

# WEST BENGAL NURSING COUNCIL

FIRST YEAR GENERAL NURSING-MIDWIFERY (3 Years) EXAMINATION,  
FEBRUARY - 2020

SUBJECT: BIO-SCIENCE (PAPER - I)

Full Marks: 75

Time Allowed: 3 Hours

Write any two from the following questions. 1, 2 and 3.

1. (a) List down the organs of female reproductive system.  
(b) Describe the structure and functions of Ovary. 8+7=15
2. (a) Define joint.  
(b) Write down the classification of different joints.  
(c) Describe the characteristics of synovial joint. 2+6+7=15
3. (a) Describe the composition of blood.  
(b) Explain blood coagulation process.  
(c) Describe pulmonary circulation. 3+7+5=15
4. (a) Define sterilization.  
(b) Write the different areas where sterilization process is used.  
(c) How will you sterilize sharp instruments ? 2+4+4=10
5. Write Short notes (any three) : 3x5=15
  - a) Structure of eye.
  - b) Fat digestion.
  - c) Biomedical waste management.
  - d) Function of skin.
  - e) Immunity.

SEE QUESTION NO. 6, 7 & 8 IN SEPARATE SHEET

# WEST BENGAL NURSING COUNCIL

FIRST YEAR GENERAL NURSING-MIDWIFERY (3 Years) EXAMINATION,  
AUGUST - 2019

SUBJECT: BIO-SCIENCE (Paper I)

(SUBJECTIVE)

Full Marks: 75

Time Allowed: 3 Hours

## ANSWER THE FOLLOWING QUESTIONS

1. a) Enlist the organs of Digestive System.  
b) Draw the diagram of stomach and describe it.  
c) Write the composition and functions of gastric juice. 2+8+5=15
2. a) Write down the location, size and shape of Heart.  
b) Draw interior diagram of Heart and label it.  
c) Describe the cardiac cycle. 3+7+5=15
- OR
- a) List down different sensory organs of the body.  
b) Draw the diagram of eye and label it.  
c) Explain the physiology of vision. 2+7+6=15
3. a) Define Bacteria.  
b) What are the factors affecting Bacterial growth?  
c) Differentiate Pathogenic & Non Pathogenic organisms with example. 2+4+4=10
4. **Write Short notes (any three)** 5x3=15
  - a) Mitotic cell division
  - b) Types & functions of bone.
  - c) CSF
  - d) Function of Pituitary Gland.
  - e) Spleen.

SEE QUESTION NO. 5, 6, & 7 IN SEPARATE SHEET



**WEST BENGAL NURSING COUNCIL**  
**FIRST YEAR GENERAL NURSING-MIDWIFERY (3 Years) EXAMINATION,**  
**AUGUST - 2018**

**SUBJECT: BIO-SCIENCE (Paper I)**

**Full Marks: 75**

**Time Allowed: 3 Hours**

**ANSWER THE FOLLOWING QUESTIONS**

1. (a) Write down the difference between endocrine and exocrine gland.  
(b) List down the different endocrine glands of the body.  
(c) Describe the relationship between Pituitary gland and Hypothalamus. 6+4+5=15
  
2. (a) Describe the structure of liver with diagram.  
(b) Write down the functions of liver. 8+7=15  

OR

a) Describe the structure of Neuron with diagram.  
b) Write the names of different cranial nerves. 9+6=15
  
3. (a) Classify organism.  
(b) Write down the portal of entry and exit of micro-organisms into the body.  
(c) How can you prevent cross infection in the hospital? 4+3+3=10  

OR

a) Write the difference between disinfection and sterilization.  
b) Write down the care of rubber goods. 4+6=10
  
4. Write Short notes (any three) 5x3=15
  - a) Menstrual cycle.
  - b) Physiology of respiration.
  - c) Structure of ear.
  - d) Functions of skin.
  - e) Collection of specimens.

**SEE QUESTION NO. 5, 6, & 7 IN SEPARATE SHEET**



# WEST BENGAL NURSING COUNCIL

FIRST YEAR GENERAL NURSING – MIDWIFERY (3 YEARS) EXAMINATION, AUGUST – 2017

SUBJECT: BIO - SCIENCES (PAPER –I)

FULL MARKS: 75

TIME ALLOWED: 3 HOURS

## ANSWER THE FOLLOWING QUESTIONS

1. a) Draw a diagram of G.I. System and label it.  
b) Write down the functions of stomach.

4+4+7 = 15

2. a) Define blood.  
b) Describe the composition of blood.  
c) Explain the process of coagulation of blood.

2+5+8 = 15

OR

- a) Name the different sensory organs of the body.  
b) Describe the anatomical structure of any one of the sensory organs with diagram.

