

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2013
ANATOMY
PAPER ONE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write Briefly about:

- Q. 1. Boundaries, contents and applied anatomy of the femoral triangle
- Q. 2. Anterior and posterior relations of the right kidney
- Q. 3. Parts and blood supply of a long bone
- Q. 4. Movements of eversion and inversion
- Q. 5. Intrinsic muscles of the hand
- Q. 6. Radial nerve injuries
- Q. 7. Supports of the uterus
- Q. 8. Interior of the right atrium
- Q. 9. Shoulder joint- type of joint, bones forming it, factors stabilizing the joint and applied anatomy.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2013**ANATOMY****PAPER ONE (MCQ)****Time allotted for MCQ- 15 minutes****B : MCQs (Single response type):****(½ x 14= 7)**

Select the most appropriate answer and encircle the alphabet against it

1. Action of Popliteus is:
 - a. Locking of knee joint
 - b. Extension of knee joint
 - c. Unlocking of knee joint
 - d. None of the above
2. Medial malleolus is formed by:
 - a. Fibula
 - b. Femur
 - c. Tibia
 - d. Hip bone
3. Injury to nerve to Serratus anterior leads to:
 - a. Winging of scapula
 - b. Wrist drop
 - c. Frozen shoulder
 - d. Flexion of elbow
4. Posterior circumflex humoral artery is a branch of:
 - a. 1st part of axillary artery
 - b. 2nd part of axillary artery
 - c. 3rd part of axillary artery
 - d. Brachial artery
5. Movements of pronation and supination occur at :
 - a. Radioulnar joints
 - b. Wrist joint
 - c. Shoulder joint
 - d. Sternoclavicular joint
6. Portal vein is formed behind the:
 - a. Head of pancreas
 - b. Body of pancreas
 - c. Neck of pancreas
 - d. Tail of pancreas
7. Peyer's patches are present in :
 - a. Jejunum
 - b. Ileum
 - c. Duodenum
 - d. Colon
8. Left testicular vein drains into :
 - a. Inferior vena cava
 - b. Left renal vein
 - c. Right renal vein
 - d. Right internal iliac vein
9. The muscles of mastication are supplied by:-
 - a. Mandibular nerve
 - b. Trigeminal nerve
 - c. Facial nerve
 - d. Oculomotor nerve
10. The corpus callosum is made up of:
 - a. Projection fibres
 - b. Association fibres
 - c. Grey matter
 - d. Commissural fibres
11. The visual area corresponds to Brodmann's area number:
 - a. 3,1,2
 - b. 4
 - c. 17,18,19
 - d. 41,42
12. Upper motor neuron type of facial palsy presents as:
 - a. Paralysis of ipsilateral half of face
 - b. Paralysis of contralateral half of face
 - c. Paralysis of ipsilateral lower half of face
 - d. Paralysis of contralateral lower half of face
13. Which type of joint is the first carpometacarpal joint of the hand?
 - a. Saddle
 - b. Ellipsoid
 - c. Ball and socket
 - d. Hinge
14. Foot drop is caused due to injury to:
 - a. Deep peroneal nerve
 - b. Tibial nerve
 - c. Superficial peroneal nerve
 - d. Medial plantar nerve

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
HUMAN PHYSIOLOGY
PAPER SECOND

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Define erythropoiesis? How the regulation of erythropoiesis is brought about.
- Q. 2.** Define hemostasis? How clotting of blood take place inside the body?
- Q. 3.** Write briefly about the sequence of events at neuromuscular junction?
- Q. 4.** Write briefly about functions of thyroid hormone.
- Q. 5.** Describe briefly mechanism of swallowing.
- Q. 6.** Define cardiac output? How regulation of cardiac output is brought about.
- Q. 7.** Define synapse and clarify it.
- Q. 8.** Describe with help of diagram static lung volume and capacities.
- Q. 9.** Enumerate the differences between myelinated and nonmyelinated nerve fibre.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
HUMAN PHYSIOLOGY
PAPER SECOND (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. For sodium potassium pump the coupling ratio is:

- a. 1:1
- b. 2:3
- c. 3:2
- d. 1:4

2. Approximately 90% osmolality of plasma is contributed by:

- a. Plasma protein
- b. Glucose
- c. Sodium
- d. Urea

3. Exocytosis refuses which ion?

- a. Na^{++}
- b. Ca^{++}
- c. K^{+}
- d. Mg^{++}

4. Eosinophilia occurs in all EXCEPT:

- a. Stress
- b. Urticaria
- c. Allergic rhinitis
- d. Worm infection

5. RBC maturation takes place in ----- days.

- a. 3-5
- b. 6-8
- c. 10-14
- d. 20-25

6. Most potent respiratory stimulant is:

- a. Oxygen
- b. Carbon dioxide
- c. Hydrogen ion
- d. K^{+} ion

7. 100 ml of arterial blood contain ----- of CO_2 :

- a. 16 ml
- b. 32 ml
- c. 48 ml
- d. 52 ml

8. Rate of filtration at any point along a capillary is determined by:

- a. Mean capillary pressure
- b. Colloidal osmotic pressure
- c. Starling process
- d. Filtration pressure

9. Hydrostatic and colloidal pressure in glomerular capillaries is:

- a. 45 and 25 mmhg
- b. 25 and 45 mmhg
- c. 10 and 25 mmhg
- d. 25 and 10 mmhg

10. All are menosynaptic reflexes EXCEPT:

- a. Knee reflex
- b. Biceps reflex
- c. Ankle reflex
- d. Abdominal reflex

11. Kinesthetic receptors are:

- a. Free nerve ending
- b. Pacinian capsule
- c. Ruffini corpuscles
- d. Cortical cells

12. Medial geniculate body is concerned with:

- a. Hearing
- b. Vision
- c. Taste
- d. Smell

13. Hormone secreted by hypothalamus:

- a. GHIH
- b. GH
- c. LH
- d. FSH

14. Substance not excreted via kidney by filtration alone is:

- a. Glucose
- b. Vitamin B_{12}
- c. Mannitol
- d. Sucrose

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
CLINICAL PSYCHOLOGY
PAPER THREE

[Max Marks: 70]

[Time allotted: Three hours]**Note:** Attempt all questions

Draw suitable diagram wherever necessary

(7 x 9 = 63)

A : Short answer questions (Attempt any 9 questions):

- Q. 1. Discuss the application of psychology in various fields.
- Q. 2. Describe various endocrine glands and the hormones secreted by them and how does the endocrine system affect our behaviour?
- Q. 3. Why is it important to manage negative emotions? Suggest ways to manage negative emotions.
- Q. 4. Explain about the acquired motives with suitable examples.
- Q. 5. What are the factors that influence the formation of an attitude?
- Q. 6. How would define learning? Describe the types of learning.
- Q. 7. What do you understand by frustration and its sources?
- Q. 8. Describe the perception of the visual field as defined by Gestalt Psychologists.
- Q. 9. Describe in detail about motivation cycle with appropriate examples.
- Q. 10. What do you understand about defense mechanism or adjustment mechanism? Write the theory of defense mechanism.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
CLINICAL PSYCHOLOGY
PAPER THREE (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Attention to an object or a stimulus against our will because of its striking qualities is called :
 - a. Involuntary attention
 - b. Voluntary attention
 - c. Habitual attention
 - d. None of them
2. Items that together form symmetrical units comes under the law of :
 - a. Symmetry
 - b. Similarly
 - c. Closure
 - d. Figure and background
3. If by constant, effort learner finds the way to reach the goal, it is called :
 - a. Imitation
 - b. Trial and error method
 - c. Insight
 - d. None of the above
4. Law of readiness, law of exercise, and law of satisfaction is related to:
 - a. Motivation
 - b. Emotion
 - c. Learning
 - d. Perception
5. An organic state of deficiency or excess is called :
 - a. Need
 - b. Drive
 - c. Goal
 - d. Incentive
6. Drive refers to:
 - a. A state of tension and activity
 - b. An aroused state
 - c. Response to the need
 - d. None of the above
7. Unconscious process that defends a person against anxiety is :
 - a. Defense Mechanism
 - b. Frustration
 - c. Conflict
 - d. Emotion
8. Homeostasis is :
 - a. An internal process
 - b. Maintenance of equilibrium state of internal physiological process.
 - c. Automatic physiological mechanisms
 - d. None of the above
9. The term frustration refers to :
 - a. The blocking of behavior directed toward a goal.
 - b. The conflict state of mind
 - c. Struggle between two different thoughts
 - d. None of them
10. Habitual patterns of behavior, thought, and emotion is defined as :
 - a. Trait
 - b. Personality
 - c. Emotions
 - d. Attitude
11. "Felt emotion is the perception of bodily changes" is the theory of :
 - a. Cannon Bard
 - b. Jemes Lange theory
 - c. Schachter-Singer theory
 - d. None of the above
12. A strong stimuli attracting attention more quickly than a weak one is called :
 - a. Intensity
 - b. Change in intensity
 - c. Size
 - d. All of the above
13. On the whole large objects attract our attention more than small ones because of:
 - a. Intensity
 - b. Change intensity
 - c. Size
 - d. None of the above
14. Elements which are similar in appearance and shape and grouped together are called :
 - a. Figure & ground
 - b. Proximity
 - c. Similarly
 - d. Continuity

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
BIOCHEMISTRY
PAPER FOUR

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Explain the term 'transamination'? Give one suitable example. What is the metabolic importance of transamination? Give details of the cycle by which ammonia is detoxified in the liver. (1+1+2+3=7)
- Q. 2.** How are fatty acids mobilized from the adipose tissue for β -oxidation? Outline the steps for complete β -oxidation of palmitic acid. How much energy is produced on complete oxidation of one molecule of palmitic acid? (2+3+2=7)
- Q. 3.** Outline the sequence of reactions involved in the breakdown of glycogen in the skeletal muscle. What is the purpose served by this process. Explain glycogen storage disease with two examples (3+1+3=7)
- Q. 4.** What is cAMP? Diagrammatically represent how it is formed. List all the hormones whose action is associated with cAMP. (1+3+3=7)
- Q. 5.** Define vitamins. List all the antioxidant vitamins. What are the deficiency manifestations of these vitamins? (2+1.5+3.5=7)
- Q. 6.** Draw well labeled diagram of the Watson & Crick model of DNA showing its salient features.
- Q. 7.** Write a note on enzymes and their mode of action. Classify enzymes as per IUBMB, giving one example of each class. (3+4=7)
- Q. 8.** Explain biochemical events during muscle contraction and relaxation. (7)
- Q. 9.** Explain what are hemoglobin & myoglobin and their functions. Add a note on the Hemoglobinopathies. (4+3=7)

