



62603

Second Basic B.Sc. Nursing Examination, Summer 2013  
PHARMACOLOGY, PATHOLOGY AND GENETICS

Total Duration : Section A + B + C = 3 Hours

Section B &amp; C Marks : 60

## SECTION – B &amp; SECTION – C

*Instructions:*

- 1) All questions are compulsory.
- 2) The number to the right indicates full marks.
- 3) Draw diagrams wherever necessary.
- 4) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

SECTION – B  
Pharmacology

2. Answer the following (any 3 out of 4).  $(3 \times 5 = 15)$ 
  - a) Mention any five therapeutic uses of gluco-corticoids.
  - b) Write a short note on chloroquine.
  - c) Write a short note on oral contraceptive pills.
  - d) Enlist parenteral routes of drug administration and give any two advantages of rectal route along with suitable examples.
3. Classify drugs used in treatment of congestive cardiac failure ? Mention mechanism of action and side effects of digoxin.  $(1 \times 7 = 7)$
4. Classify the drug treatment of bronchial asthma ? Mention the drug treatment of status asthmaticus.  $(1 \times 8 = 8)$

SECTION – C  
Pathology

5. Answer the following (any 3 out of 4).  $(3 \times 4 = 12)$ 
  - a) Write a brief account of benign prostatic hyperplasia.
  - b) Laboratory investigations in myocardial infarction.
  - c) What is primary complex ? Give the fate of primary complex.
  - d) Enumerate factors affecting wound healing.
6. Attempt 3 LAQ out of four.  $(3 \times 6 = 18)$ 
  - a) Mention causes of diarrhoea. Give a brief account of stool examination.
  - b) Define neoplasia. Write differences between benign and malignant tumours.
  - c) Write in brief on different methods of grouping and cross matching of blood.
  - d) Write different etiological factors for cervical cancers. Mention the laboratory investigations in the diagnosis.



62603

**Second Basic B.Sc. Nursing Examination, Summer 2014**  
**PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration: Section A + B + C = 3 Hours

Section B & C Marks: 60

**SECTION – B & SECTION – C**

**Instructions :**

- 1) Use blue/black ball point pen only.
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- 3) All questions are compulsory.
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- 5) Draw diagrams wherever necessary.
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- 7) Use a common answer book for all Sections.

**SECTION – B**

**(30 Marks)**

**(Pharmacology)**

2. Answer the following (any three out of four): **(3×5=15)**
  - a) What is first pass metabolism and its clinical significance.
  - b) Discuss uses of adrenaline in brief.
  - c) Write a note on sulfamethoxazole and trimethoprim combination.
  - d) Write a note on stimulant purgatives.
3. Classify drugs used in bronchial asthma. Discuss mechanism of action, uses and adverse effects of selective beta 2 agonists. **(1×7=7)**
4. Classify antihypertensive agents. Write mechanism of action and adverse effects of enalapril. **(1×8=8)**

P.T.O.



## SECTION - C

(30 Marks)

## (Pathology)

5. Answer the following (any three out of four) : (3x4=12)

- Define Metaplasia. Give four examples.
- Enumerate gross and microscopic changes of Myocardial Infarction with respect to duration of time.
- Classify cirrhosis of Liver on the basis of etiology. Mention the complications.
- Enumerate causes of Hematuria. Describe tests for detection of blood in urine.

6. Answer the following (any three out of four) : (3x6=18)

- Define Neoplasia. Describe the various modes of spread of a malignant tumour.
- Describe methods of blood collection for various hematological investigations. What is the role of a Nurse in collection and dispatch of these samples.
- Mention laboratory investigations in Diabetes mellitus.
- Classify ovarian tumours. Describe gross and microscopy of Teratoma ovary.

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62603

**Second Basic B.Sc. Nursing Examination, Summer 2015**  
**PHARMACOLOGY, PATHOLOGY AND GENETICS**

Total Duration : Section A+B+C = 3 Hours

Total Marks : 75

*Instructions : 1) Use blue/black ball point pen only.*

- 2) *Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.*
- 3) *All questions are compulsory.*
- 4) *The number to the right indicates full marks.*
- 5) *Draw diagrams wherever necessary.*
- 6) *Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.*
- 7) *Use a common answer book for all Sections.*

**SECTION – A (40 Marks)**

**(Pharmacology)**

1. Short answer question (any five out of six) : (5x5=25)
  - a) Classify oral hypoglycemic drugs with examples. How will you treat hypoglycemia ?
  - b) Give therapeutic uses of sympathomimetic drugs.
  - c) Define allergy. Describe types of hypersensitivity reactions.
  - d) Compare and contrast ampicillin and amoxicillin.
  - e) Write mechanism of action and uses of ranitidine.
  - f) Define prokinetic drugs, mention two examples and write clinical uses of prokinetic drugs.

P.T.O.

62603



2. Long answer question (any one out of two) : (1×15=15)

- Classify opioid analgesics and explain pharmacological action, adverse drug reactions and uses of morphine.
- What is myocardial infarction and describe drug therapy for it.

SECTION – B (29 Marks)  
(Pathology)

3. Short answer question (any four out of five) : (4×5=20)

- Differences between Crohn's disease and ulcerative colitis.
- Describe various factors affecting wound healing.
- Classify cirrhosis of liver on the basis of etiology. Mention the complications.
- Define inflammation. Describe vascular events of acute inflammation.
- Laboratory investigations in myocardial infarction.

