

MANIPAL UNIVERSITY**FIRST YEAR B.Sc. NURSING DEGREE EXAMINATION – SEPTEMBER 2010****SUBJECT: NURSING FOUNDATIONS (BSN 103)**

Friday, September 17, 2010

Time: 10:00 – 13:00 Hrs.

Max. Marks: 75

Answer ALL the questions.**Choose the Single Best Answer to each of the following questions:**1A. Qualities of a professional nurse are the following **EXCEPT**

- a) impatiene~~e~~ b) inelligence
c) co-operation d) good physical health

1B. The meaning of Ethics is

- a) truth b) guiding beliefs
c) philosophy d) policy

1C. Types of discharge of a patient are the following **EXCEPT**

- a) planned b) discharge against medical advice
c) unplanned d) transfers

1D. Formula to convert Fahrenheit to Centigrade is

- a) $C = F + 32 \times \frac{9}{5}$ b) $C = F / 32 \times \frac{9}{5}$
c) $C = (F - 32) \times \frac{9}{5}$ d) $C = (F - 32) \times \frac{5}{9}$

1E. The condition in which a sweet, fruity, ketone^o odour is in Oral cavity is

- a) alcoholics b) diabetic acidosis
c) metabolic acidosis d) cyanosis

1F. Duration of sterilization of needle by boiling is

- a) 40 – 50 minutes b) 30 – 40 minutes
c) 20 – 30 minutes d) 10 – 20 minutes

1G. Following are the steps of nursing process **EXCEPT**

- a) introspection b) assessment
c) planning d) implementation

1H. Percentage of humidity which is comfortable for clients in the Hospital is

- a) 40 – 60% b) 20 – 40%
c) 0 – 10% d) 10 – 20%

II. The part of body which is prone for getting decubites^u ulcer is

- a) occiput b) calf muscle
c) tongue d) teeth

- 1J. The basic technique to prevent and control transmission of infection is
- autoclave
 - hand washing
 - isolation
 - dressing
- 1K. Medications specially prepared for absorption in the intestine is called
- strips
 - enteric coated tablet
 - syrup
 - ampules
- 1L. Following are the routes of administration of drugs **EXCEPT**
- intra muscular
 - intrathecal
 - intra personal
 - intra venous
- 1M. Serious drainage from a wound is defined as
- fresh bleeding
 - clear, watery plasma
 - thick and yellow
 - brown and foul smelling
- 1N. Russel's traction is used in the treatment of fracture of
- shaft of tibia
 - shaft of femur
 - ribs
 - caspal bones
- 1O. Following are the signs of clinical death **EXCEPT**
- absence of pulse
 - fixed eyes
 - normal respiration
 - absence of reflexes

(1×15 = 15 marks)

✍ **Write short notes on:**

- Orem's theory.
- Elements of communication.
- Methods of health assessment.
- Recreational and diversional needs of a client.
- Factors influencing drug action.
- Principles of bandaging.
- Care of a patient during post operative period.

(5×7 = 35 marks)

✍ **Essays:**

- Explain the process of maintaining intake and output chart.
- Describe the procedural steps with scientific rationale for female urinary catheterization.

(13 marks)

- Explain the routes of administration of drugs.
- Describe the nurse responsibility in administering Intra dermal Injection to a client.

(4+8 = 12 marks)



MANIPAL UNIVERSITY**FIRST YEAR B.Sc. NURSING DEGREE EXAMINATION – SEPTEMBER 2010****SUBJECT: MICROBIOLOGY (BSN 106)**

Thursday, September 16, 2010

Time: 10:00 – 13:00 Hrs.

Max. Marks: 75

✍ **Answer ALL the Questions.**✍ **Draw neat labeled diagrams flow charts wherever necessary.**

1A. Describe the pathogenesis of laboratory diagnosis of pulmonary tuberculosis. Add a note on Mantoux test.

(10 marks)

1B. Define and classify hypersensitivity. Describe type I hypersensitivity in detail.

(2+4+4 = 10 marks)

1C. Define and classify sterilization. Describe in detail sterilization by moist heat.

