

**BACHELOR OF PHYSIOTHERAPY- 2<sup>ND</sup> YEAR EXAMINATIONS, JUNE 2018**  
**(SUB:-PATHOLOGY & MICROBIOLOGY; PAPER CODE:-03050201)**  
**(RE-APPEAR)**

Time – 3 hrs

M.marks-80

**Instructions:**

1. Write your Roll No. on the question paper.
2. Candidate should ensure that they have been provided with correct question paper. Complaints in this regard, if any, should be made within 15 minutes of the commencement of the exams. No complaint(s) will be entertained thereafter.
3. Question paper consist of Two **Parts, Part-I & Part-II**. Max. Marks for each part are **40** marks. Use **Separate Answer book for each part**. Any mistake in this regard shall be at the risk and responsibility of the examinee. Marks are indicated against each question.
4. Draw diagram whenever required.

**PART – I (PATHOLOGY)**

**Attempt any Three Questions. Q.1. is compulsory. Attempt any Two Questions from Q.2 to Q.4.**

- Q.1** Define shock. And discuss its types and pathogenesis. (14)
- Q.2** Discuss briefly (6.5x2=13)
- a) Chronic venous congestion
  - b) Metastasis
- Q.3** Discuss briefly:- (6.5x2=13)
- a) Leukemia.
  - b) Megaloblastic anemia.
- Q.4** Write short note on:- (6.5x2=13)
- a) Scurvy
  - b) Pathogenesis & types of edema.

**PART – II (MICROBIOLOGY)**

**Attempt all Questions.**

- Q.1** Enumerate common organisms associated with hospital acquired infections. Describe briefly their control measures. (5+10=15)
- Q.2** Write briefly about **any two** of the following:- (2x8=16)
- a) National Immunisation program for children
  - b) Precipitation tests and their applications
  - c) Passive immunity
  - d) Post-exposure prophylaxis for HIV
- Q.3** Write short notes on **any three**:- (3x3=9)
- a) Media for isolation of N.gonorrhoea
  - b) Phases of growth of bacteria
  - c) Differences in the cell wall of gram positive and gram negative bacteria.
  - d) Louis Pasteur
  - e) Zoonotic diseases

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**BPT- 2<sup>nd</sup> YEAR ANNUAL EXAMINATIONS, JUNE-2018**  
**(SUBJECT – PHARMACOLOGY; PAPER CODE-305202)**  
**(Re – Appear)**

**Time: 3 HOURS****Max. Marks-80****Instructions:**

1. Write your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with correct paper. Complaints in this regard, if any should be reported to the invigilator on duty in the examination hall within 15 minute of the commencement of the exams. No complaints(s) will be entertained thereafter.
3. Attempt **SIX (6)** questions in all. Question No.1 is compulsory. Students are required to attempt any five (5) questions from (Q.2 to 8).
4. Marks are indicated against each question.
5. Draw diagram wherever required.

- Q.1** Enumerate different routes of drug administration with examples. Discuss the advantages and disadvantages of intravenous route of drug administration (7+4+4=15)
- Q.2** Describe briefly:
- a) First pass metabolism of a drug and its clinical significance
  - b) Centrally acting Skeletal Muscle Relaxants (7+6=13)
- Q.3** Give therapeutic uses and adverse effects of:
- a) Anabolic Steroids
  - b) Bisphosphonates (7+6=13)
- Q.4** Write short notes on:
- a) Diuretics
  - b) Disease modifying antirheumatic drugs (DMARDs) (7+6=13)
- Q.5** Give drug treatment of the following:
- a) Osteoporosis
  - b) Organophosphate poisoning (7+6=13)
- Q.6** Describe briefly:
- a) Preanaesthetic medication
  - b) Mechanism of local anesthetics (7+6=13)
- Q.7** Give mechanism of action & therapeutic uses of:
- a) Thiazides diuretics
  - b) Metronidazole (7+6=13)
- Q.8** Give mechanism of action & adverse effects of:
- a) Phenytoin
  - b) Levodopa (7+6=13)

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**BACHELOR OF PHYSIOTHERAPY- 2<sup>ND</sup> YEAR ANNUAL EXAMINATIONS, JUNE 2018**  
**(SUB:-PATHOLOGY & MICROBIOLOGY; PAPER CODE:-03050201/3050202)**

Time – 3 hrs

M.marks-80

**Instructions:**

1. Write your Roll No. on the question paper.
2. Candidate should ensure that they have been provided with correct question paper. Complaints in this regard, if any, should be made within 15 minutes of the commencement of the exams. No complaint(s) will be entertained thereafter.
3. Question paper consist of Two **Parts, Part-I & Part-II**. Max. Marks for each part are **40** marks. Use **Separate Answer book for each part**. Any mistake in this regard shall be at the risk and responsibility of the examinee. Marks are indicated against each question.
4. Draw diagram whenever required.