4. Long answer question (any one out of two) : (1×9=09)

- Write the two sites of CSF collection. Mention the indications of CSF examination. Differentiate between the pyogenic, tuberculous and viral meningitis on the basis of CSF examination.
- Classify breast tumours. Describe gross and microscopic features of infiltrating duct cell carcinoma.

SECTION – C (6 Marks)  
(Genetics)

5. Short answer questions (any two out of three) : (2×3=6)

- Write on sex linked inheritance.
- Gene therapy.
- Genetic counselling.

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62603

Second BASIC B.Sc. NURSING, Winter 2015

PHARMACOLOGY, PATHOLOGY & GENETICS

Total Duration: Section A+B+C = 3 Hours

Total Marks : 75

Section A Section B & Section C

Instructions:

- 1) Use **blue/black** ball point pen only.
- 2) **Do not** write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) **All** questions are **compulsory**.
- 4) The number to the **right** indicates **full marks**.
- 5) Draw diagrams **wherever** necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for **all** Sections.

Section "A" (40 Marks)  
Pharmacology

1. Short answer questions (**any five** out of six) :

(5x5=25)

- a) Enumerate antiemetic drugs and write briefly on their use.
- b) Classify drugs used for bronchial asthma. Write a note on salbutamol.
- c) Explain why atropine is used in OPC poisoning and as pre-anesthetic medication.
- d) Classify Diuretics. Write a short note on Frusemide.
- e) Compare and contrast between Heparin and Warfarin.
- f) Describe in short uses of corticosteroids.

2. Long answer questions (**any one** out of two) :

(1x15=15)

- a) Classify analgesics. Write pharmacological actions, uses, adverse effects and contraindications of morphine.
- b) Classify B lactam antimicrobials. Write a mechanism of action, uses and ADRs of Cephalosporins.

Section "B" (29 Marks)  
Pathology

3. Short answer questions (**any four** out of five) :

(4x5=20)

- a) Define metaplasia. Give one example of each type.
- b) Define shock. Classify shock. Enumerate four causes of cardiogenic shock.
- c) Define karyotype. Describe two cytogenetic disorders involving sex chromosomes.
- d) Define leiomyoma of the uterus. Describe its morphological features.
- e) Enumerate the CSF findings in a case of pyogenic meningitis.



## PHARMACOLOGY, PATHOLOGY & GENETICS

4. Long answer questions (any one out of two) : (1x9=09)

- Define thrombus. Discuss the etiology and pathogenesis of thrombus formation.
- Classify Hodgkins Lymphoma. Describe clinical features. Describe morphology of its various types.

### Section "C" (06 Marks) Genetics

5. Short answer questions (any two out of three) : (2x3=06)

- Mendels laws
- Turners syndrome
- Autosomal dominant inheritance

### Section "B" (06 Marks) Pathology

(06=3x2)

### Section "B" (06 Marks) Pharmacology

(06=3x2)



1  
2

62603

**Second Basic B.Sc. Nursing Examination, Summer 2016**  
**PHARMACOLOGY, PATHOLOGY AND GENETICS**

(Total Duration : Section A + B + C = 3 Hours) Total Marks : 75

**Instructions :**

- 1) Use blue/black ball point pen only.
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- 3) All questions are compulsory.
- 4) The number to the right indicates full marks.
- 5) Draw diagrams wherever necessary.
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- 7) Use a common answer book for all Sections.

**SECTION – A**

**(40 Marks)**

**Pharmacology**

1. Short answer question (any five out of six) : (5x5=25)

- a) Classify routes of drug Administration. Write Advantages of sublingual route of Administration. 3/5
- b) Write uses of Penicillins. 3
- c) Write Management of Opiod Poisoning. 2
- d) Classify Diuretics. Write uses of thiazides. 2
- e) Write Five Atropine Substitutes. Write use of each Atropine Substitute.
- f) Write uses of Morphine. 3

13  
7  
16  
36

2. Long answer question (any one out of two) : (1x15=15)

- a) Classify drugs used for the treatment of hypertension. Write uses and adverse reactions of enapril.
- b) Classify Adrenergic drugs. Write Uses and side effects of Adrenaline.

P.T.O.



## SECTION - B

(29 Marks)

## Pathology

3. Short answer question (any four out of five) : (4×5=20)

- Describe healing of a bone fracture. Mention its complications. 3
- Enumerate the stages of Alcoholic Liver disease. Describe gross and microscopic features of Alcoholic cirrhosis.
- Define gangrene and write the differences between dry and wet gangrene.
- Describe in brief the etiology and morphology of various types of renal calculi.
- Write a note on Glucose Tolerance Test.

4. Long answer question (any one out of two) : (1×9=9)

- Define Inflammation. Describe the vascular and cellular changes seen in acute inflammation.
- Give indications of Lumbar Puncture. Mention the sites of this procedure. Differentiate between pyogenic, tuberculous and viral meningitis on the basis of CSF examination.

## SECTION - C

(06 Marks)

## Genetics

5. Short answer question (any two out of three) : (2×3=06)

- Steps(procedure) of karyotyping.
- Clinical features of Down's syndrome(Trisomy21,mongolism).
- Noninvasive prenatal diagnostic procedure.

