bacteria appear different on Gram staining? (2)
- (a) Enumerate various methods of sterilization. (2)  
(b) Which is the best method of sterilization? What is its principle and procedure? (3)
- (a) Enumerate the various Antigen-Antibody tests. (2.5)  
(b) What is meant by ELISA? Write down its principle. (2.5)
- (a) What are the different targets of action of antibiotics? Give at least one example for each. (2.5)  
(b) Enumerate the four basic mechanisms of resistance to antibiotics with examples. (2.5)

(General Bacteriology)

(Batch - 1)  
(2013-14)

**Patho (General)**  
Azra Naheed Medical College  
MBBS 3<sup>rd</sup> Year Class (Session 2011)

Class Test IV (General Pathology SEQs) 3-3-2014

Name \_\_\_\_\_

Roll No: **2013-14**

Total Time: 45 Minutes

Total Marks: 25

④

Q.1. Discuss mechanism of action of Tyrosine kinase receptor in mediating role of Epidermal growth factor in healing.

Q.2. Write short note on adult (somatic) stem cells.

Q.3. Define shock, explain the pathophysiology of septic shock

Q.4. Define hemostasis & explain different steps of primary & secondary hemostasis.

Q.5. Define embolism, infarct, hyperemia, congestion & anasarca with examples

check

1) shock is systemic hypoperfusion resulting from reduction in either cardiac output or effective circulating blood volume, followed by impaired tissue perfusion & cell death.

ii) Hemostasis is a normal physiological process maintaining the blood in a fluid state in normal vessels yet prevent the rapid formation of thrombotic clots at the site of vascular injury.  
Primary Hemostasis

④

**Batch-1**

# Patho (Micro)

Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (Session 2013-14)

Class Test 5-A (Microbiology SEQs) Dated: 07-04-2014

Roll No: 2013-14

Name: \_\_\_\_\_

Total Marks: 15

Total Time: 25 Minutes

- Q.1. a. Enumerate the pathogenic Escherichia coli and mention the diseases caused by them. (3)
- b. Write down the pathogenesis of bloody diarrhea caused by Escherichia coli. What are the complications. (3)
- Q.2. a. Give an account of the laboratory diagnosis of typhoid fever in the first, second and third week of the disease. (3)
- b. Enumerate the causative agents of Urinary tract infection. (2)
- Q.3. a. Define and classify Enterobacteriaceae. (2)
- b. Write down the pathogenesis of meningitis caused by Neisseria meningitidis. (3)

Batch-1



*Patho (General)*  
Azra Naheed Medical College  
MBBS 3<sup>rd</sup> Year Class (Session 2013-14)

Class Test 5-B (Gen. Pathology SEQs) Dated: 28-04-2014

Name: Hadia Muneer

Roll No: 2013-14  
12199

Total Time: 20 Minutes

Total Marks: 10

Neoplasia

- Q.1. a. Define Neoplasia (1)  
b. Enumerate the common pathways for Metastasis (2)  
c. Explain the Nomenclature used to classify the neoplastic tumours (2)
- Q.2. a. Give a brief review on clinical application of tumor markers. (3)  
b. List oncofetal antigens. Summarise any important tumor marker of this group (2)

# Patho (General + Micro)

Azra Naheed Medical College  
MBBS 3<sup>rd</sup> Year Class (Session 2011)

Class Test (General Pathology & Parasitology) 5 Qs 8-5-2014

Name: \_\_\_\_\_

Roll No: 2013-14

Total Time: 45 Minutes

Total Marks: 25

Q.1. a. Draw and label the life cycle of Plasmodium falciparum. (2)

b. Draw and label the ova of following parasites: (3)

- a. Trichuris trichiura
- b. H. nana
- c. Ankylostoma duodenale

Q.2. Tabulate the differences between amoebic and bacillary dysentery. (5)

Q.3. Explain the pathogenesis of hydatid disease of liver. (5)

Q.4. a. Define regeneration. (1)

b. Discuss phases of secondary wound healing. (4)

Q.5. Define the following (5)

- a. Gene → segment of DNA that determines trait.
- b. Allele → different genes for same trait.
- c. Karyotyping → general appearance of chromosomes.
- d. Amniocentesis → procedure performed during pregnancy.
- e. Autosomal dominant disorder

Q.6. (a) Regeneration refers to proliferation of cells and tissues to replace lost structures. Tissues with high proliferative capacity (eg. liver, HSC) can continue by self-renewal and regenerate with little loss. However, stem cells are not destroyed and they can self-renew.

## Batch-1

Q.5 (a) A 50 years old man has been diagnosed with fatty liver, what is the most likely cause and what other substances can be accumulated extracellular and intracellular, give examples. 2

(b) Enumerate different types of necrosis, Explain Fibrinoid necrosis. 1.25, 0.75

(c) Tabulate, two basic differences between the two different types of calcifications? 1

Q.6 A 30 year old patient had a soft tissue sarcoma measuring 10 cm. He got chemotherapy and tumor size reduced to 3 cm in three months.