**PART – I (PATHOLOGY)**

**Attempt any Three Questions. Q.1. is compulsory. Attempt any Two Questions from Q.2 to Q.4.**

- Q.1** Discuss in detail pathogenesis , etiology of jaundice. (14)
- Q.2** Discuss briefly (6.5x2=13)
- a) Granulomatous inflammation
  - b) Hypersensitivity reaction
- Q.3** Compare and contrast (6.5x2=13)
- a) Leukemia and leucocytosis.
  - b) Bacterial and viral meningitis.
- Q.4** Write short note on:- (6.5x2=13)
- a) Rickets
  - b) Osteomyelitis

**PART – II (MICROBIOLOGY)**

**Attempt any Three Questions. Q.1. is compulsory. Attempt any Two Questions from Q.2 to Q.4.**

- Q.1** Define immunity. Describe active and passive immunity with examples. (2+6+6=14)
- Q.2** Write short notes on:
- a) Bacterial spores (3)
  - b) Hospital associated infections (3)
  - c) Cell mediated immunity (3)
  - d) Ziehl Nelson Staining (4)
- Q.3** Write short notes on:
- a) Sterilization (3)
  - b) Candidiasis (3)
  - c) Mantoux test (3)
  - d) ELISA (4)
- Q.4** Write short notes on:
- a) Lab diagnosis of Hepatitis B (3)
  - b) Elephantiasis (3)
  - c) Antigen Antibody reaction (3)
  - d) Opportunistic fungal infections (4)

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**BPT- 2<sup>nd</sup> YEAR ANNUAL EXAMINATIONS, JUNE-2018**  
**(SUB:- PHARMACOLOGY; PAPER CODE-0305203)**

**Time: 3 HOURS****Max. Marks-80****Instructions:**

1. Write your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with correct paper. Complaint(s) in this regard, if any, should be made within 15 minute of the commencement of the exams. No complaints(s) will be entertained thereafter.
3. Attempt six questions in all. **Q.1** is compulsory. Students are required to attempt any **five (5)** questions from **Q.2 to Q.8**. Marks are indicated against each question.
4. Draw diagram wherever required.

- Q.1** Enumerate different routes of drug administration with examples. Discuss the advantages and disadvantages of intravenous route of drug administration. (7+4+4=15)
- Q.2** Describe briefly: (7+6=13)
- a) Bioavailability
  - b) Management of status asthmaticus
- Q.3** Give therapeutic uses and adverse effects of: (7+6=13)
- a) Proton pump inhibitors
  - b) Corticosteroids
- Q.4** Write short notes on: (7+6=13)
- a) Aspirin
  - b) Disease modifying antirheumatic drugs (DMARDs)
- Q.5** Give drug treatment of the following: (7+6=13)
- a) Osteoporosis
  - b) Chronic gout
- Q.6** Explain why? (7+6=13)
- a) Benzodiazepines are preferred over barbiturates as hypnotics
  - b) Antitubercular drugs are always given in combination therapy
- Q.7** Give mechanism of action & therapeutic uses of : (7+6=13)
- a) Thiazides diuretics
  - b) Atropine
- Q.8** Give mechanism of action & adverse effects of: (7+6=13)
- a) Phenytoin
  - b) Bisphosphonates

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**BACHELOR OF PHYSIOTHERAPY- 2<sup>ND</sup> YEAR**  
**ANNUAL EXAMINATION, JUNE 2018**  
**(SUB:-BIOMECHANICS; PAPER CODE:-0305204)**

**Time – 3 hrs**

**M.marks-80**

**Instructions:**

1. Write your Roll No. on the question paper.
2. Candidate should ensure that they have been provided with correct question paper. Complaints in this regard, if any, should be made within 15 minutes of the commencement of the exams. No complaint(s) will be entertained thereafter.
3. Attempt **SIX** questions in all. **Q.1** is compulsory. Students are required to attempt **FIVE** questions from **Q.2 to Q.8**. Marks are indicated against each question.
4. Draw diagram whenever required.