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013**BIOCHEMISTRY**
PAPER FOUR (MCQ)**Time allotted for MCQ- 15 minutes****B : MCQs (Single response type):****(½ x 14= 7)**

Select the most appropriate answer and encircle the alphabet against it

1. In proteins, the α -helix and β -pleated sheet are examples of-
 - a. Primary structure
 - b. Secondary structure
 - c. Tertiary structure
 - d. Quaternary structure
2. Biological lipid bilayers do NOT contain the following -
 - a. Cholesterol
 - b. Glycolipids
 - c. Phospholipids
 - d. Triglycerides
3. Milk sugar is called-
 - a. Lactose
 - b. Glucose
 - c. Sucrose
 - d. Galactose
4. The isoenzymes CK(MB) is specifically increased in blood of patients who have-
 - a. Skeletal muscle disease
 - b. Infective hepatitis
 - c. Acute pancreatitis
 - d. Recent myocardial infarction
5. The rate- limiting enzyme in the biosynthesis of cholesterol is-
 - a. HMG-CoA reductase
 - b. HMG-CoA synthase
 - c. Squalene synthase
 - d. Mevalonate kinase
6. Which of the following vitamins is NOT required for the activity of pyruvate dehydrogenase?
 - a. Riboflavin
 - b. Pantothenic acid
 - c. Thiamine
 - d. Folic acid
7. Deficiency of ascorbic acid causes-
 - a. Night Blindness
 - b. Osteomalacia
 - c. Scurvy
 - d. Pellagra
8. All the following are composed of glucose EXCEPT -
 - a. Amylose
 - b. Glycogen
 - c. Maltose
 - d. Inulin
9. All the following are substrates for gluconeogenesis EXCEPT-
 - a. Palmitic acid
 - b. Lactic acid
 - c. Glycerol
 - d. Alanine
10. HMP shunt provides-
 - a. Ribose-5-Phosphate
 - b. NADPH+H⁺
 - c. ATP
 - d. Both a & b
11. The mechanism of action steroid hormones is through -
 - a. Second messenger
 - b. Tyrosine kinase
 - c. Intra cellular receptors
 - d. Cell surface receptors
12. The enzyme lipoprotein lipase is activated by -
 - a. Apo A-II
 - b. Apo B-48
 - c. Apo C-II
 - d. Apo E
13. Respiratory chain is located in -
 - a. Inter mitochondrial space
 - b. Inner mitochondrial membrane
 - c. Mitochondrial matrix
 - d. Outer mitochondrial membrane
14. Cellulose is made up of glucose units linked by:
 - a. α - 1 $\rightarrow$ 4 linkages
 - b. α - 1 $\rightarrow$ 6 linkages
 - c. β -1 $\rightarrow$ 4 linkages
 - d. β - 1 $\rightarrow$ 6 linkages

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
BASIC PHYSIOTHERAPY
PAPER FIVE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Describe electromagnetism and self and mutual induction ?
- Q. 2.** Describe types and functions of the valves and semiconductors?
- Q. 3.** Describe physiological effects of cryotherapy?
- Q. 4.** Describe physiological effects of heat.
- Q. 5.** Describe Equilibrium and its types.
- Q. 6.** Describe saggital and frontal axis and plane ?
- Q. 7.** Write in detail about 1st and 2nd order of lever and its examples in human body?
- Q. 8.** Write in detail about hanging and sitting fundamentals starting positions?
- Q. 9.** Write about types of muscle contraction and muscle work.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013**BASIC PHYSIOTHERAPY****PAPER FIVE (MCQ)****Time allotted for MCQ- 15 minutes****B : MCQs (Single response type):****(½ x 14= 7)**

Select the most appropriate answer and encircle the alphabet against it

1. The centre of gravity in human body is situated at:
 - a. S2 vertebrae
 - b. L5 vertebrae
 - c. L1 vertebrae
 - d. S1 vertebrae
2. The line of gravity is a line through the centre of gravity
 - a. Transverse
 - b. Horizontal
 - c. Perpendicular
 - d. None
3. If the forces acting upon a body is at rest not able to restore it to its original position after it has been displaced it is called as:
 - a. Neutral equilibrium
 - b. Unstable equilibrium
 - c. Stable equilibrium
 - d. None
4. Movement about vertical axis is in a :
 - a. Sagittal plane
 - b. Frontal plane
 - c. Horizontal plane
 - d. Vertical plane
5. Force is defined as the product of:
 - a. $w \times v$
 - b. w / d
 - c. $w \times a$
 - d. $w \times p$
6. The fulcrum between the effort and weight is called as:
 - a. 2nd order
 - b. 3rd order
 - c. 1st order
 - d. none
7. The calf muscle at ankle joint is an example of:
 - a. 1st order
 - b. 2nd order
 - c. 3rd order
 - d. None
8. The atlanto occipital joint is an example of:
 - a. 2nd order
 - b. 1st order
 - c. 3rd order
 - d. None
9. A force is most effective when it is applied at..... angles to a lever:
 - a. 90 degree
 - b. 60 degree
 - c. 30 degree
 - d. 45 degree
10. In isotonic contraction which one quality of the muscle remains same?
 - a. Tone
 - b. Length
 - c. Force
 - d. Movement
11. The antagonist muscle for elbow flexion is?
 - a. Triceps
 - b. Biceps
 - c. Brachialis
 - d. Supinator
12. In Lewis Hunting reaction:
 - a. Vasodilation is followed by vasoconstriction
 - b. Vasoconstriction is followed by vasodilation
 - c. Both
 - d. None
13. The current in diode valve flows in
 - a. One direction
 - b. Reverse direction
 - c. Both direction
 - d. None
14. The joules law states that
 - a. $Q \propto I^2$
 - b. $Q \propto I$
 - c. $Q \propto 1/I$
 - d. $Q \propto IR$

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
BASIC NURSING & COMPUTER APPLICATIONS
PAPER SIX

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 8 = 56)

BASIC NURSING

Write short note on:

- Q. 1. Electric Shock .
- Q. 2. First aid management of a case of ingested poisoning.
- Q. 3. Importance of infection control in physiotherapy.
- Q. 4. Examination of vital signs.

COMPUTER APPLICATION

Q. 5. Conversions :

a. $(13)_{10} = (\quad)_2$

b. $(10010)_2 = (\quad)_{10}$

- Q. 6. What is a virus how to remove it from the system?
- Q. 7. What is an input device? Name some of the commonly used input devices?
- Q. 8. Calculate the total marks & percentage in MS Excel.

Instruction: Manual Calculation not allow (Only use Excel Formula.)

A	B	C	D	E	F	G
Roll. no.	Name	Maths	English	Computer	Total Marks	Percentage (out of 300)
1	Lalit	56	86	78		
2	Sunil	89	57	87		
3	Sanjay	45	64	82		

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2013
BASIC NURSING & COMPUTER APPLICATIONS
PAPER SIX (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 28= 14)

Select the most appropriate answer and encircle the alphabet against it

BASIC NURSING

1. A victim has lost a lot of blood through a deep cut in his leg. He is breathing fast and seems pale and restless. He is probably.
 - a. Having a stroke
 - b. Having a heart attack
 - c. In shock
 - d. Choking
2. Dressing and bandages are used to:
 - a. Reduce the victim's pain
 - b. Reduce internal bleeding.
 - c. Help control bleeding and prevent infection
 - d. Make it easier to take the victim to the hospital
3. The normal respiratory rate, in adult, ranges from:
 - a. 40 to 60 /min
 - b. 12 to 24 /min
 - c. 22 to 32 /min
 - d. 6 to 10 /min
4. Where is the carotid artery located?
 - a. Inside the wrist just above the hand
 - b. On the neck to the right or left of the windpipe.
 - c. Behind the kneecap.
 - d. Inside the arm between the elbow and shoulder
5. Syrup ipecac can be given to induce which of the following:
 - a. Vomiting
 - b. Constipation
 - c. Diarrhoea
 - d. Pain
6. What is the first thing you should do for a victim suspected for an Electrical burn?
 - a. Check for breathing and pulse
 - b. Check to see that electricity is turned off
 - c. Check for severe bleeding
 - d. Check for shock
7. If a victim has a severe, rapid and fatal hypersensitivity reaction to a substance, then the condition is known as:
 - a. Septic shock
 - b. Cardiac arrest
 - c. Hypovolemic shock
 - d. Anaphylactic shock
8. What is first aid?
 - a. Completing a primary survey
 - b. First help given to the victim of an accident
 - c. Assessing a victim's vital signs
 - d. Treating a victim for shock
9. Presence of blood in sputum is called:
 - a. Hematoma
 - b. Haemophilia
 - c. Haemoptysis
 - d. Hematuria
10. Suppose you are standing at a bus stop, suddenly a girl comes and states that she got a snake bite. What will you do?
 - a. Apply ice to the wound and take to the nearest hospital
 - b. Wash the wound, keeping injured area lower than the heart; get professional medical care within 30 minutes.
 - c. Cut a 1" cross at the site of injury and suck the poison out, apply ice.
 - d. Elevate injured area, apply ice, and get professional medical help within 30 minutes.
11. You are working in an emergency ward, a woman comes & her blood pressure is found to be 80/40 mm of Hg. This condition is known as:
 - a. Hypertension
 - b. Bradycardia
 - c. Hypotension
 - d. Tachycardia
12. The exact location of giving chest compression is:
 - a. In between both nipples
 - b. Left side of the chest
 - c. Below the xyphoid process of sternum
 - d. In between the collar bone
13. PPE stands for:
 - a. Personal programme equipment
 - b. Protective personal equipment
 - c. Personal protective equipment
 - d. Protective preservative equipment
14. When applying a head dressing or bandage, the first aider should ask the patient to:
 - a. Remains standing
 - b. To sit
 - c. To lie down
 - d. None of the above

P.T.O.