- a. What is the cause of reduction in size of this tumor? (0.5)
- b. What is reperfusion injury, describe in detail? 2
- c. Enumerate the steps of mitochondrial pathway of apoptosis. (2)

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Q 1. A 52 year old lady presents to the gyne department with complaint of irregular menstrual cycle. Her history reveals that her menarche started at 12 years of age. She has two normal deliveries. Her physical examination reveals no abnormality. She is explained that she is undergoing menopause, which is due to programmed cell death.

- a. What is the name of this process? (1)
- b. Enumerate 2 differences between programmed cell death and necrosis. (2)
- c. What are the features of reversible cell injury with pathogenesis. 2 (A)

Q 2. Define Necrosis, what are different types of necrosis. 3

- b. Give one example of sites involved with each type of necrosis. 2

Q 3. A 60 years old male chronic alcoholic dies in a road side accident. On autopsy, the liver was enlarged and yellow and greasy.

- a. What is the most likely substance accumulated in liver. 0.5

b. What is the microscopic appearance. 1.5

- c. What are different types of pigments deposited in cells. 3

Q 4. What are the effects of increased cytosolic calcium on cell. 1.5

- b. what are different types of calcification. 2

d. what is mechanism of atrophy in a cell. 1.5

Q 5. What are different types of cellular adaptations, Give types with one example each. 5

Steatosis → TAG accumulation in liver cells.  
Anthracosis → Carbon accumulation in body cells & lymph nodes of pulmonary parenchyma.  
Stenosis → narrowing of heart valves.

TAG accumulation in liver steatosis  
Carbon accumulation (Anthracosis)  
lipofuscin, melanin

# Azra Naheed Medical College

MBBS 3<sup>rd</sup> Year Class (Session 2013-14)

Class Test 5-B (Gen. Pathology SEQs) Dated: 28-04-2014

Name: Rowshan

Roll No: 12186

Total Time: 20 Minutes

Total Marks: 12

- Q.1. a. Define Neoplasia (1)  
b. Enumerate the common pathways for Metastasis (2)  
c. Explain the Nomenclature used to classify the neoplastic tumours (2)
- Q.2. a. Give a brief review on clinical application of tumor markers. (3)  
b. Enlist oncofetal antigens. Summarise any important tumor marker of this group. (2)

CEA: Colorectal carcinoma, pancreatic, breast, stomach

CAP15: Ovarian carcinoma.

Trap: hairy leukemia.

AFP: hepatocellular carcinoma.

PSA: prostate carcinoma.

BHCG: chorio carcinoma.

CA-19.9: pancreatitis.



# AZRA NAHEED MEDICAL COLLEGE

## Pathology Class Test-1

### DPT-5

Subject: Pathology (General Microbiology)

Total Marks: 20

Examiner person: Dr Tahir Majeed/ Dr Sadia Ikram

Obtained Marks:

Time Allowed: 95 minutes

### Short Essay Questions (SEQ's)

1. Draw and label the diagram of cell wall of Gram positive and Gram negative bacteria. (5)
2. Enumerate the differences between endotoxins and exotoxins. (5)
3. What are the different mechanisms of actions of antibiotics? Give one example of each. (5)
4. a. Enlist methods of sterilization. (3)  
b. Give two examples of strict aerobes and strict anaerobes. (2)



Department of Pathology  
Azra Naheed Medical College  
Grand Test-1, 06 December 2016  
MBBS 3<sup>rd</sup> Year (SEQ)  
(General Pathology & General Microbiology)

Name: \_\_\_\_\_

Roll No: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:**

1. All subjective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.

Attempt all questions. Each Question carries 5 marks

- Q-1 a. Draw and label the cell wall of Gram positive and Gram negative bacteria?  
b. Make a flow chart to classify Gram Negative rods.  
c. What is the role of process of fermentation in the respiration of facultative bacteria?  
d. Classify bacteria on the basis of their temperature requirements.
- Q.2 a. Draw and label the bacterial growth curve. During which phase of growth curve affect of antibiotics maximum?  
(1+0.5)  
b. Tabulate the differences in the exotoxins and endotoxins. (2)  
c. Is lipopolysaccharide exotoxin or endotoxin? What is its chemical composition, location and mechanism of action in the causation of disease in human beings? (0.5+1)
- Q3. a. By which method of sterilization we can sterilize the instruments and bed linen in the hospitals and operation theaters? What is its principle and procedure? (0.5+1)  
b. Define the following:  
i. Plasmids & their medical implications importance (1)  
ii. Sterilization (1)  
iii. Spore and its medical implication (1)  
c. Name two exotoxin-producing bacteria, their mechanism of action and the diseases produced by them. (2)
- Q-4 Depletion of ATP to 5% to 10% of normal levels has widespread effects on many cellular systems.  
(a) Describe it in detail, write down the morphological features as well. 3  
(b) What are the major consequences of mitochondrial damage? 2