- Q.1** Define Levers and its various types emphasizing on mechanical advantage? Discuss about use of levers in Physiotherapy and types of lever along with example in human body? **(2+3+2+5+3=15)**
- Q.2** Define Gait, its phases and spatial and temporal variables in detail? Elaborate sagittal plane analysis of Gait in detail? **(1+2+3+7=13)**
- Q.3** Write short notes on:-
- a) Q angle and its clinical implication? **(7)**
  - b) Subtalar joint non weight bearing and weight bearing function? **(6)**
- Q.4** Explain in detail Static and Dynamic stabilization at Glenohumeral joint? **(13)**
- Q.5** Write short notes on:-
- a) Active and Passive insufficiency along with examples? **(6)**
  - b) Prehension and precision activities of Hand? **(7)**
- Q.6** Enumerate various ligaments of Knee joint with their functions ? Discuss about the function of Tibio Femoral joint along with locking and unlocking mechanism? **(5+8 =13)**
- Q.7** Write short notes on:-
- a) Lumbopelvic Rhythm **(6)**
  - b) Carrying angle and its clinical implication **(7)**
- Q.8** Write short notes on:-
- a) Instability at Wrist joint **(7)**
  - b) Plantar arches **(6)**

Roll No. \_\_\_\_\_

**BACHELOR OF PHYSIOTHERAPY – 2<sup>nd</sup> SEMESTER EXAMINATIONS; JUNE - 2018**  
**(SUB:- PSYCHOLOGY; PAPER CODE:- 03060205)**

**Time: 03 hrs**

**Maximum Marks: 30**

**Instructions:**

1. Write your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with correct question paper. Complaint(s) in this regard, if any, should be made within 15 minutes of the commencement of the exam. No complaint in this regard will be entertained thereafter.
3. Each part is compulsory. Marks are indicated against each question.
4. Draw diagram wherever required.

**PART – A (OBJECTIVE TYPE QUESTIONS OMR SHEET) (15 MARKS)**

- Q.1** Continuous Painful stimuli leads to insomnia which results in to \_\_\_\_\_  
a. Stress  
b. Fatigue  
c. Both a& b  
d. All of the above
- Q.2** What is psychology?  
a. Study of human behaviour  
b. Study of animal behaviour  
c. Both  
d. None of these
- Q.3** Maturity comes through.....  
a. Growth  
b. Experiences  
c. Both a & b  
d. None of this
- Q.4** \_\_\_\_\_ plays important role in personality development  
a. Culture  
b. Education  
c. Both a & b  
d. None of this
- Q.5** Who plays an important role in development and growth inChild \_\_\_\_\_  
a. Culture  
b. School  
c. Family  
d. All of the above
- Q.6** Who has introduced social psychology  
a. Willam medugol  
b. Morgan  
c. All port  
d. Baron and Myrom
- Q.7** Maturity comes through.....  
a. Growth  
b. Experiences  
c. Both a & b  
d. None of this
- Q.8** Clinical psychology deals with \_\_\_\_\_  
a. Psychopathologies and therapies  
b. Sports persons and their performances  
c. Prescribe medicines  
d. Physiological tests

**Q.9** The professional ask question and allows the client to answer either in structure or unstructured way this method is known as

- a. Interview method
- b. Observation method
- c. Case study
- d. Experiment

**Q.10** What is independent variable?

- a. Internal variable
- b. Independent variable
- c. Interview variable
- d. Experiment

**Q.11** Who gave the concept of psychoanalysis?

- a. Allport
- b. Erickson
- c. Sigmund Fryod
- d. Jung

**Q.12** Motivation causing people to participate in an activity for tangible reward refers to

- a. Intrinsic motivation
- b. Extrinsic motivation
- c. Need
- d. None of these

**Q.13** Allport theory of personality was given in which year

- a. 1936
- b. 1935
- c. 1940
- d. 1934

**Q.14** Treatment method in which the unconscious significance of dream is related to patient's current problem is called

- a. Insight
- b. Catharsis
- c. Free association
- d. Dream interpretation

**Q.15** What is the last step of observation method

- a. Record behaviour
- b. Note down behaviour
- c. Generalization and interpretation
- d. None of these

**Q.16** Concept of trial and error learning theory was given by

- a. Kohler
- b. Thondike
- c. Pavlov
- d. Skinner

**Q.17** Which famous psychologist gave cardinal and secondary traits

- a. Fryod
- b. Skinner
- c. Allport
- d. None of these

**Q.18** Who gave the theories of emotions?

- I. James Larnge
- II. Cannon Bard
- III. Maslow
- IV. Fryod
- a. I,II,III,IV
- b. I, II
- c. I,II,III
- d. None of these

**Q.19** Which of the following are motor learning

- I. Swimming
- II. Horse riding
- III. Problem solving
- IV. Playing piano
- V. Sensation of different sense organs
- VI. Performing experiments

- a. I,II,IV,VI
- b. I,II,III,IV,V
- c. II,V,VI
- d. None of these

**Q.20** What are the characteristics of personality?

- I. Measureable
- II. Goal oriented
- III. Self
- IV. Uniqueness

- a. I,II
- b. I,II,III,IV
- c. II,III,IV
- d. None of these

**Q.21** In theory of personality by Sigmund Fryod, what is the structure of personality?

- I. Id
- II. Ego
- III. Super ego
- IV. Defense mechanisms

- a. I,II
- b. III,IV
- c. I,II,III
- d. None of these

**Q.22** Match the following List-A with List-B

List – A

- a) Allport
- b) Fryod
- c) Cannon Bard
- d) Thondike

List – B

- I Trial and error learning
- II Emotions
- III Psychoanalysis
- IV trait theory of personality