COMPUTER APPLICATIONS

15. An impact printer uses
- Ink jet technology
 - Thermal technology
 - Electro-Mechanical mechanism
 - None
16. The following is not a image file format
- .gif
 - .bmp
 - .cdc
 - .tiff
17. Which software would you use to teach students in computer classes?
- Spreadsheet
 - Database
 - Word processing
 - Power Point
18. This command lets you view the contents of a file in DOS.
- CAT
 - SHOW
 - TYPE
 - DISP
19. ROM means
- Read Once Memory
 - Read Only Memory
 - Read On Memory
 - Read Other Memory
20. The multiplication arithmetic operator is represented by which of the following symbols?
- ^
 - *
 - /
 - x
21. The input device that is most appropriate for playing games on a playstation is ?
- Joystick
 - Touch Panel
 - Keyboard
 - Track Ball
22. Which one of the following is DOS External Command?
- COPY
 - FORMAT
 - DEL
 - DIR
23. An example of a volatile memory is :
- CD-ROM
 - RAM
 - ROM
 - HardDisk
24. What is the Hex Value of decimal number 15?
- F
 - 1
 - 0
 - E
25. The batch file uses the extension
- .BAT
 - .DOC
 - .PRG
 - .DOS
26. In Ms-Dos what command you will use to display system date?
- Date command
 - Ver command
 - Disk command
 - Format command
27. The arithmetic and logical operations in a computer are performed in
- ALU
 - CLU
 - Hard-Disk
 - ICU
28. What is the default file extension for all Word documents
- .txt
 - .wrd
 - .fil
 - .doc

Regn. No.....

Paper Code: BP- 101...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2015
ANATOMY
PAPER ONE

[Time allotted: Three hours]**[Max Marks: 70]****Note:** Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:**(7 x 9 = 63)**

Write Briefly about:

- Q. 1.** Describe the Shoulder joint under the following headings: Type, Bones forming, Factors providing stability, movements & applied.
- Q. 2.** Draw a well labelled diagram of the structure of a Lymph node.
- Q. 3.** Describe the femoral triangle (Boundaries, contents & applied).
- Q. 4.** Draw a well labelled diagram of the Circle of Willis.
- Q. 5.** Write about Systemic Circulation.
- Q. 6.** Describe the lymphatic drainage of the head and neck region.
- Q. 7.** Write about the rectus sheath (formation and contents).
- Q. 8.** Describe the bronchopulmonary segments of the lung.
- Q. 9.** Describe the Brachial plexus.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2015
ANATOMY
PAPER ONE (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Periosteum is absent in:-
 - a. Long bones
 - b. Short bones
 - c. Irregular bones
 - d. Sesamoid bones
2. Abduction is defined as:-
 - a. Going away from the median plane
 - b. Increase of angle
 - c. Decrease of angle
 - d. Come nearer to the median plane
3. Wrist drop is seen in injuries of:
 - a. Median nerve
 - b. Ulnar nerve
 - c. Radial nerve
 - d. Musculocutaneous nerve
4. Pisiform is an example of:-
 - a. Long bone
 - b. Short bone
 - c. Sesamoid bone
 - d. Flat bone
5. Right gonadal vein drains into:-
 - a. Inferior vena cava
 - b. Right renal vein
 - c. Right internal iliac vein
 - d. Right external iliac vein
6. Spinal cord in an adult ends at the level of:
 - a. Lower border of L3
 - b. Upper border of L3
 - c. Lower border of L1
 - d. Upper border of L1
7. Carcinoma prostate occurs in:-
 - a. Apex
 - b. Base
 - c. Central zone
 - d. Peripheral zone
8. All are branches of external carotid artery EXCEPT:-
 - a. Lingual artery
 - b. Facial artery
 - c. Posterior auricular artery
 - d. Middle meningeal artery
9. Brodmann's number for visual area is:-
 - a. 4, 6
 - b. 3, 1, 2
 - c. 44, 45
 - d. 17, 18, 19
10. Pubic Symphysis is an example of:-
 - a. Primary cartilaginous joint
 - b. Secondary Cartilaginous joint
 - c. Synovial joint
 - d. Fibrous joint
11. All are hamstring muscles EXCEPT:
 - a. Semitendinosus
 - b. Semimembranosus
 - c. Short head of biceps femoris
 - d. Ischial head of adductor magnus
12. The anterior interventricular artery in the heart is a branch of:
 - a. Left coronary artery
 - b. Right coronary artery
 - c. Circumflex artery
 - d. Conus artery
13. Movements of pronation and supination occur at:
 - a. Radioulnar joint
 - b. Wrist joint
 - c. Shoulder joint
 - d. Elbow joint
14. Motor supply of muscles of facial expression is from:
 - a. Trigeminal nerve
 - b. Facial nerve
 - c. Glossopharyngeal nerve
 - d. Hypoglossal nerve

Regn. No.....

Paper Code: BP- 102...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
PHYSIOLOGY
PAPER SECOND

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1. What is erythropoiesis? Describe the stages and factors influencing it.
- Q. 2. With help of a diagram describe the structure of neuromuscular junction explain the mechanism of transmission of impulses across it.
- Q. 3. List 4 important function of saliva and stomach.
- Q. 4. What is synapse? What are the types of synapse? Enumerate the properties of synapse.
- Q. 5. Name the anterior pituitary hormones. Describe the functions of growth hormone.
- Q. 6. What is cardiac output? Describe the regulation of cardiac output.
- Q. 7. What is hypoxia? What are the types of hypoxia?
- Q. 8. What is GFR? What is its normal value? What factors affect it?
- Q. 9. List the differences between:
 - a. 1st Heart sound and 2nd heart sound
 - b. Cortical nephron and juxta medullary nephron.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
PHYSIOLOGY
PAPER SECOND (MCQ)

Time allotted for MCQ- 15 minutes

(½ x 14= 7)

B : MCQs (Single response type):

Select the most appropriate answer and encircle the alphabet against it

1. The power house of the cell is :
 - a. Centriole
 - b. Centrosome
 - c. Mitochondria
 - d. Lysosomes
2. Erythropoiesis normally occurs in adult in:
 - a. Liver
 - b. Yolk sac
 - c. Spleen
 - d. Bone marrow
3. Phagocytic cell is :
 - a. Neutrophil
 - b. RBC
 - c. Platelets
 - d. Astrocytes
4. Depolarization in a motor nerve action potential is due to :
 - a. Entry of K⁺ ion
 - b. Exit of K⁺ ion
 - c. Entry of Na⁺ ion
 - d. Entry of Ca⁺⁺ ion
5. The neurotransmitter at neuromuscular function is?
 - a. Acetylcholine
 - b. Dopamine
 - c. Epinephrine
 - d. GABA
6. Cause for plateau phase in cardiac muscle action potential is?
 - a. Entry of Na⁺ ion
 - b. Exit of K⁺ ion
 - c. Entry of Ca⁺⁺ ion
 - d. Entry of chloride ion
7. First heart sound is best heard in :
 - a. Mitral area
 - b. Pulmonary area
 - c. Aortic area
 - d. All the above
8. Exposure to high altitude causes :
 - a. Hypoxic hypoxia
 - b. Stagnant hypoxia
 - c. Histotoxic hypoxia
 - d. Anemic hypoxia
9. Interruption of respiration during swallowing is called?
 - a. Deglutition apnea
 - b. Hyperpnea
 - c. Sleep apnea
 - d. Dyspnea
10. Trypsin helps in the digestion of :
 - a. Proteins
 - b. Fat
 - c. Carbohydrates
 - d. Minerals
11. Substances used for estimation of GFR:
 - a. Insulin
 - b. Inulin
 - c. Renin
 - d. PAH
12. The vascular layer of eye is:
 - a. Sclera
 - b. Retina
 - c. Choroid
 - d. None
13. Dorsal column next carry all sensations except:
 - a. Pain
 - b. Fine touch
 - c. Pressure
 - d. Vibration
14. A cells of pancreas secrete :
 - a. Insulin
 - b. Somatostatin
 - c. Glucagon
 - d. Pancreatic polypeptide

Regn. No.....

Paper Code: BP- 103...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
CLINICAL PSYCHOLOGY
PAPER THREE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Write the nature of psychology and discuss the use of psychology in Physiotherapeutic practice.
- Q. 2.** Define Classical Conditioning. How does classical conditioning help us in modifying our behavior?
- Q. 3.** Define attention by explaining its types.
- Q. 4.** Describe the perception of the visual field as defined by the Gestalt Psychologists.
- Q. 5.** Explain the nature of conflict and describe about various types of conflict.
- Q. 6.** What is personality? Define it with determinants of personality.
- Q. 7.** Write about the psychosexual theory (Freud's theory) of personality.
- Q. 8.** Define the nature of defense mechanism and describe its function.
- Q. 9.** Write short definition of the following:
 - a.** Denial
 - b.** Rationalization
 - c.** Regression
 - d.** Sublimation
 - e.** Mental Retardation
 - f.** Counseling
 - g.** I.Q.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
CLINICAL PSYCHOLOGY
PAPER THREE (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Study of physical system and behavior comes under
 - a. Educational Psychology
 - b. Neuropsychology
 - c. Social psychology
 - d. Counseling Psychology
2. Counseling psychologists assess and treat people with
 - a. Neurological problems
 - b. Hormonal problems
 - c. Psychological Problems
 - d. Medical problems
3. If by constant, effort learner finds the way to reach to the goal it is called
 - a. Imitation
 - b. Trial and Error Method
 - c. Insight
 - d. None of these
4. Law of readiness, law of exercise, and law of satisfaction is related with
 - a. Motivation
 - b. Emotion
 - c. Learning
 - d. None of these
5. Study of intellectual, social, emotional, and moral development during our lifespan comes under
 - a. Developmental psychology
 - b. Community Psychology
 - c. School psychology
 - d. Clinical psychology
6. Learning is a change
 - a. In behavior
 - b. In Perception
 - c. In Emotions
 - d. In cognition
7. Learning takes place best when person is ready to learn denotes to the law of
 - a. Exercises
 - b. Readiness
 - c. Satisfaction
 - d. Maturation
8. Developmental stages includes the following stages
 - a. Infancy stage
 - b. Early childhood
 - c. Childhood
 - d. All the above
9. Psychology is
 - a. Scientific study of human Behavior.
 - b. Study of emotions.
 - c. Study of thoughts.
 - d. None of these
10. Study of a comparative and genetic perspective in animal behavior comes under
 - a. Bio-psychology
 - b. Neuro-psychology
 - c. Social psychology
 - d. Counseling Psychology
11. A strong stimuli will attract attention more quickly than a weak one called:
 - a. Intensity
 - b. Quantity
 - c. Size
 - d. All the above
12. In Classical conditioning theory of learning unconditional stimulus is associated with
 - a. Conditioned stimulus
 - b. False response
 - c. True response
 - d. None of the above
13. In Operant conditioning theory of learning subjects receive
 - a. Positive response
 - b. Negative response
 - c. Both A & B
 - d. None of these
14. Memory is related with the impressions of
 - a. Physical experience
 - b. Earning full impressions
 - c. Meaningful perception with particular impressions
 - d. None of these

Regn. No.....