(1+3+6 = 10 marks)

2. **Write short notes on:**

2A. Bacterial spore

2B. Acid fast staining

2C. VDRL test

2D. Prophylaxis of Polio

2E. Laboratory diagnosis of Hepatitis B infection

2F. Life cycle of *Ascaris lumbricoides*

(5×6 = 30 marks)

3. **Choose the Single Best Response for the following questions:**

3A. Facultative anaerobes grow in absence of

a) Oxygen

b) Nitrogen

c) Carbon dioxide

d) Hydrogen

3B. Selective media for *Corynebacterium diphtheriae* is

a) MacConkey's agar

b) Chocolate agar

c) Tellurite Blood agar

d) Sabouraud's dextrose agar

3C. Gas gangrene is caused by

a) *Clostridium tetani*b) *Clostridium welchi*c) *Clostridium sordelli*d) *Clostridium botulinum*

3D. Optochin sensitivity test is positive for

a) *Streptococcus pyogenes*b) *Streptococcus agalactiae*c) *Enterococcus faecalis*d) *Streptococcus pneumoniae*

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- 3E. Trichophyton causes infection of
- a) Hair & nail
 - b) Hair & skin
 - c) Skin & nail
 - d) Hair, skin & nail
- 3F. Negri bodies can be demonstrated in infection with
- a) Fixed rabies virus
 - b) Street rabies virus
 - c) Herpes virus
 - d) Cytomegalovirus
- 3G. Larval form of Taenia saginata is called
- a) Cysticercus cellulosae
 - b) Cysticercoid
 - c) Cysticercus bovis
 - d) Hydatid cyst
- 3H. Skin test used for the diagnosis of Hydatid cyst is
- a) Casoni's test
 - b) Schick test
 - c) Dick test
 - d) Frie's test
- 3I. Koplik's spots are characteristic of which of the following infections?
- a) Mumps
 - b) Measles
 - c) Herpes
 - d) Rubella
- 3J. BCG vaccine is given
- a) Intramuscular
 - b) Intradermal
 - c) Subcutaneous
 - d) Intra venous
- 3K. Bacterial spore are best destroyed by
- a) Autoclave
 - b) Filtration
 - c) Tyndalisation
 - d) U.V.rays
- 3L. Antibody that can cross placental barrier is
- a) Ig D
 - b) Ig E
 - c) Ig G
 - d) Ig M
- 3M. _____ is known as father of microbiology
- a) Joseph Lister
 - b) Robert Koch
 - c) Louis Pasteur
 - d) Alexander Fleming
- 3N. Infection induced by doctors and nurses are known as
- a) Primary infection
 - b) Nosocomial infection
 - c) Subclinical infection
 - d) Iatrogenic infection
- 3O. Method of sterilization for disposable syringe is
- a) Autoclave
 - b) Boiling for 30 minutes
 - c) Gamma radiation
 - d) Formalin vaporization

(1×15 = 15 marks)



MANIPAL UNIVERSITY**FIRST YEAR B.Sc. NURSING DEGREE EXAMINATION – SEPTEMBER 2010****SUBJECT: PSYCHOLOGY (BSN 105)**

Wednesday, September 15, 2010

Time: 10:00 – 13:00 Hrs.

Max. Marks: 75

1. Write essay on any FIVE of the following:

- 1A. Define mental health and discuss the characteristics of a mentally healthy individual
- 1B. Discuss the branches of psychology
- 1C. Elaborate on the introspection and naturalistic observation methods
- 1D. Define emotion and elaborate on the cognitive theory of emotion
- 1E. Perceptual organization
- 1F. Define intelligence and comment on the assessment of intelligence
- 1G. Elaborate on the trial and error method of learning

(8×5 = 40 marks)

2. Write short notes on any SEVEN of the following:

- 2A. Types of thinking
- 2B. Measurement of motives
- 2C. Projective tests
- 2D. Scientific method of problem solving
- 2E. Principles of classical conditioning
- 2F. Types of transfer
- 2G. Repression theory of forgetting
- 2H. Jung's classification of personality
- 2I. Guilford's model of intellect
- 2J. Learning theory of personality

(5×7 = 35 marks)



MANIPAL UNIVERSITY**FIRST YEAR B.Sc. NURSING DEGREE EXAMINATION – SEPTEMBER 2010****SUBJECT: NUTRITION AND BIOCHEMISTRY (BSN 102)**

Tuesday, September 14, 2010

Time: 10:00 – 13:00 Hrs.

Max. Marks: 75

Answer Section – ‘A’ and Section – ‘B’ in two separate answer books.**SECTION – A : NUTRITION : 45 MARKS****1. Choose the appropriate answers for the following:**