5+10 = 15

3. a) Define Immunity.  
b) Classify Immunity.  
c) Write about prevention of nosocomial infection.

2+4+4 = 10

4. Write short notes (any three)

5 X 3 = 15

- a) Carbohydrate Metabolism.  
b) Biomedical waste management.  
c) Epithelial tissue.  
d) Structure & functions of breast  
e) Pleura.

Question no 5, 6, 7 and 8 are in separate sheet.



**WEST BENGAL NURSING COUNCIL**  
**FIRST YEAR GENERAL NURSING- MIDWIFERY(3 YRS) EXAMINATION, July 2016.**  
**SUBJECT: BIO-SCIENCE – (Paper-I)**

Marks: 75

Time Allowed: 3 Hours

Answer any two questions from Q. NO: 1-3 & Q. No. 4 & 5 is compulsory.

1. a) Draw a diagram of heart & label it.  
 b) Describe the pulmonary circulation with diagram. 8+7=15
  
2. a) Describe the structure of Neuron with diagram.  
 b) Write the functions of CSF.  
 c) Write the names of Cranial nerves. 5+4+6=15
  
3. a) Write the different types of bones with example.  
 b) What are the functions of bone ?  
 c) Classify the types of bones with examples. 5+3+7=15
  
4. a) Write the difference between bacteria & virus.  
 b) Write the different types of bacteria with example & diagram. 5+5=10
  
5. Write short notes on: (any three) 5 X 3 = 15
  - a. Menstrual cycle.
  - b. Function of skin.
  - c. Human skull.
  - d. Tongue.
  - e. Structure of eye.

Questions NO: 6, 7, 8 & 9 are in separate sheet

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# WEST BENGAL NURSING COUNCIL

FIRST YEAR GENERAL NURSING-MIDWIFERY (3½ years) EXAMINATION, AUG. -2015

SUBJECT: BIO-SCIENCE (Paper I)

Full Marks: 75

Time Allowed: 3 Hours

Answer any two question from question No. 1 to 3 & Question No. 4 & 5 are compulsory.

1. (a) Describe the structure of human cell with diagram.  
(b) Explain mitosis with the help of a diagram. 7+8=15
2. (a) Name the organs of urinary system.  
(b) Describe the microscopic structure of nephron with the help of a diagram.  
(c) Describe the mechanism of formation of urine. 3+6+6=15
3. (a) Describe the formation and circulation of C.S.F. with the help of diagram.  
(b) Write the composition of C.S.F.  
(c) Enumerate the functions of C.S.F. 7+3+5=15
4. a) Classify microorganisms.  
b) Describe the factors influencing growth of the microorganisms. 5+5=10
5. Write Short notes (any three) 5x3=15
  - a) Anterior Pituitary Hormones and its functions.
  - b) Plumonary circulation.
  - c) Microscope - uses and care.
  - d) Flat bone and its functions.

QUESTION NO. 6, 7, 8 & 9 IN SEPARATE SHEET



# WEST BENGAL NURSING COUNCIL

FIRST YEAR GENERAL NURSING-MIDWIFERY (3½ years) EXAMINATION, AUG. -2014

SUBJECT: BIO-SCIENCE (Paper I)

Full Marks: 75

Time Allowed: 3 Hours

## ANSWER THE FOLLOWING QUESTIONS

- (a) Enlist the organs of respiratory system.
- (b) Describe the structure of lungs with diagram.
- (c) Explain the mechanism of respiration.

3+7+5=15

- (a) Enlist the organs of digestive system.
- (b) Name the different digestive juices and their source of origin.
- (c) Describe the structure and functions of stomach.

3+5+7=15

OR

- (a) Describe the structure of liver with diagram.
- (b) State the functions of liver.
- (c) Explain the digestion of protein.

7+4+4=15

- (a) Define immunity.
- (b) Classify immunity with examples of each

- (c) State the difference between active artificial and passive artificial immunity.

2+5+3=10

OR

- a) What is sterilization?
- b) What are the different methods of sterilization?
- c) How will you sterilize sharp instruments?

2+5+3=10

**Write Short notes (any three)**

5x3=15

- a) Factors affecting blood pressure
- b) Cerebrospinal fluid
- c) Simple epithelial tissue
- d) Menstrual cycle
- e) Physiology of hearing.