Second Basic B.Sc. Nursing Examination, Winter 2016  
**PHARMACOLOGY, PATHOLOGY AND GENETICS**

Total Duration : Section A + B + C = 3 Hours

Total Marks : 75

**Instructions :**

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- 3) **All questions are compulsory.**
- 4) **The number to the right indicates full marks.**
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- 6) **Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.**
- 7) **Use a common answerbook for all Sections.**

**SECTION – A (40 Marks)**  
**(Pharmacology)**

1. Short answer question (any five out of six) : (5x5=25)
  - a) Mention five advantages of intravenous route of drug administration.
  - b) Enumerate disinfectants. What are the uses of Glutaraldehyde ?
  - c) What is Omeprazole ? Mention the uses of Omeprazole.
  - d) Give three examples of mucolytic agents. Explain the role of mucolytic agents in management of Bronchial Asthma.
  - e) What is the difference in vaccine and sera ? Describe the advantage of oral polio vaccine over injectable polio vaccine.
  - f) Enumerate and mention the role of any five drugs used as pre - anaesthetic medication.

P.T.O.



2. Long answer question (any one out of two) : (1x15=15)

- Enumerate commonly used opioid analgesics. Describe uses of morphine. What is the nurses' responsibility in a patient treated with morphine ?
- Classify anti-tubercular drugs. Explain DOTS mentioning its importance and treatment strategy. What is the role of nurse before and after starting anti-tubercular drugs ?

**SECTION – B (29 Marks)**

**(Pathology)**

3. Short answer question (any four out of five) : (4x5=20)

- Give differences between benign and malignant tumours.
- Describe etiology, pathology and complications of lung abscess.
- Describe gross and microscopic features of Tuberculosis of lymph node.
- Describe the method of blood grouping and its importance.
- Describe causes, pathology and complications of Peptic ulcer.

4. Long answer question (any one out of two) : (1x9=9)

- Define thrombosis. Describe the pathogenesis and complications of thrombus formation.
- Define inflammation. Describe the role of chemical mediators in inflammation.

**SECTION – C (6 Marks)**

**(Genetics)**

5. Short answer question (any two out of three) : (2x3=6)

- Morphology and classification of human chromosomes
- Sex chromatin (Barr body)
- Down syndrome (Trisomy 21).



62603

**Second Basic B.Sc. Nursing Examination, Summer 2017**  
**PHARMACOLOGY, PATHOLOGY AND GENETICS**

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Total Marks : 75

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- 7) Use a common answerbook for all Sections.

**SECTION – "A" (40 Marks)**

**(Pharmacology)**

1. Short answer question (any five out of six) : (5x5=25)
  - a) Write the difference between action of Ergometrine and Oxytocin on uterus.
  - b) Enumerate drugs used for treatment of congestive heart failure. Write mechanism of action and adverse effects of any one of them.
  - c) Enumerate various sources of drugs along with suitable examples.
  - d) Write therapeutic uses of adrenergic drugs.
  - e) Write note on Oral Rehydration Solution (ORS).
  - f) Write in brief the drug treatment and nursing role in the management of Organophosphorus Poisoning.
2. Long answer question (any one out of two) : (1x15=15)
  - a) Classify Anti-tuberculosis drugs . Discuss mechanism of action and adverse effects of any one of them. Write in short about Directly Observed Treatment Strategy (DOTS).
  - b) Classify Non Steroidal Anti-inflammatory Drugs (NSAIDs). Discuss mechanism of actions, therapeutic uses and adverse effects of aspirin with a note on nursing responsibility during aspirin therapy.



### SECTION - "B" (29 Marks)

#### (Pathology)

3. Short answer question (any four out of five) : (4×5=20)

- Describe healing of a wound by primary union.
- Define gangrene. Write the differences between dry gangrene and wet gangrene.
- Define cirrhosis. Describe the classification.
- Describe the gross and microscopic features of uterine leiomyoma.
- Describe gross and microscopic appearance of typhoid ulcer.

4. Long answer question (any one out of two) : (1×9=9)

- Define oedema. Mention differences between transudate and exudate. Describe pathogenesis of oedema.
- Describe collection and physical examination of urine.

### SECTION - "C" (06 Marks)

#### (Genetics)

5. Short answer question (any two out of three) : (2×3=6)

- Amniocentesis.
- X-Linked recessive inheritance.
- Methods for Gene transfer in Gene therapy.



**Second Basic B.Sc. Nursing Examination, Winter 2017**  
**PHARMACOLOGY, PATHOLOGY AND GENETICS**

Total Duration : Section A + B + C = 3 Hours

Total Marks : 75

**SECTION – A, SECTION – B & SECTION – C**

**Instructions :**

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- 7) Use a common answerbook for all Sections.

**SECTION – A (40 Marks)**  
**(Pharmacology)**

1. Short answer question (any five out of six) : (5x5=25)
  - a) Define bioavailability. Enumerate any four factors affecting bioavailability of a drug.
  - b) Write uses and adverse effects of penicillins.
  - c) Write a short note on Oral Rehydration Solution (ORS).
  - d) Enumerate any five vaccines used for immunization of infant and children along with their route of administrations and schedule.
  - e) Write name of four anticholinergic drugs. Write their uses and adverse effects.
  - f) Enumerate any four Diuretics. Write uses and adverse effects of any one of them.
2. Long answer question (any one out of two) : (1x15=15)
  - a) Classify anti anginal drugs. Write treatment of Myocardial Infarction (MI). What are the nursing responsibilities in the management of myocardial infarction ?
  - b) Classify drugs used for treatment of diabetes. Write the mechanism of action, uses and adverse effects of any one of them. What are the nursing responsibilities during insulin administration ?