- 1A. The standards which are set by the directorate of marketing and inspection of the government of India is
- a) bureau of Indian standards b) agmark
c) codex alimentaries d) none of the above
- 1B. The amount of lipids in 100ml of normal human plasma in the post absorptive state is
- a) 300mg b) 400mg
c) 500mg d) 600mg
- 1C. The amount of energy required to carryout the basic processes of life is called as
- a) body mass index b) basal metabolism
c) calorie d) energy value of foods
- 1D. Nicotinic acid contains
- a) adenine nucleus b) iso-alloxazine nucleus
c) pyridine nucleus d) ribose nucleus.
- 1E. The deficiency disease of cyanocobalamin is
- a) bitot's spots b) beri-beri
c) pellagra d) pernicious anaemia.
- 1F. Ascorbic acid is lost by
- a) canning b) cooking
c) freezing d) none of the above
- 1G. One of the most important energy-yielding food is
- a) cereals b) egg
c) fish d) milk
- 1H. Food and agriculture organization was established in the year
- a) 1942 b) 1943
c) 1944 d) 1945

(1×8 = 8 marks)

- 2A. Define carbohydrates.
- 2B. Classification of carbohydrates.
- 2C. Digestion and absorption of carbohydrates.

(6 marks)

3. Mrs. Menaka, 50yrs old office clerk, a known case of diabetes mellitus got admitted in the medical ward, considering her condition answer the following:

- 3A. List down the principles involved in menu planning.
- 3B. Explain the dietary requirement of Mrs. Menaka with the sample diet plan.

(2+4 = 6 marks)

4. Name any two fat soluble vitamins and describe in detail their role in maintaining the health of human beings.

(7 marks)

5. **Write short answers on the following:**

- 5A. Body-building foods
- 5B. Goiter
- 5C. Sterols
- 5D. Protein requirements for various group of people in India
- 5E. Factors affecting calcium absorption
- 5F. Types of electrolytes
- 5G. Heat treatment of food
- 5H. Methods of safe food handling
- 5I. Vital statistics

(2×9 = 18 marks)

SECTION – B : BIOCHEMISTRY : 30 MARKS

6. **Choose the appropriate answers for the following:**

6A. DNA has the following bases **EXCEPT**

- a) Guanine
- b) Uracil
- c) Thymine
- d) Adenine

6B. All the following are renal function tests **EXCEPT**

- a) Creatinine clearance test
- b) Blood urea estimation
- c) Electrolyte measurements
- d) AST and ALT measurements

6C. All the following are normal constituents of urine **EXCEPT**

- a) Chloride
- b) Urea
- c) Creatinine
- d) Albumin

- 6D. Elevation of plasma creatine kinase is seen in
- a) Acute pancreatitis
 - b) Prostate cancer
 - c) Myocardial infarction
 - d) Hemolytic jaundice
- 6E. In obstructive jaundice, the type of bilirubin whose serum level increases is
- a) Conjugated bilirubin
 - b) Unconjugated bilirubin
 - c) Both a) and b)
 - d) None of the above
- 6F. All the following polysaccharides contain glucose **EXCEPT**
- a) Starch
 - b) Glycogen
 - c) Cellulose
 - d) Inulin

(1×6 = 6 marks)

7. **Answer the following questions:**

- 7A. Write short note on Rhodopsin cycle.
- 7B. Define epimerism with two examples.
- 7C. Explain the digestion and absorption of proteins.
- 7D. Discuss covalent modification of enzymes with an example.

(3×4 = 12 marks)

8. **Answer the following:**

- 8A. Describe the structural organization of proteins with appropriate figure.
- 8B. Describe the Watson-Crick model of DNA. List any two functions of DNA.

(6×2 = 12 marks)



MANIPAL UNIVERSITY

FIRST YEAR B.Sc. NURSING DEGREE EXAMINATION – SEPTEMBER 2010

SUBJECT: ANATOMY AND PHYSIOLOGY (BSN 101)

Monday, September 13, 2010

Time: 10:00 – 13:00 Hrs.

Max. Marks: 75

✂ **Answer Section 'A' and Section 'B' In Two Separate Answer Books.**

SECTION "A": ANATOMY: 37 MARKS

1. **Write briefly on:**

- 1A. Thymus.
- 1B. Fallopian tube.
- 1C. Bile duct.

(5×3 = 15 marks)

2. **Write short notes on each of the following:**

- 2A. Describe the anatomical position of Human body.
- 2B. Draw a neat labelled diagram of a typical synovial joint.
- 2C. Structure of a skeletal muscle.
- 2D. Papillae of tongue.
- 2E. Internal intercostal muscle.
- 2F. Coverings of kidney.
- 2G. Microscopic structure of exocrine pancreas.

(2×7 = 14 marks)

3. **Select the Single Best Response to each of the following:**

3A. Which of the following movements is only observed in the thumb?