**QUESTION NO. 5, 6, 7 & 8 IN SEPARATE SHEET**

# WEST BENGAL NURSING COUNCIL

PRELIMINARY GENERAL NURSING-MIDWIFERY (3½ years) EXAMINATION, JANUARY-2014

SUBJECT: BIO-SCIENCE (Paper-I) (SUBJECTIVE)

Full Marks: 75

Time Allowed: 3 Hours

1. a) Describe the structure of skin with diagram. 7+3=10  
b) List down the functions of skin.
2. a) Draw a diagram of human heart and label it. 8+7=15  
b) Describe the pulmonary circulation.
- OR
- a) Discuss composition of blood. 8+7=15  
b) Explain the mechanism of co-agulation of blood.
3. a) List down the different parts of female reproductive organs. 4+6=10  
b) Describe the structure of uterus in brief with the help of diagram
4. a) Classify the organisms. 4+3+3=10  
b) Write down the portal of entry and exit of microorganism into the body.  
c) How can you prevent cross infection in the hospital?
5. Write short notes (any two) :- 2x5=10  
a) Neuron  
b) Structure of eye.  
c) Classification of tissues  
d) Synovial joint.

FOR QUESTION NOS. 6, 7, 8 & 9 SEE SEPARATE SHEET



# WEST BENGAL NURSING COUNCIL

PRELIMINARY GENERAL NURSING-MIDWIFERY (3½ years) EXAMINATION, JANUARY-2013

SUBJECT: BIO-SCIENCE (Paper-I) (SUBJECTIVE)

Full Marks: 75

Time Allowed: 3 Hours

1. (a) Describe the heart with the help of diagram.

10+5=15

(b) Write down the Pulmonary circulation.

2. (a) List down the sensory organs of the human body.

5+10=15

(b) Describe the structure of eye with the help diagram.

OR

(a) Describe the structure of Neuron.

(b) Explain the function of Neuron.

(c) Name of cranial nerves with its area of supply.

5+4+6=15

3. (a) List the different types of micro organisms.

(b) Describe the factors affecting growth of the micro organisms.

5+5=10

4. Short notes (any two)

2x5=10

a) Digestion of Protein.

b) Sterilization of glass articles.

c) Physiology of menstruation.

d) Epithelial Tissue.

FOR QUESTION NOS. 5, 6, 7 & 8 SEE SEPARATE SHEET



# WEST BENGAL NURSING COUNCIL

PRELIMINARY GENERAL NURSING-MIDWIFERY (3½ years) EXAMINATION, JULY-2013

SUBJECT: BIO-SCIENCE (Paper-I)

Full Marks: 75

Time Allowed: 3 Hours

## ANSWER ALL THE QUESTIONS

1. (a) Define joint.  
(b) Write down the classification of different joints.  
(c) Describe the characteristics of synovial joints with diagram.

2+6+7=15

OR

- (a) Name the organs of Urinary System.  
(b) Describe the structure of Nephron with diagram.  
(c) List down the functions of Kidney.

5+6+4=15

2. (a) Write the difference between endocrine gland and exocrine gland.  
(b) List down the different endocrine glands of the body.  
(c) Describe the Pituitary gland and influence of hypothalamus on the Pituitary gland.

5+3+7=15

3. Write down the difference between the following terms (any two) :

- (a) Active immunity and passive immunity.  
(b) Bacteria and Virus.  
(c) Disinfection and Sterilization.

2x5=10

4. Write Short notes (any three) :-

3x5=15

- a) Functions of Cerebellum,  
b) Menstrual Cycle.  
c) Connective tissue.  
d) Blood Coagulation.  
(e) Functions of Skin.

FOR QUESTION NOS. 5, 6, 7 & 8 SEE SEPARATE SHEET



# WEST BENGAL NURSING COUNCIL

Preliminary General Nursing Midwifery (3½ years) Examination - June 2011  
Sub : BIO-SCIENCE (PAPER-I)

Full Marks : 75

Time Allotted : 3 Hours.

## Answer the following questions

1. a) List the different sense organs of the body.  
b) Describe the eye with diagram. 5+10=15  

OR

  - a) Enlist the name of the bones which forms the vault of the cranium.
  - b) How many cranial nerves are there?
  - c) Describe composition and functions of cerebrospinal fluid. 3+5+7 = 15
2. a) Write the difference between endocrine gland and exocrine gland.  
b) Enlist the endocrine glands of human body.  
c) Describe structure of liver. 5+3+7 = 15
3. a) Name some microorganisms that affect the body entering through respiratory tract and alimentary tract.  
b) How can you prevent the spread of infection? 5+5=10  

Or

  - a) Describe the classification & characteristics of micro organism.
  - b) Discuss the different methods of microbial control. 5+5 = 10
4. Write **short notes** (any three): 3x5 = 15
  - a) Menstrual cycle
  - b) Factors affecting blood pressure
  - c) Classification of immunity
  - d) Nephron.

