



# **B.Sc.(N) [Post Basic (1<sup>st</sup> Year)]**

BF/2009/06

## **Nutrition & Dietetics**

[New Scheme-w.e.f. 2007 admission]

**M.M. : 35**

**Time : 2 Hours.**

Note: Attempt all questions.

1. **Define any FIVE of the following:** [5]
    - a. Rickets.
    - b. Food adulteration.
    - c. Atherosclerosis.
    - d. Type I Diabetes Mellitus.
    - e. Basal Metabolic Rate.
    - f. Acute Glomerular Nephritis.
  
  2. **Briefly explain the objectives and principles of dietary management in any TWO of the following:** [7]
    - a. Typhoid.
    - b. Peptic ulcer.
    - c. Cirrhosis of the Liver.
  
  3. **Explain any TWO of the following:** [7]
    - a. ICDS.
    - b. Anaemia in Indian women.
    - c. PEM in children.
  
  4. **Give a brief explanation of any TWO of the following:** [7]
    - a. Food hygiene.
    - b. Anthropometric assessment.
    - c. Nutritional needs during pregnancy.
  
  5. **Write short notes on any THREE of the following:** [9]
    - a. Soft diet.
    - b. Nutrition in hypertension.
    - c. Balanced diet.
    - d. Nutritional care of preterm babies.
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# B.Sc.(N) [Post Basic (1<sup>st</sup> Year)]

BF/2009/06

## Biochemistry & Biophysics

[New Scheme-w.e.f. 2007 admission]

M.M. : 75

Time : 3 Hours.

Note: Attempt Three questions from each Section. Question No. 1 of each Section is Compulsory.

**USE SEPARATE ANSWER SHEETS FOR EACH SECTION.**

### SECTION-A (Biochemistry)

[37.5 marks]

1. a. Describe the structure and function of Plasma membrane of a Eukaryotic cell.  
b. List down 4 important properties of Water.  
c. Define Km and Vmax of Enzymes.  
d. Briefly discuss 'Diabetes Mellitus'.  
e. Enumerate 3 major functions of Plasma protein.  
f. What are Ketone bodies. How are these utilized in the body.  
g. Role of Lipoproteins in Cholesterol metabolism. [7x2.5=17.5]
2. a. Discuss the distribution of various Electrolytes in Intracellular and Extracellular fluids. [5]  
b. Explain the diagnostic significance of AST and ALT. [5]
3. **Write short notes on any TWO:** [5+5]
  - a. Digestion and absorption of Proteins.
  - b. Oxidative Phosphorylation.
  - c. Gout.
4. Write in detail the diseases associated with Digestion and Absorption of Food. [10]

**P.T.O.**

**SECTION-B**  
**(Biophysics)**

[37.5 marks]

1. **Explain briefly any FIVE of the following:** [5x3=15]
- a. Blood pressure cuff is used in blood transfusion.
  - b. Arms are relaxed at sides of body while folding linen.
  - c. Rubber tips are used at the bottom of crutches.
  - d. Use of Flannel cover over a hot water bottle.
  - e. Lead screen is used for protection by radiographers.
  - f. Underwater drainage is used for drainage from chest incision.
  - g. Ice is used to decrease swelling on the face.
  - h. Pacemakers are implanted in patients with irregular heartbeat.
2. a. What are the different kinds of pressures present in the human body. How will you measure any two of these pressures. [8]  
b. How can artificial breathing help to restore normal breathing in drowned person. [4<sup>1</sup>/<sub>2</sub>]
- OR**
3. a. What do you understand by Friction? Why does it occur? How can it be overcome? How can the force of friction cause a “burn”. [8]  
b. What happens if a patient on a wheelchair moving down a ramp very fast suddenly breaks the wheelchair with his hands. [4<sup>1</sup>/<sub>2</sub>]
4. **Write short notes on any TWO:** [2x5=10]
- a. Use of X-rays in medical imaging.
  - b. Ultrasound in imaging the foetus.
  - c. Relation of muscle contraction and stimulus provided.
  - d. Diathermy in the treatment of inflammatory conditions.
  - e. Eye as a Lens.

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## Psychology

[New Scheme-w.e.f. 2007 admission]

M.M. : 75

Time : 3 Hours.

Note: Attempt all questions.