P.T.O.



**SECTION – B (29 Marks)**  
**(Pathology)**

3. Short answer question (any four out of five) : (4x5=20)

- a) What is primary complex ? Give the fate of primary complex.
- b) Mention sites of CSF collection, indications of CSF examination and describe microscopic features in bacterial meningitis.
- c) Mention the gross and microscopic features of benign prostatic hyperplasia.
- d) Mention the sites of bone marrow aspiration in adults and in infants. Mention the indications of bone marrow examination.
- e) Describe the gross and microscopic features of chronic pyelonephritis.

4. Long answer question (any one out of two) : (1x9=9)

- a) Classify ovarian tumours. Describe gross and microscopy of benign cystic teratoma of ovary.
- b) Define neoplasia and write the differences between benign and malignant tumors.

**SECTION – C (6 Marks)**  
**(Genetics)**

5. Short answer question (any two out of three) : (2x3=6)

- a) Mendel's laws
- b) Steps of Karyotyping
- c) Turner's syndrome.

Second Basic B.Sc. Nursing Examination, Summer 2018  
**PHARMACOLOGY, PATHOLOGY AND GENETICS**

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Total Marks : 75

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- 7) **Use a common answerbook for all Sections.**

**SECTION "A" (40 Marks)**  
**(Pharmacology)**

1. Short answer question (**any five out of six**) : **(5x5=25)**
  - a) Write advantages and disadvantages of oral route of drug administration
  - b) Write therapeutic uses of adrenaline.
  - c) Write names of five antiemetic drugs. Write mechanism of action and adverse effects of any one of them.
  - d) Write a short note on oral contraceptives
  - e) Write uses and adverse effects of opioid drugs
  - f) Enumerate iron preparations and write indications for parenteral iron therapy.
2. Long answer question (**any one out of two**) : **(1x15=15)**
  - a) Classify antihypertensive drugs. Write mechanism of action and adverse effects of any one of them along with nursing responsibilities in management of hypertensive patient.
  - b) Enumerate anti malarial drugs. Write mechanism of actions, uses and adverse effects of chloroquine. Write nursing responsibilities in management of malaria patient.



**SECTION "B" (29 Marks)**  
**(Pathology)**

3. Short answer question (any four out of five) : (4×5=20)

- a) Define granuloma. Describe the microscopic feature.
- b) Define cirrhosis. Classify it.
- c) Discuss pathological features of diabetic nephropathy.
- d) Mention the factors affecting wound healing.
- e) Mention the gross and microscopic features of uterine leiomyoma.

4. Long answer question (any one out of two) : (1×9=09)

- a) Classify breast tumours. Describe gross and microscopic features of infiltrating duct cell carcinoma.
- b) Define embolus. Enumerate different types of emboli. Write in brief about air embolism.

**SECTION "C" (06 Marks)**  
**(Genetics)**

5. Short answer question (any two out of three) : (2×3=06)

- a) Sex Chromatin
- b) Amniocentesis
- c) Autosomal Recessive inheritance

Second Basic B.Sc. Nursing Examination, Summer 2018  
**PHARMACOLOGY, PATHOLOGY AND GENETICS**

Total Duration : Section A+B+C = 3 Hours

Total Marks : 75

**Instructions :**

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- 7) **Use a common answerbook for all Sections.**

**SECTION "A" (40 Marks)**  
**(Pharmacology)**

1. Short answer question (**any five out of six**) : **(5x5=25)**
  - a) Write advantages and disadvantages of oral route of drug administration
  - b) Write therapeutic uses of adrenaline.
  - c) Write names of five antiemetic drugs. Write mechanism of action and adverse effects of any one of them.
  - d) Write a short note on oral contraceptives
  - e) Write uses and adverse effects of opioid drugs
  - f) Enumerate iron preparations and write indications for parenteral iron therapy.
2. Long answer question (**any one out of two**) : **(1x15=15)**
  - a) Classify antihypertensive drugs. Write mechanism of action and adverse effects of any one of them along with nursing responsibilities in management of hypertensive patient.
  - b) Enumerate anti malarial drugs. Write mechanism of actions, uses and adverse effects of chloroquine. Write nursing responsibilities in management of malaria patient.



**SECTION "B" (29 Marks)**  
**(Pathology)**

3. Short answer question (any four out of five) : (4×5=20)

- a) Define granuloma. Describe the microscopic feature.
- b) Define cirrhosis. Classify it.
- c) Discuss pathological features of diabetic nephropathy.
- d) Mention the factors affecting wound healing.
- e) Mention the gross and microscopic features of uterine leiomyoma.

4. Long answer question (any one out of two) : (1×9=09)

- a) Classify breast tumours. Describe gross and microscopic features of infiltrating duct cell carcinoma.
- b) Define embolus. Enumerate different types of emboli. Write in brief about air embolism.