N. B. : For Question No. 5, 6, 7 & 8 please see separate sheet only.



# WEST BENGAL NURSING COUNCIL

PRELIMINARY GENERAL NURSING-MIDWIFERY (3½ years) EXAMINATION, DECEMBER -2010

SUBJECT: BIO-SCIENCE

Full Marks: 75

Time Allowed: 3 Hours

1. (a) Define tissue.  
(b) Classify tissue.  
(c) Describe epithelial tissue in details with diagram. 2+6+7=15
2. (a) Name the different parts of urinary system.  
(b) Describe the microscopic structure of Kidney with the help of diagram.  
(c) Describe the functions of Kidney. 3+7+5=15

OR

- (a) Define joints.  
(b) Write the classification of different type of joints.  
(c) Describe the characteristics of synovial joints with the help of diagram. 2+5+8=15
3. (a) Describe the classification and characteristics of micro organism.  
b) Discuss the different methods of microbial control. 7+8=15
4. Short notes (any two) 2x5=10
  - a) Physiology of Respiration.
  - b) Neuron
  - c) Thyroid gland
  - d) Blood coagulation.

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# WEST BENGAL NURSING COUNCIL

PRELIMINARY GENERAL NURSING-MIDWIFERY EXAMINATION, JUNE-2010

SUBJECT: BIO-SCIENCE

Full Marks: 75

Time Allowed: 3 Hrs.

1.
  - a) What is cell ?
  - b) Describe one simple cell with help of a diagram.
  - c) Explain stages of cell division (Mitosis)

2+7+6=15
  
2.
  - a) List the organs of the respiratory system in order.
  - b) Describe the structure of lung with diagram.
  - c) Explain functions of lungs.

4+7+4=15
  
- Or
  
- a) Define plasma ?
  - b) Describe the composition of plasma.
  - c) Explain the process of coagulation of blood.

2+3+10=15
  
3.
  - a) Define immunity.
  - b) Classify immunity.
  - c) Explain active and passive immunity with example.

2+4+4=10
  
4. Write short notes on following items (any two) 2x5=10
  - a) Cross infection
  - b) Structure of ear
  - c) Synovial joint
  - d) Function of Suprarenal Gland.

For Question No. 5, 6, 7, 8 See Separate Sheet



# WEST BENGAL NURSING COUNCIL

PRELIMINARY GENERAL NURSING-MIDWIFERY (3½ years) EXAMINATION, DECEMBER -2009

SUBJECT: BIO-SCIENCE (PAPER - I)

Full Marks: 75

Time Allowed: 3 Hours

1. (a) What is gland ?  
(b) How many types of gland are there ?  
(c) Mention two examples of each type of gland.  
(d) Draw a diagram of pancreas.  
(e) Write down the composition of pancreatic juice.

1+2+4+4+4=15

OR

Enlist the different parts of digestive system with diagram :-

15

2. (a) Describe the parts of conducting system of the heart with diagram.  
(b) Write down the meaning and measure of the cardiac output and stroke volume.  
(c) Why the heart sound is produced ?  
(d) What are the total periods of one cardiac cycle ?

6+2+2+3+2=15

OR

- (a) What is pulse ?  
(b) Write down the factors affect on the pulse rate.  
(c) Name three pulse point of our body. (d) Describe the blood flow through the heart.

1+5+3+6=15

3. (a) Name the Internal organs of the female reproductive system with diagram. (b) Write down the function of the uterus.

6+4=10

#### 4. Short notes (any three)

3x5=15

- a) Physiology of vision.  
b) Thyroid gland  
c) Nephron  
d) Physical method of control of organism .



# WEST BENGAL NURSING COUNCIL

PRELIMINARY GENERAL NURSING-MIDWIFERY EXAMINATION, JUNE -2009

## SUBJECT: ANATOMY & MICROBIOLOGY

Full Marks: 75

Time Allowed: 3 Hrs.

1. a) Draw a diagram of the heart showing the layers composing its wall and its chambers with all the internal structures. 8+7=15  
b) Write the function of the heart.

Or

- a) Define joint.  
b) Write the classification of different joint. 2+5+8=15  
c) Describe the characteristics of Sinovial joint.
2. a) Name the organs of urinary system.  
b) Describe the functions of Bladder. 2+5+8=15  
c) Describe the microscopical structure of the Kidney with diagram.

Or

- a) What is the most basic function of Respiration?  
b) Write the difference between external & internal respiration.  
c) Describe the process of gas exchanges in the lungs & tissues
3. a) Describe the classification & characteristics of micro organism. 7+8=15  
b) Discuss the different methods of microbial control.
4. Write short notes (any two) 2x5=10  
a) Insulin  
b) Cross infection  
c) Fallopian Tube

For Question No. 5, 6 See Separate Sheet