Paper Code: BP- 104...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
BIOCHEMISTRY
PAPER FOUR

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Define Carbohydrates. Write detailed classification of Carbohydrates giving at least one example in every group. (1+3+3=7 Marks)
- Q. 2.** What is the normal fasting blood glucose level? Which are the hormones that influence blood glucose levels and how do they act? Write a note on Diabetes Mellitus. (1+3+3=7 marks)
- Q. 3.** How are fatty acids mobilized from the adipose tissue for β -oxidation? Outline the steps for complete β -oxidation of palmitic acid. How much energy is produced on complete oxidation of one molecule of palmitic acid? (2+3+2=7 Marks)
- Q. 4.** What are phospholipids? Draw the structure of a phospholipid. Describe at least 4 functions of phospholipids (1+2+4=7 Marks)
- Q. 5.** Describe the mode of action of enzymes. Explain the various factors affecting enzyme action (3+4=7 Marks)
- Q. 6.** Write short notes :
- a. Draw a well labeled diagram of the Watson-Crick model of DNA. (3.5 Marks)
 - b. Transport mechanisms across cell membrane (3.5 Marks)
- Q. 7.** Describe the structural organization of proteins and indicate the types of linkages/bonds necessary to maintain the various structural levels. (7 Marks)
- Q. 8.** What are isoenzymes? Which enzyme would you estimate in a patient suspected to be suffering from
- a. muscular atrophy
 - b. bone disease
 - c. myocardial infarction (1+2+2+2=7 marks)
- Q. 9.** Write shot notes on :
- a. Detoxification of ammonia and how is it removed from the body? (3.5 Marks)
 - b. Biochemical role and deficiency diseases of Vitamin D (3.5 Marks)

Regn. No.....

Paper Code: BP- 105...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
BASIC PHYSIOTHERAPY
PAPER FIVE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1. Define EMF and explain about magnetic lines of force
- Q. 2. Write short note on:
- a. Parallel bar
 - b. Pulleys
- Q. 3. Explain physiological and therapeutic effects of heat and cold.
- Q. 4. Define force. Explain different types of forces with diagram.
- Q. 5. Define physiotherapy. What are the various branches of physiotherapy? What precaution will you take before giving any electrical modality to patient?
- Q. 6. Write short notes:
- a. Group action of muscle
 - b. Step up transformer
- Q. 7. What is cryotherapy? What are its indications and contraindications? State difference methods of application of ice.
- Q. 8. Write short note on :
- a. Semi conductors
 - b. Thermonic valves
- Q. 9. Explain the muscle action in standing, sitting and supine position (fundamental position).

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
BASIC PHYSIOTHERAPY
PAPER FIVE (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. The Joule Law state that
 - a. $Q = I^2RT$
 - b. $Q = RT$
 - c. $Q = IRT$
 - d. $Q = IR$
2. Therapeutically eddy current is used to
 - a. Produce heat
 - b. Produce nerve stimulation
 - c. Apply drugs in iontophoresis
 - d. None
3. In Isotonic contraction, which one quality of the muscle remain same
 - a. Tone
 - b. Length
 - c. Force
 - d. Movement
4. High inductance can be incorporated into a conducting coil by
 - a. Using many turns of wire
 - b. Placing the turn closer
 - c. Winding the coil into iron core
 - d. All of the above
5. Electric valves work upon the principle of
 - a. Vantoff law
 - b. Thermionic emission
 - c. Joules law
 - d. Coulombs law
6. The weight is between the fulcrum and effort is called as
 - a. 2nd order lever
 - b. 3rd order lever
 - c. 1st order lever
 - d. None of the above
7. The line of gravity is a -----line through the centre of gravity
 - a. Transfer
 - b. Horizontal
 - c. Vertical
 - d. None of the above
8. If in spite of displacement of a body, the height and position of its COG remains same in relation to the base, the body is said to be in
 - a. Neutral equilibrium
 - b. Unstable equilibrium
 - c. Stable
 - d. None of the above
9. Which of the following is example of mechanical advantage
 - a. First order lever
 - b. Second order
 - c. Third order
 - d. None of the above
10. The ratio of stress and strain is termed as
 - a. Plasticity
 - b. Yield point
 - c. Tension
 - d. Elasticity
11. Dynamic friction is the friction observed during
 - a. Rest
 - b. Prior to movement
 - c. No change
 - d. Movement
12. Two forces of equal magnitude acting together in opposite direction and displaced from one another are called as
 - a. Shear force
 - b. Moment arm
 - c. Force couple
 - d. None of the above
13. Mechanical advantage the ratio of
 - a. Effort arm by resistance arm
 - b. Effort arm by weight arm
 - c. Effort arm by distance arm
 - d. None of the above
14. Levers and pulleys both work on the principle of
 - a. Moments
 - b. Friction
 - c. Power
 - d. Force

Regn. No.....

Paper Code: BP- 106...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
BASIC NURSING & COMPUTER APPLICATIONS
PAPER SIX

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 8 = 56)

BASIC NURSING, EMERGENCIES & FIRST AID

- Q. 1. Write the first Aid Management for Burns. (7)
- Q. 2. Write the first Aid Management for Drowning. (7)
- Q. 3. Write the first Aid Management for Cardiac Arrest (7)
- Q. 4. Write a short note on infection control Techniques Used in Hospital Setting. (7)

COMPUTER APPLICATION

- Q. 5. Conversions :
- a. $(10110110)_2 = (\quad)_{16}$ (3.5)
- b. $(101110)_2 = (\quad)_8$ (3.5)
- Q. 6. Write Short notes on :
- a. Describe the steps to create a new shortcut (MS WORD) on the Desktop? (3)
- b. Describe the following : (4)
- i. Dot-matrix printer
- ii. Laser printer
- Q. 7. Draw a block diagram to illustrate the basic organization of a computer system, and explain the functions of the various units. (7)
- Q. 8. Write Short notes on :
- a. Describe the Mail Merge operation in Microsoft Word. (3.5)
- b. What is a virus how to remove it from the system? (3.5)

Regn. No.....

Paper Code: BP- 106...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2015
BASIC NURSING & COMPUTER APPLICATIONS
PAPER SIX (MCQ)

Time allotted for MCQ- 15 minutes

(½ x 28= 14)

B : MCQs (Single response type):

Select the most appropriate answer and encircle the alphabet against it

BASIC NURSING

1. The most important point to be considered while managing a chemical poisoning case is NOT To _____ :
2. Excessive bleeding leads to _____ shock:
3. The normal blood pressure of an healthy adult is _____ mm of Hg: 1.5 cm
4. The position provided while tube feeding to the patient is _____
5. The primary aim of first aids is to _____
6. Blood in sputum is called _____
7. A medical term used for increase heart rate than normal is _____
8. Shock due to allergy is known as _____
9. Vital Signs are also known as _____
10. A decrease in body temperature below normal is known as _____
11. The normal respiratory rate ranges between _____
12. A Position provided to the patient with breathing difficulty is called _____
13. Rule of 9 (nine) is a method used to assess the patient with _____
14. Presence of blood in urine is known as _____

P.T.O....

COMPUTER APPLICATIONS

15. Which one of the following is not an input device?
- Keyboard
 - Memory
 - Monitor
 - Mouse
16. One of the following is an Application Software.
- DOS
 - Windows
 - Linux
 - MS Office
17. Following is the example of Toggle Case-
- TOGGLE CASE
 - toggle case
 - tOGGLE cASe
 - None
18. Which one of the following is DOS External Command?
- COPY
 - FORMAT
 - DEL
 - DIR
19. One of the following is Diagnostic Software.
- Window -XP
 - Window 98
 - Norton Antivirus
 - Unix
20. The number system that is the basis for computer operation as?
- Hexadecimal System
 - Octal System
 - ASCII
 - Binary System
21. A computer port is used to:
- Communicate with other computer peripherals
 - Download files from the web
 - Communicate with all hard drives
 - Connect computer together
22. ROM means
- Read Once Memory
 - Read Only Memory
 - Read On Memory
 - Read Other Memory
23. To create a capital letter, you must use which special key simultaneously with the letter key?
- Enter
 - Esc
 - Tab
 - Shift
24. ALU is:
- Arithmetic Logic Unit
 - Array Logic Unit
 - Application Logic Unit
 - None
25. In MS-DOS what command you will use to display directory structure
- DIR
 - CLS
 - TREE
 - none of the these
26. The batch file uses the extension.
- .BAT
 - .DOC
 - .PRG
 - .DOS
27. Which of the following is NOT a mouse technique commonly used in Windows?
- Lifting
 - Dragging
 - Double clicking
 - Clicking
28. An example of a volatile memory is
- CD-ROM
 - RAM
 - ROM
 - Hard-disk

Regn. No.....

Paper Code: BP- 101...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2016
ANATOMY
PAPER ONE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Describe the shoulder joint under the following headings: type of joint, bones forming the joint, ligaments, muscles producing the movements & applied anatomy.
- Q. 2.** Describe the boundaries and contents of popliteal fossa with its applied anatomy.
- Q. 3.** Write differences between an artery and a vein.
- Q. 4.** Describe the right atrium of human heart.
- Q. 5.** Discuss Femoral sheath.
- Q. 6.** Describe Lymphatic drainage of the stomach.
- Q. 7.** Describe Flexor retinaculum & Carpal Tunnel Syndrome.
- Q. 8.** Write a note on Circle of Willis.
- Q. 9.** Give an outline of Carotid sheath.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2016
ANATOMY
PAPER ONE (MCQ)

Time allotted for MCQ- 15 minutes

($\frac{1}{2} \times 14 = 7$)

B : MCQs (Single response type):