**SECTION "C" (06 Marks)**  
**(Genetics)**

5. Short answer question (any two out of three) : (2×3=06)

- a) Sex Chromatin
- b) Amniocentesis
- c) Autosomal Recessive inheritance

**Second Basic B.Sc. Nursing  
Examination, Summer (Phase - II) 2019  
PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration : 3 Hours

Total Marks : 75

**Instructions :**

- 1) Use **blue/black ball point pen only.**
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*If written anything, such type of act will be considered as an attempt to resort to unfair means.*
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- 7) **Use a common answer book for all sections.**

**SECTION-A (40 Marks)  
(Pharmacology)**

1. Short answer questions (**any five out of six**) : **[5 × 5 = 25]**
  - a) Write briefly on uses and adverse effects of Atropine.
  - b) Enumerate drugs used for treatment of peptic ulcer. Write indications for use proton pump inhibitors.
  - c) Define Bioavailability. Enumerate the factors affecting Bioavailability.
  - d) Enumerate oral iron preparations. Write indications and adverse effects of oral iron preparation.
  - e) Write advantages of Benzodiazepines over barbiturates.
  - f) Classify Sympathomimetics (Adrenergic drugs). Write three uses of Adrenaline.

## 62603

2. Long answer questions (any one out of two) :  $[1 \times 15 = 15]$

- a) Enumerate different routes of drug administration with one example of each route. Write advantages of parenteral routes over oral route.
- b) Classify Penicilline. Write therapeutic and prophylactic uses, adverse effects, drug interactions of Benzathine Penicillin.

### **SECTION-B (29 Marks)** **(Pathology)**

3. Short answer questions (any four out of five) :  $[4 \times 5 = 20]$

- a) Define granuloma. Describe microscopic features & give examples.
- b) Define embolism. Describe the effects of embolism.
- c) Define pneumonia. Describe pathology of bronchopneumonia in brief.
- d) Define acute inflammation. Discuss cellular events in acute inflammation.
- e) Enumerate causes of haematuria. Describe tests for detection of blood in urine.

4. Long answer questions (any one out of two) :  $[1 \times 9 = 9]$

- a) Discuss the pathogenesis and pathological features of diabetic nephropathy.
- b) Classify ovarian tumours. Describe gross and microscopy of benign cystic teratoma of ovary.

### **SECTION-C (6 Marks)** **(Genetics)**

5. Short answer question (any two out of three) :  $[2 \times 3 = 6]$

- a) Write note on infertility.
- b) Translocation.
- c) Down's syndrome (Trisomy 21).



**Second Basic B.Sc. Nursing Examination, Winter  
(Phase - III All other remaining UG/PG Course) - 2019  
PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration : Section A + B + C = 3 Hours

Total Marks : 75

**SECTION - A & SECTION - B, & SECTION - C**

**Instructions :**

- 1) Use **blue/black ball point pen only.**
- 2) **Do not write anything on the blank portion of the question paper.**  
If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) **All questions are compulsory.**
- 4) The number to the **right** indicates **full marks**.
- 5) Draw diagrams **wherever necessary.**
- 6) **Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.**
- 7) Use a common answerbook for all sections.

**SECTION - "A" (40 Marks)**

**(Pharmacology)**

1. Short answer question (any five out of six) : **[5 × 5 = 25]**
  - a) Define Bioavailability. Enumerate various factors affecting bioavailability.
  - b) Classify alpha blockers. Enumerate uses of alpha blockers.
  - c) Classify glucocorticoids. Enumerate adverse effects of glucocorticoids.
  - d) Classify oral anti-diabetic drugs and explain mechanism of action of sulfonylureas.
  - e) Enumerate anti-epileptic drugs. Discuss management of status epilepticus.
  - f) Explain in brief the role of beta 2 agonists in bronchial asthma.

2. Long answer question (any one out of two) : **[1 × 15 = 15]**

- Enumerate beta-lactam group of antibiotics. Write mechanism of action, adverse effects and therapeutic uses of penicillin G.
- Classify anti-hypertensive drugs. Explain in detail mechanism of action, adverse effects and advantages of angiotensin converting enzyme inhibitors in hypertension.

**SECTION - "B" (29 Marks)**  
**(Pathology)**

3. Short answer question (any four out of five) : **[4 × 5 = 20]**

- Define Necrosis. Describe various types with examples.
- Define Hyperplasia. Describe benign hyperplasia of prostate.
- Describe clinical features and peripheral smear findings in Iron deficiency anaemia.
- Describe primary complex of Tuberculosis.
- Describe collection and examination of Semen and its importance in infertility.

4. Long answer question (any one out of two): **[1 × 9 = 9]**

- Define Healing. Describe various steps in cutaneous wound healing and factors affecting wound healing.
- Define cirrhosis of liver. Give classification, clinical features and complications of cirrhosis.

**SECTION - "C" (6 Marks)**  
**(Genetics)**

5. Short answer question (any two out of three) : **[2 × 3 = 6]**

- Turner's syndrome.
- Autosomal dominant inheritance.
- Enumerate neural tube defects.



**Second Basic B.Sc. Nursing Examination, Summer  
(Phase - III : All Other Remaining UG/PG Courses) - 2020**  
**PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration : 3 Hours

Total Marks : 75

**Instructions :**

- 1) Use **blue/black** ball point pen only.
- 2) **Do not write anything on the blank portion of the question paper.**  
If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) All questions are **compulsory**.
- 4) The number to the right indicates **full marks**.
- 5) Draw diagrams **wherever necessary**.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for all sections.