1.
  - a. Describe the method of Observation. [6]
  - b. Discuss the relationship of psychology with education. [6]
  
2.
  - a. Describe the principles of Perception. [4]
  - b. List the contributory factors of Attention. [3]
  - c. What are the psychological needs of an adolescent. [5]
  
3.
  - a. Define Personality. [3]
  - b. Describe the factors affecting Personality development. [5]
  - c. What are the Personality characteristics that a student nurse should develop. [4]
  
4.
  - a. Define Motivation. [3]
  - b. List the biological and social motives. [4]
  - c. Explain Conflicts. [5]
  
5.
  - a. Define Memory. [3]
  - b. List the causes of Forgetting. [4]
  - c. Explain any theory of Learning with examples. [5]
  
6. **Write short notes on any TWO of the following:** [7<sup>1</sup>/<sub>2</sub>+7<sup>1</sup>/<sub>2</sub>=15]
  - a. Measurement of Intelligence.
  - b. Characteristics of a mentally healthy person.
  - c. Consequences of emotional stress.

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## Microbiology

[New Scheme-w.e.f. 2007 admission]

M.M. : 75

Time : 3 Hours.

Note: Attempt FIVE questions only. Q.No. 1 is COMPULSORY.

1A. Give one word answer of the following: [10x1=10]

1. Who invented basic tools, such as hot air oven and steam sterilizer?
2. Lipopolysaccharide is a major cell component of.....bacteria.
3. Painless, hard, non-bleeding ulcer is seen in which stage of Syphilis.....
4. Destruction or inhibition of microorganisms in living tissues is known as.....
5. Which bacterial cell wall contains Sterols?
6. Anaphylactic reactions are mediated by which class of Immunoglobulin?
7. Mycolic acid is present in the cell wall of.....
8. Quellung reaction is used for the diagnosis of.....
9. Albert's stain is used for the detection of.....
10. Negri bodies are found in the cells infected with the following virus.....

1B. Pick up the most appropriate answer: [5x1=5]

1. Most abundant class of *immunoglobulin* in the body is:
  - a. Ig G
  - b. Ig M
  - c. Ig E
  - d. Ig A
2.  $\beta$ -hemolysis is characteristic of:
  - a. *Streptococcus pyogenes*.
  - b. *S. salivarius*.
  - c. *S. pneumoniae*
  - d. Viridans streptococci.
3. Humans become most commonly infected with *Mycobacterium tuberculosis* most frequently by:
  - a. Ingestion.
  - b. Inhalation.
  - c. Contact.
  - d. Inoculation.
4. What is the colour of colonies of *Corynebacterium diphtheriae* on blood tellurite agar medium?
  - a. White.
  - b. Grey to black.
  - c. Cream.
  - d. Yellow.
5. What is the efficacy of the transmission of HIV by blood transfusion?
  - a. 0.5-1%
  - b. 2.5%
  - c. 13-40%
  - d. >90%

P.T.O.

- 1C. **Fill in the blanks:** [4x1=4]
1. Mantoux test is used for the diagnosis of.....
  2. Dark ground microscopy is used for the diagnosis of .....
  3. The colour of granules in *Madurella mycetomatis* is.....
  4. Plastics are to be disposed of in which colour coded bag.....
2. **Write short notes on any FOUR of the following:** [4x3<sup>1</sup>/<sub>2</sub>=14]
- a. Contributions of Robert Koch.
  - b. Hot air oven.
  - c. Prozone Phenomenon.
  - d. Type II hypersensitivity.
  - e. Typhoid vaccines.
  - f. Cryptococcus infections.
  - g. Differential media.
  - h. Ziehl-Neelsen stain.
3. Define Hypersensitivity. How do you classify various types of hypersensitivity reactions? Describe Type I reactions. [2+4+8=14]
4. Name different types of hospital wastes and describe in detail the various methods of disposal waste. [4+10=14]
5. Discuss the pathogenesis, laboratory diagnosis of Tuberculosis. Describe the Mantoux test and BCG vaccination. [4+5+2+3=14]
6. Name various Hepatitis causing viruses transmitted by Blood. Describe other routes of transmission, pathogenesis and laboratory diagnosis of Hepatitis C virus. [3+4+7=14]
7. **Write briefly on:** [7+7=14]
- a. Laboratory diagnosis of Malaria.
  - b. Laboratory diagnosis of Aspergillosis.