Select the most appropriate answer and encircle the alphabet against it

1. All are parts of the brainstem EXCEPT:
 - a. Pons
 - b. Diencephalon
 - c. Midbrain
 - d. Medulla Oblongata
2. Brodmann's number for visual area is:-
 - a. Area no.44,45
 - b. Area no.6
 - c. Area no. 17,18,19
 - d. Area no. 4
3. The muscle which depresses the mandible is:-
 - a. Masseter
 - b. Temporalis
 - c. Medial pterygoid
 - d. Lateral pterygoid
4. Patella is an example of:-
 - a. Long bone
 - b. Short bone
 - c. Sesamoid bone
 - d. Pneumatic bone
5. Supranuclear lesions of facial nerve will lead to paralysis of:-
 - a. Ipsilateral half of face
 - b. Contralateral half of face
 - c. Ipsilateral lower part of face
 - d. Contralateral lower part of face
6. The arrangement of structures in the hilum of Kidney from anterior to posterior is:-
 - a. Artery, Vein, Pelvis
 - b. Pelvis, Artery, Vein
 - c. Vein, Artery, Pelvis
 - d. Vein, Pelvis, Artery
7. All are features of large intestine EXCEPT:-
 - a. Taenia coli
 - b. Plicacircularis
 - c. Haustrations
 - d. Appendices epiploicae
8. Winging of the scapula occurs due to injury to:-
 - a. Axillary nerve
 - b. Median nerve
 - c. Musculocutaneous nerve
 - d. Nerve to serratus anterior
9. Which is not a hamstring muscle?
 - a. Semimembranosus
 - b. Semitendinosus
 - c. Short head of biceps femoris
 - d. Ischial head of adductor magnus
10. The angle of anteversion in the uterus is:-
 - a. 90 degrees
 - b. 120 degrees
 - c. 60 degrees
 - d. 140 degrees
11. The ligament attached to lesser curvature of stomach is:-
 - a. Lesser omentum
 - b. Greater omentum
 - c. Gastrosplenic ligament
 - d. None of the above
12. Foot drop is caused due to injury to:-
 - a. Femoral nerve
 - b. Obturator nerve
 - c. Deep peroneal nerve
 - d. Superior gluteal nerve
13. Facial artery is a branch of:-
 - a. Internal carotid artery
 - b. Subclavian artery
 - c. Maxillary artery
 - d. External carotid artery
14. Corpus callosum is made up of :-
 - a. Commissural fibres
 - b. Association fibres
 - c. Projection fibres
 - d. None of the above

Regn. No.....

Paper Code: BP- 102...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
PHYSIOLOGY
PAPER SECOND

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Define excitation-contraction coupling. Give the sequence of events involved in excitation-contraction coupling. (2+5=7)
- Q. 2.** Define cardiac cycle. Enumerate the mechanical events of cardiac cycle giving duration of each and draw labelled diagram showing left ventricular pressure-volume and ECG changes during cardiac cycle. (2+2+3=7)
- Q. 3.** Draw a spirogram indicating various lung volumes and capacities and define vital capacity (5+2=7)
- Q. 4.** Give the composition and functions of pancreatic juice. (3+4=7)
- Q. 5.** Differentiate between: (3.5 x 2=7)
- a. Two types of nephrons in the kidney
 - b. Graded potential and action potential
- Q. 6.** Give the origin, course and functions of pyramidal tract and draw a labelled diagram showing the pathway of pyramidal tract (4+3=7)
- Q. 7.** Draw labelled diagram to show feedback control of growth hormone secretion. Differentiate between pituitary and hypothyroid dwarf. (3+4=7)
- Q. 8.** List the various types of leucocytes found in the blood. Describe the major functions of each type. (3+4=7)
- Q. 9.** Write briefly about functions of hypothalamus (7)

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
PHYSIOLOGY
PAPER SECOND (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. The minimal strength of stimulus acting for a given duration that produces action potential is called _____ stimulus.
 - a. Chronaxie
 - b. Threshold
 - c. Sub-threshold
 - d. Supra-threshold
2. The value of which of the following is considered as unit of excitability:
 - a. Refractory period
 - b. Utilization time
 - c. Chronaxie
 - d. Rheobase
3. The major anion in intracellular fluid is:
 - a. Protein
 - b. Chloride
 - c. Bicarbonate
 - d. Phosphate
4. The normal blood pH is:
 - a. 7.20
 - b. 7.30
 - c. 7.40
 - d. 7.50
5. The total leucocyte count in an adult person is:
 - a. 20000/cu.mm
 - b. 15000-18000/cu.mm
 - c. 11000-15000/cu.mm
 - d. 4000-11000/cu.mm
6. The motor unit is:
 - a. Muscle fiber and neurons supplying it
 - b. Ventral horn cells along with its motor nerve
 - c. Single motor neuron and all the muscle fiber it supplies
 - d. Single muscle fiber with its nerve
7. Deglutition refers to:
 - a. Chewing the food into smaller particles
 - b. Swallowing the food
 - c. Degradation of food by digestive enzymes
 - d. Transport of nutrients from small intestine into circulation
8. All the following are synthesized in the liver
Except:
 - a. Albumin
 - b. Immunoglobulins
 - c. Urea
 - d. Cholesterol
9. In systemic circulation the blood is pumped from:
 - a. Right atrium
 - b. Right ventricle
 - c. Left atrium
 - d. Left ventricle
10. The exchange vessels are the:
 - a. Arterioles
 - b. Veins and venules
 - c. Capillaries
 - d. Aorta
11. Inspiratory capacity is:
 - a. TV+ERV
 - b. TV+IRV
 - c. ERV+RV
 - d. VC+RV
12. Slow pain is carried by:
 - a. A α fiber
 - b. B fiber
 - c. C fiber
 - d. A δ fiber
13. The tract which carries proprioceptive sensation is:
 - a. Spinotectal
 - b. Lateral spinothalamic
 - c. Dorsal column
 - d. Anterior spinothalamic
14. Delta cells of pancreas secrete:
 - a. Insulin
 - b. Glucagon
 - c. Somatostatin
 - d. Pancreatic polypeptide

Regn. No.....

Paper Code: BP- 103...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
CLINICAL PSYCHOLOGY
PAPER THREE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Appreciate the value of psychology in daily life to help you understand yourself and others better.
- Q. 2.** Describe various endocrine glands and the hormones secreted by them. How does the endocrine system affect our behavior?
- Q. 3.** What do you understand about the nature of human motivation?
- Q. 4.** Describe the nature of emotional expression, and components of emotions.
- Q. 5.** Define attitude and explain its characteristics.
- Q. 6.** What do you understand about the nature of conflict and causes of conflict?
- Q. 7.** Briefly describe various defense mechanisms used in our daily life.
- Q. 8.** What do you understand about the nature, determinants and types of attention?
- Q. 9.** How would you characterize and define intelligence?

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2016
CLINICAL PSYCHOLOGY
PAPER THREE (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Psychology has been defined a:
 - a. The systematic study of behavior and mental processes.
 - b. The systematic study of body
 - c. The systematic study of society
 - d. The systematic study of soul.
2. Human behavior involves the:
 - a. Physical process
 - b. Mental Process
 - c. Body-mind interaction
 - d. Social interactions
3. A need is:
 - a. an organic state of deficiency or excess.
 - b. a state of tension and activity
 - c. a goal
 - d. None of these
4. 'Felt emotion and bodily responses are independent Events'. This concept was given by:
 - a. Cannon Bard's Theory
 - b. James-Lange Theory
 - c. Schachter-Singer Theory
 - d. None of these
5. While developing attitude, we are influenced by the followings:
 - a. Our social environment and cultural norms
 - b. Our motives and own reflection
 - c. Both a and b
 - d. None of these
6. Paired Comparison Method (to assess attitude) was developed by:
 - a. Thurstone
 - b. Likert
 - c. Louis Guttman
 - d. None of These
7. When two positive goals are desired simultaneously but the simultaneous attainment is impossible, called:
 - a. Approach-Approach Conflict
 - b. Approach-Avoidance conflict
 - c. Avoidance-Avoidance Conflict
 - d. None of these
8. The unconscious worry that we will lose control of the id's urges, is called:
 - a. Depression
 - b. Anxiety
 - c. Neurotic anxiety
 - d. None of the above
9. Blocking out thoughts about unpleasant things or experiences are called:
 - a. Repression
 - b. Rationalization
 - c. Denial
 - d. Projection
10. Sensory perception that causes a false or distorted impression is called :
 - a. Delusion
 - b. Hallucination
 - c. Illusion
 - d. None of the above
11. Id, ego, and superego is called:
 - a. Learning
 - b. Perception
 - c. Emotions
 - d. Personality Structure
12. The Oral Stage, The Anal Stage, The Phallic or Oedipal Stage, A Latency Stage, The Genital stage are the stages of:
 - a. Psychosexual theory of personality
 - b. Cognitive theories of personality
 - c. Psychosocial theory of personality
 - d. None of the above
13. Behavior directed towards gaining a reward or avoiding a punishment are examples of:
 - a. Classical conditioning
 - b. Operant Conditioning
 - c. Both A & B
 - d. None of these
14. Motivation refers to the desire of a person to meet standards of excellence is called :
 - a. Need for Achievement
 - b. Need for Affiliation
 - c. Need for aggressiveness
 - d. Need for power and status

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
BIOCHEMISTRY
PAPER FOUR

[Time allotted: Three hours]**[Max Marks: 70]****Note:** Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:**(7 x 9 = 63)**

- Q. 1.** Explain the term transamination. What is its metabolic importance? Give details of the cycle by which ammonia is detoxified in the liver. (1+1+5=7)
- Q. 2.** Draw a well labelled diagram of Watson and Crick model of DNA showing its salient features. (7)
- Q. 3.** What are enzymes? Write their mode of action. Classify enzymes as per IUBMB giving one example of each class. (1+3+3=7)
- Q. 4.** What is gluconeogenesis? Write down the sequence of reactions of the process from various substrates. What is the purpose served by the process? (1+4+2=7)
- Q. 5.** What are lipoproteins? List their types and function. Which one of them is implicated in the causation of atherosclerosis? (1+5+1=7)
- Q. 6.** Draw a labelled diagram of Fluid Mosaic model. What are the various transport mechanisms involved in the transport across the cell membrane? (3+4=7)
- Q. 7.** Describe sources, biochemical functions, daily requirement, and deficiency manifestations of vitamin C. (7)
- Q. 8.** Define carbohydrates. Write down their classification giving 2 examples in every group. (2+5=7)
- Q. 9.** What are phospholipids? Draw the structure of a phospholipid. Describe any 4 functions of phospholipids. (1+2+4=7)