**SECTION - A (40 Marks)**  
**Pharmacology**

1. Short answer question (**any five** out of six) **[ $5 \times 5 = 25$ ]**
  - a) Explain first pass metabolism and its clinical significance.
  - b) Write therapeutic uses of adrenaline and its congeners. *Consequence*
  - c) Write a note on lepra reaction.
  - d) Enumerate oral and parenteral iron formulations. Discuss indications for iron therapy.
  - e) Write therapeutic uses of morphine and its congeners.
  - f) Write adverse effects of glucocorticoids.

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[1 × 15 = 15]

2. Long answer question (any one out of two)

- a) Discuss pharmacotherapy of peptic ulcer.
- b) Classify anti-anginal drugs. Explain in brief mechanism of action, adverse effects and therapeutic uses of nitrates.

**SECTION - B (29 Marks)**

**Pathology**

3. Short answer question (any four out of five) : [4 × 5 = 20]

- a) Define Inflammation. Describe cardinal signs and vascular events of acute inflammation.
- b) Define Gangrene. Mention the differences between dry gangrene and wet gangrene.
- c) Describe Amoebic liver abscess-etiology, pathogenesis, clinical features and complications.
- d) Enumerate CSF findings in Pyogenic meningitis.
- e) Describe clinical features and peripheral smear findings in Megaloblastic anaemia.

4. Long answer question (any one out of two) : [1 × 9 = 9]

- a) Describe etiology, pathology and spread of Carcinoma cervix.
- b) Define Peptic ulcer. Give etiology, pathology and differences between Duodenal and peptic ulcer.

**SECTION - C (06 Marks)**

**Genetics**

5. Short answer question (any two out of three) : [2 × 3 = 6]

- a) Role of Nurse in Genetics.
- b) Genetics in Hemoglobinopathies.
- c) Down's Syndrome.



**Second Basic B.Sc. Nursing Examination,  
Winter (Special Examination) - 2020  
PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration : 3 Hours

Total Marks : 75

**Instructions :**

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- 2) Do not write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.
- 3) **All** questions are **compulsory**.
- 4) The number to the **right** indicates **full** marks.
- 5) Draw diagrams **wherever** necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for all sections.

**SECTION - "A" (40 Marks)**

**Pharmacology**

1. Short answer question (**any five out of six**) : **[5 × 5 = 25]**
  - a) Describe various routes of administration. Mention the advantages and disadvantages of subcutaneous route of administration.
  - b) List various aminoglycoside antibiotics. Discuss important therapeutic uses and adverse effects of Gentamicin.
  - c) Classify antiseptics and Disinfectants. Mention uses of Aldehydes and Alcohols with important nursing instructions.
  - d) Write on various drugs used for Acid Peptic diseases. What are the therapeutic uses of Ranitidine.
  - e) Discuss the drug treatment of Organophosphorous poisoning. Write a note on role of atropine in OP poisoning.
  - f) Classify oral anti-diabetic drugs. Discuss therapeutic uses and adverse effects of Sulphonylureas.

2. Long answer question (any one out of two) : [1 × 15 = 15]

- Classify Nonsteroidal Anti inflammatory drugs (NSAIDS). Discuss therapeutic uses, adverse effects of aspirin. Add a note on salicylate poisoning.
- Write down various Anti-anginal drugs. What are the therapeutic uses and adverse effects of nitrates. What nursing instructions will you keep in mind while administering Nitrates.

### SECTION - "B" (29 Marks)

#### **Pathology**

3. Short answer question (any four out of five) : [4 × 5 = 20]

- Describe Healing of wound by secondary intention and various factors affecting wound healing.
- What is Thrombosis? Describe various complications of a thrombus.
- Describe pathology of a Fatty liver.
- Nurse's role in collection and dispatch of various samples for laboratory tests.
- Various complications produced by long standing Diabetes Mellitus.

4. Long answer question (any one out of two) : [1 × 9 = 9]

- Define Edema. Describe mechanisms of edema formation. Describe Cardiac edema.
- Define Pneumonia. Describe various stages of lobar pneumonia. Mention its various complications.

### SECTION - "C" (06 Marks)

#### **Genetics**

5. Short answer question (any two out of three) : [2 × 3 = 6]

- Write note on Karyotype.
- Write note on Genetic Counseling.
- Write note in Gene Therapy.



Second Basic B.Sc. Nursing Examination, Winter 2020  
**PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Marks : 75

Total Duration : Section A+B+C = 3 Hours

**SECTION - A & SECTION - B & SECTION - C**

**Instructions :**

- 1) Use **blue/black ball point pen only**.
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- 3) **All questions are compulsory.**
- 4) The number to the **right** indicates **full marks**.
- 5) Draw diagrams **wherever** necessary.
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- 7) **Use a common answerbook for all sections.**

**SECTION - "A" (40 Marks)**

**Pharmacology**

1. Short answer question (**any five** out of six) : **[5 × 5 = 25]**
  - a) Define adverse drug reaction and write a note on teratogenecity.
  - b) Write management of organophosphorus compound poisoning.
  - c) Write therapeutic uses of antipsychotics and its nursing implications.
  - d) What are the routes and principles of drug administration.
  - e) Define antiseptic and disinfectant with example.
  - f) Write advantages and disadvantages of parenteral route of drug administration.