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BF/2009/06

## Maternal Nursing

[New Scheme-w.e.f. 2007 admission]

M.M. : 75

Time : 3 Hours.

Note: Attempt all questions.

1. a. Draw a labeled diagram of longitudinal section of Uterus. [7]  
b. Discuss the structure and functions of Myometrium. [5]
2. a. Write in brief the causes of Maternal mortality. [7]  
b. Discuss the positive signs of Pregnancy. [5]
3. **Rani, 35 years old primigravida, at 28 weeks of pregnancy is admitted with High BP, Oedema and blurring of vision.**  
a. How will you monitor her condition. [5]  
b. Write nursing care plan for Rani, for the first 24 hours using nursing process. [6]
4. **Differentiate between the following[any FIVE]:** [5x2=10]
  1. Threatened abortion and Missed abortion.
  2. Cervical effacement and Cervical Dilatation.
  3. Cord prolapse and Cord presentation.
  4. Oligohydramnios and Polyhydramnios.
  5. Copper 'T' and Lippes Loop.
  6. Menopause and Menarche.
  7. Mcdonald's stitches and Shirodhkar's stitches.
5. a. What are the aims of Antenatal care? [5]  
b. How will you counsel a pregnant woman who is HIV positive? [5]
6. **Write short notes on any FOUR:** [4x5=20]
  1. Examination of a new born baby.
  2. Vesicular mole.
  3. Diet in pregnancy.
  4. Mastitis.
  5. Problems of an unwed mother.
  6. Complications of 3<sup>rd</sup> stage of labour.

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# B.Sc.(N) [Post Basic (1<sup>st</sup> Year)]

BF/2009/06

## Medical Surgical Nursing

[New Scheme-w.e.f. 2007 admission]

M.M. : 75

Time : 3 Hours.

Note : Attempt all questions.

1. **Mr. Rajpal, 25 years old male was brought to the casualty after a road traffic accident. At the time of admission, patient was unconscious, had severe head injury & fracture of left lower limb, CT scan indicated presence of a large acute subdural hematoma, and an emergency Craniotomy & evacuation of Hematoma was performed:**
  - a. Briefly explain types of Head injury. [3]
  - b. Write pathophysiology of Brain injury using flow diagram. [2]
  - c. Enlist clinical manifestations of intracranial hypertension. [3]
  - d. Explain management of patients with head injury. [5]
  - e. Prepare a post craniotomy nursing care plan for Rajpal. [7]
  
2. **Mrs. Radha, 58 yrs/female was admitted in the ICU with 45% TBSA burns. The weight of the patient is 50 kg.**
  - a. Calculate the fluid requirement for Radha for 1<sup>st</sup> 24 hrs using Parkland formula. [4]
  - b. Explain 4 degrees of burns. [6]
  
3.
  - a. What is Cardiac catheterization. [5]
  - b. Write pre, intra and post nursing management of Cardiac catheterization. [10]
  
4. **Write short notes on[any FIVE]:** [5x6=30]
  - a. Skin care of patient undergoing Radiation therapy.
  - b. Osteosclerosis.
  - c. Management of pt. undergoing Chemotherapy.
  - d. Principles of ICU nursing
  - e. Primary and Secondary amenorrhoea.
  - f. Laryngitis.

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# B.Sc.(N) [Post Basic (1<sup>st</sup> Year)]

BF/2009/06

## Child Health Nursing

[New Scheme-w.e.f. 2007 admission]

M.M. : 75

Time : 3 Hours.

Note : Attempt all questions.