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
BIOCHEMISTRY
PAPER FOUR (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Phospholipid acting as surfactant is:
 - a. Phosphatidyl inositol
 - b. Cephalin
 - c. Dipalmitoyl lecithin
 - d. Phosphatidyl serine
2. Regulatory enzyme for cholesterol biosynthesis is:
 - a. HMG CoA reductase
 - b. HMG CoA synthase
 - c. HMG CoA lyase
 - d. HMG CoA carbokylase
3. Which bond is present in primary structure of proteins?
 - a. Ester bonds
 - b. Peptide bonds
 - c. Hydrogen bonds
 - d. Ionic bonds
4. The major storage form of lipid in our body is:
 - a. Cholesterol
 - b. Triacylglycerol
 - c. Phospholipid
 - d. Lipoproteins
5. Lactate formed in muscles can be utilized through:
 - a. Urea cycle
 - b. Cori's cycle
 - c. Glucose alanine cycle
 - d. Citric acid cycle
6. Mutarotation refers to a change in:
 - a. pH
 - b. Optical rotation
 - c. Conductance
 - d. Chemical properties
7. For post prandial blood sugar estimation the blood sample is taken:
 - a. Immediately after giving 75 g glucose
 - b. 2 hr after giving 75 g glucose
 - c. 2 hr before giving 75 g glucose
 - d. Anytime
8. Respiratory chain is located in:
 - a. Inter mitochondrial space
 - b. Inner mitochondrial membrane
 - c. Mitochondrial matrix
 - d. Outer mitochondrial membrane
9. The isoenzymes CK-MB is specifically increased in patients with:
 - a. Skeletal muscle disease
 - b. Infective hepatitis
 - c. Acute pancreatitis
 - d. Acute myocardial infarction
10. Biological lipid layers do not contain:
 - a. Cholesterol
 - b. Glycolipid
 - c. Phospholipid
 - d. Triacylglyceride
11. All are substrates for gluconeogenesis EXCEPT:
 - a. Palmitic acid
 - b. Lactic acid
 - c. Glycerol
 - d. Alanine
12. HMP shunt provides:
 - a. Ribose 5 phosphate
 - b. NADPH + H⁺
 - c. ATP
 - d. Both A&B
13. Enzyme lipoprotein lipase is activated by:
 - a. Apo A-II
 - b. Apo B-48
 - c. Apo C-II
 - d. Apo E
14. Mechanism of action of steroid hormones is through:
 - a. Second messenger
 - b. Tyrosine kinase
 - c. Intracellular receptors
 - d. Cell surface receptors

Regn. No.....

Paper Code: BP- 105...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
BASIC PHYSIOTHERAPY
PAPER FIVE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions
Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Describe properties of magnet.
- Q. 2.** Describe transformers, its formation, functions and types.
- Q. 3.** Describe Diode and Triode valves.
- Q. 4.** Describe equilibrium, its types with suitable examples.
- Q. 5.** Describe Axes and Planes with examples.
- Q. 6.** Describe 3rd order lever with an example of human body.
- Q. 7.** Describe types of muscle contraction and muscle work.
- Q. 8.** Describe effects and cases of sitting and hanging fundamental positions.
- Q. 9.** Describe method of application of cryotherapy.

Regn. No.....

Paper Code: BP- 105...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016

BASIC PHYSIOTHERAPY

PAPER FIVE (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Isotopes of an element has:
 - a. Same physical properties
 - b. Same physical and chemical properties
 - c. Same chemical properties
 - d. Same physical but different chemical properties
2. An isotope is an atom of an element :
 - a. With same atomic number
 - b. With same atomic mass
 - c. With different atomic number
 - d. Equal number of protons and neutrons
3. A transistor is the combination of :
 - a. Two junction diode
 - b. P- types semiconductor alone
 - c. 3 junctions diode
 - d. N- types semi conductors alone
4. Capacitance of a conductor is:
 - a. Ratio of the charge to its potential
 - b. Product of its charges and resistance
 - c. Ratio of its potential to the charge
 - d. Product of charges and its potential
5. The transistor will conduct only when its emitter base junction is:
 - a. Grounded
 - b. Forward biased
 - c. Reverse biased
 - d. Biased with high potential
6. The inductance of a conductor in which an EMF of 1 volt is induced by a current of 1 ampere per second is:
 - a. 0.5 Henry
 - b. 1 watt
 - c. 1 Henry
 - d. 1 farad
7. The ability of an object to hold an electrical charge is known as:
 - a. Potential of the object
 - b. Electromotive force
 - c. Capacitance of the object
 - d. Repelling power of the object.
8. The unit of the repelling power existing between like charged particles is :
 - a. Watt
 - b. Henry
 - c. Farad
 - d. Volt
9. The EMF which produces a current of 1 ampere when applied to a conductor of resistance of 1 ohm is known as:
 - a. 1 volt
 - b. 1 coulomb
 - c. 1 watt
 - d. 10 volt
10. The rate of flow of one coulomb of electrons per second is :
 - a. 1 Ampere
 - b. 1 Milli Ampere
 - c. 10^3 Ampere
 - d. 10^6 Ampere
11. One ampere of current when flows through 2 straight parallel wires placed 1 meter apart in a vacuum produces between them:
 - a. A force of 10^{-7} newton per meter length of wire
 - b. Force of 2×10^7 newton per meter length of wire
 - c. Force of 2×10^{-7} newton per meter length of wire
 - d. Force of 10^7 newton per meter length of wire
12. The quantity of electricity which passes any given point when a current of 1 amp flows for a second is:
 - a. 1 coulomb
 - b. 10^3 coulomb
 - c. 6.26×10^{18} coulomb
 - d. 6.26×10^{-18} coulomb
13. When 1 coulomb of electricity is used to charge a body to 1 volt, the capacity of the object is?
 - a. 10^{-6} farad
 - b. 1 micro farad
 - c. 1 farad
 - d. 1 pico farad
14. "For electro magnetic waves to have an effect on the tissues, they must be absorbed" which law is this?
 - a. Snell's law
 - b. Inverse square law
 - c. Cosine law
 - d. Grothus law

Regn. No.....

Paper Code: BP- 106...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
BASIC NURSING & COMPUTER APPLICATIONS
PAPER SIX

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 8 = 56)

BASIC NURSING, EMERGENCIES & FIRST AID

- Q. 1. Write about infection control methods used in health care setting.
- Q. 2. Write first aid management for the Drowning
- Q. 3. Write first aid management for the Shock
- Q. 4. Write first aid management for the Burns

COMPUTER APPLICATION

- Q. 5. Conversions :
 - a. $(11011001)_2 = (\quad)_{16}$ (3.5)
 - b. $(111001)_2 = (\quad)_8$ (3.5)
- Q. 6. Describe the following :
 - a. Describe the steps to create a new shortcut (MS EXCEL) on the Desktop? (3)
 - b. Distinguish between impact and non-impact printer. (4)
- Q. 7. Draw a block diagram to illustrate the basic organization of a computer system, and explain the functions of the various units. (7)
- Q. 8. Write short notes on :
 - a. Mail Merge in Microsoft Word. (3.5)
 - b. Permanent deletion of files and folders in Window Operation System. (3.5)

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2016
BASIC NURSING & COMPUTER APPLICATIONS
PAPER SIX

Time allotted 25 minutes

B : Fill in the blanks & MCQs (Single response type):

(½ x 28= 14)

Select the most appropriate answer and encircle the alphabet against it

BASIC NURSING

1. Patients those who are not able to take food by mouth are given nourishment with.....feeding.
2. Cleaning of healthy wound is done from..... area.
3. The carotid pulse is assessed in adults while performing.....for 8-10 seconds.
4. All three layers of skin damage occur in.....burns.
5. The depth of chest compression in CPR is.....in cm.
6. Normal colour of urine is.....
7. The height of enema cane for normal enema, from the anus is
8. PRIMARY aim of first aider is to.....
9. A Medical term used for increased heart rate than normal is.....
10. Enema is given inposition.
11. Normal temperature of soap & water enema solution is.....
12. Bed pan should be used for those patients who are.....
13. A type of shock occurs due to excessive fluid loss from the body is.....
14. Difficulty in breathing is known as.....

COMPUTER APPLICATIONS

15. Which of the following is a communication device?
 - a. Printer
 - b. Monitor
 - c. Keyboard
 - d. Modem
16. One of the following is an Application Software.
 - a. DOS
 - b. Windows
 - c. Linux
 - d. MS Office
17. Which of the following file extensions indicate only graphics files?
 - a. BMP and DOC
 - b. JPEG and TXT
 - c. TXT and STK
 - d. BMP & GIF
18. What type of software is LINUX?
 - a. Compiler
 - b. Operating System
 - c. Utility Software
 - d. Application Software
19. Which software would you use to teach students in Computer classes?
 - a. Spreadsheet
 - b. Database
 - c. Word processing
 - d. Power Point
20. The number system that is the basis for computer operation as?
 - a. Hexadecimal System
 - b. Octal System
 - c. ASCII
 - d. Binary System
21. Which of the following is a tool to send letter to many recipients in MS-Word?
 - a. What-if
 - b. Mail merge
 - c. Goal seeking
 - d. Sorting
22. ROM means :
 - a. Read Once Memory
 - b. Read Only Memory
 - c. Read On Memory
 - d. Read Other Memory
23. The DOS command to retrieve the properties of a file is:
 - a. FORMAT
 - b. DOSKEY
 - c. ATTRIB
 - d. DIR
24. ALU is:
 - a. Arithmetic Logic Unit
 - b. Array Logic Unit
 - c. Application Logic Unit
 - d. None
25. In MS-Dos what command you will use to display directory structure:
 - a. DIR
 - b. CLS
 - c. TREE
 - d. None of the these
26. The function ROUND(1343.45,-2) returns:
 - a. 1343
 - b. -1343
 - c. -1300
 - d. 1300
27. A table is a grid of rows and columns containing boxes of:
 - a. Text or graphics
 - b. Only text
 - c. Only graphics
 - d. None
28. The background screen and main area of Windows where you can open and manage files and programs is known as:
 - a. Background
 - b. Desktop
 - c. Wall paper
 - d. None

Regn. No.....

Paper Code: BPT- 101...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2017

**ANATOMY
PAPER ONE**

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1. Describe the hip joint under the following headings :- type of joint, bones forming the joint, ligaments, muscles producing the movements & applied.
- Q. 2. Describe the formation and branches of the brachial plexus with its applied anatomy.
- Q. 3. Write difference between skeletal muscle, smooth muscle & cardiac muscle.
- Q. 4. Describe the bronchopulmonary segments with their applied anatomy.
- Q. 5. Discuss about muscles of mastication.
- Q. 6. Describe lymphatic drainage of uterus & cervix.
- Q. 7. Write short notes on cubital fossa.
- Q. 8. Describe cerebrospinal fluid circulation & its applied.
- Q. 9. Write on Popliteal fossa.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY – 2017**ANATOMY****PAPER ONE (MCQ)****Time allotted for MCQ- 15 minutes****B : MCQs (Single response type):****(½ x 14= 7)**

Select the most appropriate answer and encircle the alphabet against it.