2. Long answer question (any one out of two) :  $[1 \times 15 = 15]$

- a) Classify penicillins. Write therapeutic uses and adverse effects of penicillin. G. What are the nursing implications while administering penicillin.
- b) Discuss hormonal contraceptive. Write adverse effects and contraindications of oral combined pills. What are the nursing implications.

**SECTION - "B"** (29 Marks)

**Pathology**

3. Short answer question (any four out of five) :  $[4 \times 5 = 20]$

- a) Define Necrosis. Enumerate types and explain in detailed any one.
- b) Differentiate between benign and malignant tumours.
- c) Describe a role of a nurse in collection of Pap smear.
- d) Universal safety precautions.
- e) Describe complications of wound healing.

4. Long answer question (any one out of two) :  $[1 \times 9 = 9]$

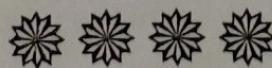
- a) Give the laboratory investigations in diabetes mellitus.
- b) Define inflammation. Describe vascular events in inflammation.

**SECTION - "C"** (06 Marks)

**Genetics**

5. Short answer question (any two out of three) :  $[2 \times 3 = 06]$

- a) Steps of Genetic counselling.
- b) Gene therapy.
- c) Down syndrome.



**Second Basic B.Sc. Nursing Examination, Summer - 2021**  
**PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration : 3 Hours Total Marks : 75

**Instructions :**

- 1) Use **blue/black ball point pen only**.
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- 3) **All questions are compulsory.**
- 4) The number to the **right** indicates **full marks**.
- 5) Draw diagrams **wherever** necessary.
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for all sections.

**SECTION - "A" (40 Marks)**

**Pharmacology**

1. Short answer question (any five out of six) : **[5 × 5 = 25]**
  - a) What are the various routes of administration of drugs? What are the advantages and disadvantages of intravenous route.
  - b) Mention various drugs used for treatment of tuberculosis. Discuss the uses and adverse effects of Rifampicin.
  - c) Classify benzodiazepines. Mention therapeutic uses of Diazepam.

d) Classify drugs used for treatment of Acid Peptic diseases. Mention therapeutic uses of Omeprazole.

e) Mention the life saving uses of atropine. Discuss the role of atropine substitute glycopyrrolate in pre-anesthetic medication.

f) Classify various drugs used for treatment of diabetes Mellitus. Mention important nursing precautions to be taken during insulin therapy.

2. Long answer question (any one out of two) :  $[1 \times 15 = 15]$

a) Classify various anti-hypertensive drugs. Discuss the therapeutic uses, adverse effects of Beta blockers.

b) Classify NSAIDs (Non steroidal anti-inflammatory drugs). Mention therapeutic uses and adverse effects of NSAIDs. Write 4 differences between Opioid and Non-opioid analgesics.

### SECTION - "B" (29 Marks)

#### **Pathology**

3. Short answer question (any four out of five) :  $[4 \times 5 = 20]$

a) Define Metaplasia. Give four examples.

b) Write a brief account of Benign prostatic hyperplasia.

c) Define Chronic bronchitis and write in brief about its pathogenesis.

d) Laboratory investigations in Myocardial infarction.

e) Chemical mediators of inflammation.

4. Long answer question (any one out of two) :  $[1 \times 9 = 9]$

a) Define Acute Inflammation. Discuss cellular events in acute inflammation.

b) Classify Ovarian tumours. Mention the types of teratoma & briefly describe mature cystic teratoma of ovary.

SECTION - "C" (06 Marks)

**Genetics**

5. Short answer question (any two out of three) : [2 × 3 = 6]

- a) Mendelism.
- b) Klinefelter's syndrome.
- c) X-linked recessive inheritance.



**Second Basic B.Sc. Nursing Examination, (Phase - III) Winter - 2021**  
**PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration : Section.A + B+C = 3 Hours

Total Marks : 75

**Instructions :**

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- 3) **All questions are compulsory.**
- 4) **The number to the right indicates full marks.**
- 5) **Draw diagrams wherever necessary.**
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- 7) **Use a common answerbook for all sections.**

**SECTION - A (40 Marks)**

**(Pharmacology)**

1. Short answer question (**any five out of six**): **[5 × 5 = 25]**
  - a) Write therapeutic uses of neostigmine.
  - b) Write treatment of status epilepticus.
  - c) Write therapeutic uses of aspirin.
  - d) Write uses of thiazide diuretics.
  - e) Write advantages of benzodiazepines over barbiturates as sedative and hypnotics.
  - f) Write uses of parenteral Iron preparations.

2. Long answer question (any one out of two):  $[1 \times 15 = 15]$

- Classify adrenergic drugs. Write therapeutic uses and side effects of adrenaline.
- Classify drugs used for bronchial asthma and write mechanism of action of each class of drug. Add a note on treatment of status asthmaticus.

**SECTION - B (29 Marks)**

**(Pathology)**

3. Short answer question (any four out of five):  $[4 \times 5 = 20]$

- Define granuloma. Describe microscopic features & give examples.
- Differences between crohn's disease & ulcerative colitis.
- Discuss the pathogenesis and pathological features of Diabetic nephropathy.
- Briefly describe the radiological findings, gross & microscopy of osteogenic sarcoma.
- Define Cirrhosis and describe Alcoholic cirrhosis.