1.
    - a. Describe the growth parameters of 2 year old child. [4]
    - b. List down the milestones with regard to gross motor, fine motor, personal social and languages of three year old toddler. [6]
  
  2. **8 years old Sumit is admitted in paediatric medical ward with Nephrotic syndrome:**
    - a. Define Nephrotic syndrome and enlist clinical manifestations. [2+3]
    - b. Draw the flow diagram showing pathophysiology of Nephrotic syndrome. [3]
    - c. Outline the nursing care plan specifying the nursing diagnosis, objectives and nursing interventions. [7]
  
  3. **Select any ONE of the following disease condition:**
    - a. *Hydrocephalous.*
    - b. *Spina bifida.*
    - i) Define and enlist the clinical features of the selected disease condition. [2+3]
    - ii) Enumerate the diagnostic investigations carried out to detect the selected disease condition. [2]
    - iii) Write objective based preoperative & post operative nursing management for a child with selected disease condition. [8]
  
  4.
    - a. Why premature neonates are prone to hypothermia and infections. [2<sup>1</sup>/<sub>2</sub>+2<sup>1</sup>/<sub>2</sub>]
    - b. Mention the nursing responsibilities in order to prevent Hypothermia and Nosocomial infections. [5+5]
  
  5. **Write short notes on any FOUR of the following:** [4x5=20]
    - a. Internationally accepted rights of the child.
    - b. Health education for a child suffering with moderate degree of Protein Energy Malnutrition.
    - c. Pica : a behavioural problem
    - d. Feeding an infant with Cleft lip and cleft palate.
    - e. Paediatric emergencies.
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# B.Sc.(N) [Post Basic (1<sup>st</sup> Year)]

BF/2009/06

## English

[New Scheme-w.e.f. 2007 admission]

M.M. : 75

Time : 3 Hours.

Note : Attempt all questions.

1. Write an essay on any ONE of the following topics in about 450 words:
- |                     |                            |
|---------------------|----------------------------|
| i) Noise pollution. | ii) Health is wealth.      |
| iii) Newspapers.    | iv) Games and sports. [15] |

2. Write a letter to your friend describing why you have joined a nursing college. [10]

**OR**

Write a letter of advice to your nephew who is careless about his studies. [10]

3. Write a paragraph on any ONE of the following topics in about 100 words:
- |                                       |      |
|---------------------------------------|------|
| a. A pleasant dream.                  |      |
| b. Laboratories of a nursing college. |      |
| c. Morning walk and physical fitness. | [10] |

4. **Do as directed:**

***Change the voice:*** [5]

- |  |
|--|
| i) Who can answer my question?                     |
| ii) People laughed at the poor old man.            |
| iii) Inform the police about the theft.            |
| iv) The author has been put off by the publishers. |
| v) The table was laid by the servant.              |

***Change the Narration:*** [5]

- |  |
|--|
| i) Rakesh said to me, "I have traveled by air many times."                   |
| ii) The customer said, "Give me another helping."                            |
| iii) The mother said, "Don't spill the ink on the carpet."                   |
| iv) I said, "What a big fool I have been to trust you."                      |
| v) The teacher said, "Shall you ever be able to get English into your head?" |

***Fill in the Correct preposition:*** [5]

- |   |
|---|
| i) You must abide.....the rules of the institution. |
| ii) Our country abounds.....forests.                |
| iii) We should abstain.....drinking.                |
| iv) I am not accustomed.....using abusive language. |
| v) He has been acquitted.....all the charges.       |

***Correct the following:*** [5]

- |  |
|--|
| i) He spoke very less words.                         |
| ii) I prefer busy life than idle life.               |
| iii) Shankar Dayal is the eldest man of our village. |
| iv) She is better than yesterday.                    |
| v) The forest abound in deers.                       |

P.T.O.

5. Give your views about the medical facilities available in your village. [10]

**OR**

Write a note on how to instill the idea of saving the environment in society.[10]

6. **Read the following passage and answer the questions given at the end:** [10]

There came down to our town some years ago a showman owning an institution called the Gaiety land. Overnight our Gymkhana grounds became resplendent with banners and streamers and coloured lamps. From all over the district, crowds poured into the show. Within a week of opening, they collected gate money amounting to nearly five hundred rupees a day. Gaiety land provided us with all sorts of fun and gambling and sideshows. For a couple of Rupees in each booth we could watch anything from performing parrots to crack motorcyclists looping the loop in the Dome of death. In addition to this, there were lotteries and shooting galleries where for a rupee you always stood a chance of winning a hundred rupees.

- i) How was Gymkhana grounds beautified?
- ii) How much gate money did they collect?
- iii) What was the Gaiety land and what were its various attractions.
- iv) What could they watch for a couple of rupees?
- v) *Explain the meanings of the following words in English:*
  - a. Resplendent.
  - b. Streamers.
  - c. Owning.
  - d. Looping.

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