1. Spinal cord in adults extends upto:
 - a. Lower border of L1
 - b. Upper border of L1
 - c. Lower border of L3
 - d. Upper border of L3
2. Brodmann's number for Broca's motor speech area is:
 - a. Area no. – 44,45
 - b. Area no. – 6
 - c. Area no. – 17
 - d. Area no. – 4
3. Middle ear communicates with the pharynx via:
 - a. Oval window
 - b. Auditory tube
 - c. Internal ear
 - d. Round window
4. Maxilla is an example of:
 - a. Long bone
 - b. Short bone
 - c. Sesamoid bone
 - d. Pneumatic bone
5. All intrinsic muscles of tongue are supplied by:
 - a. 7th cranial nerve
 - b. 8th cranial nerve
 - c. 9th cranial nerve
 - d. 12th cranial nerve
6. Portal vein is formed behind the:
 - a. Head of pancreas
 - b. Neck of pancreas
 - c. Body of pancreas
 - d. Tail of pancreas
7. Stomach bed is formed by all except:
 - a. Pancreas
 - b. Right kidney
 - c. Left suprarenal gland
 - d. Splenic artery
8. Corpus callosum connects the:
 - a. Two hemispheres of cerebellum
 - b. Two hemispheres of cerebral cortex
 - c. Cerebral cortex to brain stem
 - d. Brain stem to spinal cord
9. Cerebellum controls the:
 - a. Proprioception
 - b. Co-ordination of motor movements of opposite side
 - c. Body sensations
 - d. Co-ordination of motor movements of same side
10. Brodmann's number for primary motor area is:
 - a. Area no. - 44
 - b. Area no - 6
 - c. Area no. - 4
 - d. Area no. - 17
11. Perineal body is formed by:
 - a. 4 paired & 2 unpaired muscles
 - b. 4 paired & 4 unpaired muscles
 - c. 2 paired & 2 unpaired muscles
 - d. 2 paired & 4 unpaired muscles
12. Nerve supply of anterior abdominal wall is:
 - a. Upper 6 intercostal nerves
 - b. Lower 6 intercostal nerves
 - c. Lumbosacral trunk
 - d. Sacral plexus
13. 'No' movements occur at:
 - a. Atlanto-occipital joint
 - b. Atlanto-axial joint
 - c. Joint between 6th & 7th cervical vertebra
 - d. Joint between 3rd & 4th cervical vertebra
14. In female, pelvic floor is pierced by:
 - a. Urinary bladder, vagina, rectum
 - b. Urinary bladder, rectum
 - c. Urinary bladder, vagina
 - d. Vagina, rectum

B.P.T. FIRST YEAR EXAMINATION
JUNE/JULY - 2017
PHYSIOLOGY

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1. Describe the structure of neuromuscular junction with the help of labelled diagram and explain formation of end plate potential. (3+4=7)
- Q. 2. Enumerate the non-respiratory functions of lung. Define surfactant and give its composition & functions (3+4=7)
- Q. 3. Trace the ascending tracts in TS of spinal cord, also illustrating the sensation they carry. What is the sensory loss in complete transection of spinal cord at the level of T 10 vertebra? (5+2=7)
- Q. 4. Name the receptors of vision. Trace the visual pathway and write briefly on errors of refraction. (2+3+2=7)
- Q. 5. Draw a labelled diagram of juxtaglomerular apparatus? Discuss the role of it in urine formation. (3+4=7)
- Q. 6. Define blood pressure and its components. Discuss the methods of measurement of blood pressure. (3+4=7)
- Q. 7. Discuss the hormones regulating the calcium & phosphate metabolism. (7)
- Q. 8. Define hemostasis. Discuss the formation of permanent hemostatic plug. (2+5=7)
- Q. 9. Draw the microscopic structure of the skeletal muscle and discuss the various proteins involved in its contraction. (3+4=7)

B.P.T. FIRST YEAR EXAMINATION
JUNE/JULY - 2017
PHYSIOLOGY
(MCQ)

Time allotted for MCQ - 15 minutes

B : MCQs (Single response type):

($\frac{1}{2} \times 14 = 7$)

Select the most appropriate answer and encircle the alphabet against it.

1. HCl is produced from:
 - a. G cells
 - b. Parietal cells
 - c. Peptic cells
 - d. Mucus cells
2. Muscles of inspiration are all except:
 - a. Diaphragm
 - b. Internal intercostal
 - c. Sternocleidomastoid
 - d. External intercostal
3. Most important plasma protein for viscosity of blood is:
 - a. Albumin
 - b. Globulin
 - c. Prothrombin
 - d. Fibrinogen
4. Amount of air remaining in conducting zone after normal inspiration is:
 - a. Residual capacity
 - b. Dead space
 - c. Residual volume
 - d. Functional residual capacity
5. ICF comprises of :
 - a. Blood
 - b. Fluid in the cell
 - c. Lymph
 - d. Fluid in the cavity
6. Second heart sound is produced due to closure of:
 - a. Semilunar valves
 - b. Mitral valves
 - c. Tricuspid valves
 - d. A-V valves
7. Which of these is called as resistance vessels?
 - a. Arterioles
 - b. Vein
 - c. Capillaries
 - d. Venules
8. Maintenance of constant internal environment is called:
 - a. Hemostasis
 - b. Hematemesis
 - c. Homeostasis
 - d. Hypotension
9. All are the hormones for calcium homeostasis except:
 - a. Calcitonin
 - b. PTH
 - c. Glucagon
 - d. Vit D3
10. Windkessel effect is shown by:
 - a. Venules
 - b. Capillaries
 - c. Arteries & aorta
 - d. Vena-cava
11. All are responses to parasympathetic system stimulation except:
 - a. Vasodilation
 - b. Bradycardia
 - c. Increased gut motility
 - d. Pupil dilation
12. Receptors for hearing is present in:
 - a. Cochlea
 - b. Semicircular canal
 - c. Utricle
 - d. Saccule
13. Effective filtration pressure depends on all except:
 - a. Hydrostatic pressure
 - b. Oncotic pressure
 - c. Interstitial pressure
 - d. Bowman capsular pressure
14. Fast pain is carried by:
 - a. A α fiber
 - b. B fiber
 - c. C fiber
 - d. A δ fiber

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017
CLINICAL PSYCHOLOGY

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1. What do you understand by homeostasis?
- Q. 2. Describe the conscious, sub conscious and unconscious levels of mind.
- Q. 3. What is operant conditioning?
- Q. 4. What is social or acquired motivation? Write down the types of social motivation
- Q. 5. Discuss the use of motivation cycle in physiotherapy practice.
- Q. 6. Define learning with its appropriate examples.
- Q. 7. Explain about the acquired motives with suitable examples.
- Q. 8. Discuss the use of learning principles in physiotherapy practice.
- Q. 9. Define concept of motivation with suitable examples.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017
CLINICAL PSYCHOLOGY
(MCQ)

Time allotted for MCQ - 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and **encircle** the alphabet against it

1. Study of physical system and behavior comes under :
 - a. Educational psychology
 - b. Neuropsychology
 - c. Social psychology
 - d. Counseling psychology
2. Counseling psychologists assess and treat people with:
 - a. Neurological problems
 - b. Hormonal problems
 - c. Psychological problems
 - d. Social problems
3. If by constant, effort learner finds the way to reach to the goal, it is called:
 - a. Imitation
 - b. Trial and error method
 - c. Insight
 - d. None of these
4. Law of readiness, law of exercise, and law of satisfaction is related with:
 - a. Motivation
 - b. Emotion
 - c. Learning
 - d. None of these
5. Study of intellectual, social, emotional, and moral development during our lifespan comes under :
 - a. Developmental psychology
 - b. Community psychology
 - c. School psychology
 - d. Clinical psychology
6. Learning is a change in:
 - a. Behavior
 - b. Perception
 - c. Emotions
 - d. Cognition
7. "Learning takes place best when person is ready to learn" denotes to the law of:
 - a. Exercises
 - b. Readiness
 - c. Satisfaction
 - d. Maturation
8. Developmental stages includes the following stages:
 - a. Infancy stage
 - b. Early childhood
 - c. Childhood
 - d. All the above
9. Psychology is :
 - a. Scientific study of human behavior.
 - b. Study of emotions.
 - c. Study of thoughts.
 - d. None of these
10. Study of a comparative and genetic perspective in animal behavior comes under :
 - a. Bio-psychology
 - b. Neuro-psychology
 - c. Social psychology
 - d. Counseling psychology
11. A relatively permanent change in behavior is called :
 - a. Learning
 - b. Perception
 - c. Emotions
 - d. Rehabilitation
12. In classical conditioning theory of learning unconditional stimulus is associated with :
 - a. Conditioned stimulus
 - b. False response
 - c. True response
 - d. None of the above
13. In operant conditioning theory of learning, subject receives:
 - a. Positive response
 - b. Negative response
 - c. Both A & B
 - d. None of these
14. Memory is related with the impressions of:
 - a. Physical experience
 - b. Meaning full impressions
 - c. Meaningful perception with particular impressions
 - d. None of the above

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017
BIOCHEMISTRY

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1.** Define carbohydrates. Write detailed classification of carbohydrates giving at least one example in every group. (1+3+3=7 Marks)
- Q. 2.** What are phospholipids? Draw the structure of a phospholipid. Describe at least 4 functions of phospholipids (1+2+4=7 marks)
- Q. 3.** Describe the mode of action of enzymes. Explain the various factors affecting enzyme action. (3+4=7 marks)
- Q. 4.** Answer the following:
a. Draw a well labeled diagram of the Watson-Crick model of DNA.
b. Transport mechanisms across cell membrane. (3.5 + 3.5=7 marks)
- Q. 5.** Describe the structural organization of proteins and indicate the types of linkages/bonds necessary to maintain the various structural levels. (4+3=7 marks)
- Q. 6.** What are isoenzymes? Which enzyme would you estimate in a patient suspected to be suffering from:
a. Muscular atrophy
b. Bone disease
c. Myocardial infarction (1+2+2+2=7 marks)
- Q. 7.** What is the normal fasting blood glucose level? Which are the hormones that influence blood glucose levels and how do they act. Write a note on diabetes mellitus. (1+3+3=7 marks)
- Q. 8.** How are fatty acids mobilized from the adipose tissue for β -oxidation? Outline the steps for complete β -oxidation of palmitic acid. How much energy is produced on complete oxidation of one molecule of palmitic acid? (2+3+2=7 marks)
- Q. 9.** Write short notes on:
a. Detoxification of ammonia and how it is removed from the body?
b. Biochemical role and deficiency diseases of Vitamin D (3.5+3.5=7 marks)