4. Long answer question (any one out of two):  $[1 \times 9 = 9]$

- Define Neoplasia. Write differences between benign and malignant tumours.
- Classify Breast tumors. Describe gross & microscopic features of infiltrating duct cell carcinoma.

**SECTION - C (6 Marks)**

**(Genetics)**

5. Short answer question (any two out of three):  $[2 \times 3 = 6]$

- Turner's syndrome.
- Autosomal recessive inheritance.
- Gene therapy.



## Second Basic B.Sc. Nursing Examination, (Phase - II) Summer - 2022

## PHARMACOLOGY, PATHOLOGY &amp; GENETICS

Total Duration : 3 Hours

Total Marks : 75

**Instructions :**

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- 3) All questions are **compulsory.**
- 4) The number to the **right** indicates **full marks.**
- 5) Draw diagrams **wherever necessary.**
- 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
- 7) Use a common answer book for all sections.

**SECTION - "A" (40 Marks)**

**(Pharmacology)**

1. Short answer question (any five out of six) : **[5 × 5 = 25]**

- a) Write a note on merits and demerits of Intravenous route of administration.
- b) Classify Opioids. Describe mechanism of action and therapeutic uses of morphine.
- c) Name any two parenteral Iron preparations. What are indications for parenteral Iron therapy.
- d) Describe in short therapeutic uses of Insulin.
- e) Write a note pharmacological management of Myocardial Infarction.
- f) Classify Oral hypoglycemic drugs. Describe therapeutic uses of Metformin.

2. Long answer question (any one out of two) : [1 × 15 = 15]

- a) Classify Antitubercular drugs. Describe therapeutic uses and adverse reactions of Rifampicin.
- b) Classify drugs used in Bronchial Asthma. Add a note on pharmacological management of status asthmaticus.

**SECTION - "B"** (29 Marks)

**(Pathology)**

3. Short answer question (any four out of five) : [4 × 5 = 20]

- a) Describe briefly the role of a nurse in assisting and preparing a patient with meningitis for various investigations of CSF.
- b) Define Apoptosis. Mention the differences between Apoptosis and Necrosis.
- c) Discuss the pathophysiology of tuberculosis.
- d) Define Anemia. Describe the peripheral smear findings in iron deficiency anemia.
- e) Define Gangrene. Enumerate the types and differences between dry and wet gangrene.

4. Long answer question (any one out of two) : [1 × 9 = 9]

- a) Describe the etiology, pathology & spread of carcinoma of cervix.
- b) Define Inflammation. Mention types, causes & chemical mediators of acute inflammation. Briefly describe the cardinal signs of inflammation.

**SECTION - "C"** (6 Marks)

**(Genetics)**

5. Short answer question (any two out of three) : [2 × 3 = 6]

- a) Write a note on prenatal testing and diagnosis.
- b) Write a note on Mendelian theory of inheritance.
- c) Write role of nurse in genetic counselling.



**Second Basic B.Sc Nursing (Old) Examination, Winter - 2022**  
**PHARMACOLOGY, PATHOLOGY & GENETICS**

Total Duration : 3 Hours

Total Marks : 75

**Instructions :**

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- 3) **All questions are compulsory.**
- 4) **The number to the right indicates full marks.**
- 5) **Draw diagrams wherever necessary.**
- 6) **Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.**
- 7) **Use a common answer book for all sections.**

**SECTION "A" (40 Marks)**

**(Pharmacology)**

1. Short answer question (any five out of six) : **[5 × 5 = 25]**
  - a) Define bioavailability of a drug. Write four factors affecting it.
  - b) Explain competitive and non competitive antagonism with example.
  - c) Explain therapeutic basis of combining levodopa and carbidopa in parkinsonism.
  - d) Write five therapeutic uses and five adverse effects of beta blockers.
  - e) Classify insulins based on their duration of action. Write adverse effects of insulin therapy.
  - f) Name prokinetic drugs. Write mechanism of action and therapeutic uses of metoclopramide.

2. Long answer question (any one out of two) : [1 × 15 = 15]

- Classify antiepileptic drugs. Write mechanism of action, uses and adverse effect of phenytoin sodium. Write nursing considerations in patients receiving phenytoin therapy.
- Classify drugs used in management of hypertension. Write mechanism of action, uses and adverse effects of angiotension converting enzyme inhibitors (ACE inhibitors).

**SECTION "B" (29 Marks)**

**(Pathology)**

3. Short answer question (any four out of five) : [4 × 5 = 20]

- Define metaplasia. Describe its type with examples.
- Differentiate between transudate and exudate.
- Examination of bone marrow.
- Wound healing by primary intention.
- Describe the etiopathogenesis, gross and microscopic features of infective endocarditis.

4. Long answer question (any one out of two) : [1 × 9 = 9]

- Define neoplasia and differentiate between benign and malignant tumours.
- Define Cirrhosis of liver. Classify, enlist the clinical features and discuss the complications of cirrhosis of liver.

**SECTION "C" (6 Marks)**

**(Genetics)**

5. Short answer question (any two out of three) : [2 × 3 = 6]

- Karyotyping & its steps/Procedure.
- Triple/Quadruple screen.
- Infertility & responsible factor of infertility.