- a) Adduction
- b) Abduction
- c) Opposition
- d) Flexion

3B. Typical example of fibrous joint is

- a) Manubriosternal joint
- b) Pubic symphysis
- c) Inter vertebral joints
- d) Sutures of skull

3C. Cardiac muscle is

- a) Striated, voluntary
- b) Unstriated, voluntary
- c) Striated, involuntary
- d) Unstriated, involuntary

3D. Filum terminale is an extension of

- a) Pia mater
- b) Spinal cord
- c) Arachnoid mater
- d) Dura mater

3E. Jelly like transparent mass which fills the posterior segment of eyeball is

- a) Vitreous body
- b) Ciliary body
- c) Choroid
- d) Retina

- 3F. Lymphoid organ where filtration of lymph occurs is
 a) Tonsil b) Spleen
 c) Thymus d) Lymph node
- 3G. Right crus of diaphragm arises from following lumbar vertebrae
 a) L₂, L₃, L₄ b) L₂, L₃
 c) L₁, L₂, L₃ d) L₃, L₄, L₅
- 3H. Which one of the following is a salivary gland?
 a) Pancreas b) Submandibular
 c) Pituitary d) Pineal body
- 3I. Renal veins terminate into
 a) Portal vein b) Superior mesenteric vein
 c) Inferior mesenteric vein d) Inferior venacava
- 3J. Mineralocorticoid hormone is
 a) Cortisol b) Oestrogen
 c) Aldosterone d) Progesterone
- 3K. Gland situated below the neck of the urinary bladder is
 a) Vas deference b) Seminal vesicle
 c) Bulbourethral gland d) Prostate
- 3L. Functional area number of the percentral gyrus of cerebrum is
 a) 6 and 8 b) 4
 c) 3, 1 and 2 d) 44 and 45
- 3M. Apex of the heart is formed by
 a) Right atrium b) Left atrium
 c) Right ventricle d) Left ventricle
- 3N. Commonest position of vermiform appendix is
 a) Pre-Ileal b) Promontic
 c) Retro caecal d) Pelvic
- 3O. Principal cells and chief cells are found in
 a) Thyroid gland b) Adrenal gland
 c) Pituitary gland d) Parathyroid gland
- 3P. Corpus Luteum is present in
 a) Ovary b) Testis
 c) Pancreas d) Pituitary

($\frac{1}{2} \times 16 = 8$ marks)

SECTION "B": PHYSIOLOGY: 38 MARKS

4. Choose the Single Best Response for the following:

- 4A. The pregnancy diagnostic test is based on the presence of _____ hormone in the urine.
 a) hCS b) HCG
 c) FSH d) PSH
- 4B. The proliferation phase of the endometrium in menstrual cycle is under the control of
 a) Progesterone b) Estrogen
 c) Relaxin d) Prolactin

- 4C. All the following are examples of assisted transport EXCEPT
- a) Primary active transport b) Secondary active transport
c) Facilitated diffusion d) Osmosis
- 4D. Immunoglobulins are
- a) Antibodies b) Synthesized in the liver
c) Produced by T-lymphocytes d) Responsible for cellular immunity
- 4E. The normal tidal volume is
- a) 0.5 L b) 1 L
c) 1.5L d) 2L
- 4F. Lack of intrinsic factor leads to
- a) Pernicious anaemia b) Aplastic anemia
c) Thalassemia d) Hemolytic anaemia
- 4G. Which of the following is not a gastrointestinal hormone?
- a) Secretin b) Gastrin
c) Pepsin d) Cholecystokinin
- 4H. Renin is released by
- a) Loop of Henle b) Glomeruli
c) JG cells d) Macula densa
- 4I. Calcitonin is secreted by
- a) Parathyroid gland b) Thyroid gland
c) Adrenal gland d) Pancreatic islet
- 4J. The smooth muscle contains all the proteins EXCEPT
- a) Myosin b) Actin
c) Troponin d) Tropomyosin
- ($\frac{1}{2} \times 10 = 5$ marks)
5. Define cardiac output. What are the various factors affecting cardiac output. What is tachycardia, list few causes.
- (1+4+1+2 = 8 marks)
6. With a diagram briefly explain the steps in neuromuscular transmission.
- (5 marks)
7. **Write short notes:**
- 7A. Draw a labelled diagram showing various volumes and capacities. What is vital capacity?
7B. Describe the various phases of deglutition.
7C. List the hormones secreted by anterior pituitary. What is acromegaly?
- ((3+1)+4+(2 $\frac{1}{2}$ +1+ $\frac{1}{2}$) = 12 marks)
8. **Write short notes:**
- 8A. Define GFR. Give its normal value.
8B. Body responses when exposed to cold environment.
8C. List the hormones of adrenal cortex. What is Cushing's syndrome?
8D. Define myopia. How is it corrected?
- ((1+1)+2+(1+1)+(1+1) = 8 marks)