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017
BIOCHEMISTRY

(MCQ)

Time allotted for MCQ - 15 minutes

B : MCQs (Single response type):

(½ x 14 = 7)

Select the most appropriate answer and encircle the alphabet against it:

1. In proteins, the α -helix and β -pleated sheet are examples of:
 - a. Primary structure
 - b. Secondary structure
 - c. Tertiary structure
 - d. Quaternary structure
2. Biological lipid bilayers do not contain the following :
 - a. Cholesterol
 - b. Glycolipids
 - c. Phospholipids
 - d. Triglycerides
3. The isoenzymes CK(MB) is specifically increased in blood of patients who have:
 - a. Skeletal muscle disease
 - b. Infective hepatitis
 - c. Acute pancreatitis
 - d. Recent myocardial infarction
4. Which one of the following is a correct statement?
 - a. All enzymes are non-proteins
 - b. All proteins are enzymes
 - c. Most enzymes are proteins
 - d. Most non-enzymes are proteins
5. All of the following are essential amino acids except:
 - a. Alanine
 - b. Isoleucine
 - c. Leucine
 - d. Phenylalanine
6. All of the following are substrates for gluconeogenesis except:
 - a. Palmitic acid
 - b. Lactic acid
 - c. Glycerol
 - d. Alanine
7. In cellulose glucose units are linked by:
 - a. α - 1 $\rightarrow$ 4 linkages
 - b. α - 1 $\rightarrow$ 6 linkages
 - c. β - 1 $\rightarrow$ 4 linkages
 - d. β - 1 $\rightarrow$ 6 linkages
8. Which of the following indicates the degree of rancidity of an oil or fat?
 - a. Saponification number
 - b. Acid number
 - c. Iodine number
 - d. Reichert Meissl number
9. Ceramide is not a constituent of:
 - a. Cerebroside
 - b. Sphingomyelin
 - c. Plasmalogen
 - d. Ganglioside
10. The principle source of glucose after an overnight fast is:
 - a. Gluconeogenesis
 - b. Glycolysis
 - c. Glycogenolysis
 - d. HMP pathway
11. The two DNA strands are held together by:
 - a. Covalent bonds
 - b. Ionic interactions
 - c. Hydrogen bonds
 - d. Van der Waals forces
12. In von-Gierkes disease glucose-6-phosphatase is not present in:
 - a. Liver
 - b. Kidneys
 - c. Adipose tissue
 - d. Muscles
13. All are derived from tyrosine except:
 - a. Thyroxine
 - b. Epinephrine
 - c. Melanin
 - d. Serotonin
14. The major function of the chylomicrons is to transport:
 - a. Exogenous TAG from the intestines
 - b. Endogenous TAG from the liver
 - c. Cholesterol from the liver
 - d. Cholesterol from the extra hepatic tissue

Regn. No.....

Paper Code: BPT- 105...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017
BASIC PHYSIOTHERAPY

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1. Describe molecular theory of magnetism.
- Q. 2. Describe electro-magnetic induction and its types.
- Q. 3. Describe capacitor, its types and capacitance of a capacitor.
- Q. 4. Describe gravity, centre of gravity and line of gravity.
- Q. 5. Describe lever and its types.
- Q. 6. Describe pulleys and its types.
- Q. 7. Describe group action of different muscle group with examples.
- Q. 8. Describe any two fundamental starting position.
- Q. 9. Describe physiological effects of heat.

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017

BASIC PHYSIOTHERAPY

PAPER FIVE (MCQ)

Time allotted for MCQ - 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. The ability of a conductor to have an electric current induced in it is known as:
 - a. Impedance
 - b. Potential difference
 - c. Inductance
 - d. Electromotive force
2. The inductance of a conductor in which a current of 1 amp. Induces an EMF of 1 volt is:
 - a. 1 Henry
 - b. 1 Farad
 - c. 1 Newton
 - d. 1 Watt
3. The unit of energy is:
 - a. Calorie
 - b. Newton
 - c. Joule
 - d. Watt
4. The rate of flow of 6.26×10^{18} electrons per second is:
 - a. Coulomb
 - b. 1 Volt
 - c. 1 Ampere
 - d. 1 Joule
5. 1 coulomb of charge is equivalent to:
 - a. 6.26×10^{18} electrons
 - b. 62.6×10^{18} electrons
 - c. 626×10^{18} electrons
 - d. 2.66×10^{18} electrons
6. In a closed circuit when the temperature of the conductor is increased:
 - a. The flow of current is increased
 - b. The flow of current is not increased
 - c. The flow of current is decreased
 - d. The resistance of the conductor is reduced
7. The heat energy developed in a current carrying conductor is given by the:
 - a. Ohm's law
 - b. Joule's law
 - c. Grothus law
 - d. Newton's law
8. Tungsten when subjected to high level of heating:
 - a. Metal glows blue and then red
 - b. White and then becomes red
 - c. Only heat is felt
 - d. Glows red and then white
9. The direction of the self induced EMF:
 - a. Is in the same direction of the force producing
 - b. Is at right angle to the force producing it
 - c. Is in opposite direction to the force producing
 - d. None of the above
10. Functions of a choke coil in a circuit is to:
 - a. Induce a self induced EMF
 - b. To provide a high impedance to the flow of low frequency current
 - c. To rectify an AC to DC
 - d. All of the above
11. The unit of capacitance is:
 - a. Henry
 - b. Coulomb
 - c. Ampere
 - d. Farad
12. This is the best conductor:
 - a. Copper
 - b. Earth
 - c. Aluminum
 - d. Mercury
13. The electro motive force is:
 - a. One kind of force
 - b. Amount of work done
 - c. One kind of torque
 - d. Amount of power developed
14. According to the principle of capacitor capacitance is increased by:
 - a. Increasing the charge
 - b. Decreasing the charge
 - c. Decreasing the potential
 - d. Increasing the potential

Regn. No.....

Paper Code: BPT- 106...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017
BASIC NURSING & COMPUTER APPLICATIONS

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 8 = 56)

BASIC NURSING EMERGENCIES & FIRST AID

- Q. 1.** Write short notes on: (02)
a. Define burns. (02)
b. Classify the degrees of burn. (02)
c. Write the first aid management of 2° burns. (03)
- Q. 2.** Write about the following : (02)
a. Types of bandages. (02)
b. Purposes of applying bandages. (02)
c. List the rules of applying bandages. (03)
- Q. 3.** Write about the following : (02)
a. Define road traffic accidents. (02)
b. Enlist different causes of RTA. (02)
c. Write the first aid management of RTA. (03)
- Q. 4.** Answer the following : (02)
a. Define cardiac arrest. (02)
b. Define Artificial Ventilation. (02)
c. Write first aid management of cardiac arrest. (03)

COMPUTER APPLICATIONS

- Q. 5.** Discuss the generation and classification of computer.
- Q. 6.** What is operating system? What are the different types of operating system?
- Q. 7.** List out the five output device and explain the purpose of each device.
- Q. 8.** What do you understand by Main Memory? What are the differences between ROM and RAM?

Regn. No.....

Paper Code: BPT- 106...

B.P.T. FIRST YEAR EXAMINATION, JUNE/JULY - 2017
BASIC NURSING & COMPUTER APPLICATIONS
(MCQ)

Time allotted: 30 minutes

B : Fill in the blanks & MCQs (Single response type):

(½ x 28= 14)

For MCQs select the most appropriate answer and encircle the alphabet against it

BASIC NURSING

Fill in the Blanks :-

1. The normal body temperature of an healthy adult is.....degree Fahrenheit.
2. A condition of abnormally high BP is known as
3. A technical term that indicates any variation from normal rhythm is... ..
4. Total cessation of breathing is known as.....
5. Bluish discolouration of skin due to lack of oxygen is
6. Normal colour of urine is..... colour.
7. A process of sterilization of article by steam under pressure is known as... ..
8. Normal temperature of soap & water enema solution is.....
9. The entry and development of disease producing agent in the body is called.....
10. Artificial method of giving fluid and nutrient from nose through a tube is
11. The depth of chest compression in CPR is.....in cm.
12. The introduction of a tube through urethra in urinary bladder is
13. Respect every one's individuality is the basic principle of.....
14. Initial care given to the helpless person is known as.....

P.T.O....

COMPUTER APPLICATIONS

15. How many digits used in the binary number system?
 - a. 0
 - b. 2
 - c. 1
 - d. 3
16. Which one is Volatile Memory?
 - a. Hard Disk
 - b. Flash Drive
 - c. Pen Drive
 - d. Random Access Memory
17. Which one is not a web browser?
 - a. Google Chrome
 - b. YouTube
 - c. Internet Explorer
 - d. Mozilla Firefox
18. MS-EXCEL can be used to automate:
 - a. Financial statements, Business forecasting control
 - b. Accounts receivable, accounts payable
 - c. Transaction registers, inventory
 - d. Any of the above
19. Which one is used for writing in the M.S. Window?
 - a. Paint
 - b. Note pad
 - c. Sticky notes
 - d. Sound recorder
20. System Software is:
 - a. Work as interface between user and hardware
 - b. Work as interface between application software and hardware
 - c. It is specified program that help user to perform certain task
 - d. All of the above
21. Alt F4 is used to :
 - a. Close the window
 - b. Open the window
 - c. Save the window
 - d. None of these
22. How many Bytes in Kilobytes?
 - a. 1024
 - b. 1000
 - c. 980
 - d. 1050
23. Convert decimal $(13)_{10}$ into binary:
 - a. $(1100)_2$
 - b. $(1001)_2$
 - c. $(1111)_2$
 - d. $(1101)_2$
24. Which one is not an Operating System?
 - a. M.S. Office
 - b. Windows
 - c. Linux
 - d. DOS
25. What is a Data?
 - a. A unprocessed data
 - b. A processed data
 - c. Raw fact and figure
 - d. None of these
26. Second generation computers belong to:
 - a. 1946 – 59
 - b. 1957 – 64
 - c. 1965 – 70
 - d. 1970 – 90
27. Transistors were used in:
 - a. First generation computer
 - b. Second generation computer
 - c. Third generation computer
 - d. Fourth generation computer
28. Which of the following is a communication device?
 - a. Printer
 - b. Monitor
 - c. Keyboard
 - d. Modem