- a. I,II,III,IV
- b. II,III,IV,I
- c. IV,III,II,I
- d. II,I,III,IV

**Q.23** Match list-1 with list -2

List – I

- a) Sensory motor learning
- b) Verbal learning
- c) Perceptual learning
- d) Motor learning

List – II

- I Child learns to copy alphabets from another page.
- II Child uses his mind to solve problem by insight.
- III Jumping, eating
- IV school learning

- a. I,IV,II,III
- b. I,II,III,IV
- c. IV,III,II,I
- d. II,III,IV,I

**Q.24** Match List-1 with List-2

List – I

- a) oral stage
- b) Anal stage
- c) Phallic stage
- d) Latent period

List – II

- I 3-6 years
- II 1-3 years
- III 6- puberty
- IV 0-1 year



- a. I,II,III,IV
- b. IV,II,III,I

- c. II,I,IV,III
- d. IV,II,I,III

**Q.25 Match List-1 with List-2**

List – I

- a) Need
- b) Drive
- c) Incentive
- d) Motive

List – II

- I A desired goal that prompt behaviour
- II reinforcing agent which adds force
- III aroused awareness that energizes behaviour to fulfill a goal
- IV general want or desires

- a. I,II,III,IV
- b. IV,III,II,I

- c. II,I,III,IV
- d. III,I,II,IV

**Q.26 Match List-1 with List-2**

List – I

- a) Observation method
- b) Experimental method
- c) Interview method
- d) Survey method

List – II

- I face to face exchange of thoughts
- II a deliberate study through eyes
- III a way of collecting data from more people than direct observation
- IV a method to test hypothesis

- a. I,II,III,IV
- b. II,IV,I,III

- c. IV,III,I,II
- d. III,IV,II,I

**PART- B (DESCRIPTIVE TYPE QUESTIONS) (15 MARKS)**

**Q.1 Define psychology. Explain scope of psychology.**

**(5)**

**Q.2 Write short notes on (Attempt any 2)**

**(2X2=4)**

- a) Personality disorders
- b) Observation method
- c) Factors which increases intelligence
- d) Classical conditioning

**Q.3 Define the following**

**(1X4=4)**

- a) Frustration
- b) Motivation
- c) Personality
- d) Trial and error learning

**Q.4 Answer the following (Attempt any 2)**

**(1X2=2)**

- a) Explain types of motivation with examples.
- b) Discuss about the phases of memory
- c) Creative thinking.

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**BACHELOR OF PHYSIOTHERAPY – 2<sup>nd</sup> YEAR ANNUAL EXAMINATION, JUNE 2018  
(SUB:-PHYSICAL ASSESMENT AND MANUAL THERAPY; PAPER CODE:-0305205)**

**Time – 3 hrs**

**M.marks-80**

**Instructions:**

1. Write your Roll No. on the question paper.
2. Candidate should ensure that they have been provided with correct question paper. Complaints in this regard, if any, should be made within 15 minutes of the commencement of the exams. No complaint(s) will be entertained thereafter.
3. Attempt **SIX** questions in all. **Q.1** is compulsory. Students are required to attempt **FIVE** questions from **Q.2 to Q.8**. Marks are indicated against each question.
4. Draw diagram whenever required.

- Q.1** Define Shoulder Impingement its types? Discuss about the assessment and special tests used to rule out impingement syndrome? **(2+2+5+6=15)**
- Q.2** Define EMG and its instrumentation along with different types of electrode used for EMG? Elaborate clinical significance of EMG **(8+5=13)**
- Q.3** Write short notes on:-  
a) Grades of Mobilization? **(7)**  
b) Mckenzie Concept? **(6)**
- Q.4** Define PNF and its different types of patterns along with its indications and contraindications? Discuss about its clinical relevance **(10+3=13)**
- Q.5** Write short notes on:-  
a) Special tests used to check instability at Hip Joint? **(7)**  
b) Principle of exercise tolerance test? **(6)**
- Q.6** Define Motor control, its applications and elaborate theories of Motor control? **(13)**
- Q.7** Write short notes on:-  
a) NAGS , SNAGS **(3+3 =6 )**  
b) Upper limb Tension Tests **(7)**
- Q.8** Write short notes on:-  
a) MFR its indications and contraindiactions **(7)**  
b) Assesment of Pain **(6)**

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Roll No. \_\_\_\_\_

**BACHELOR OF PHYSIOTHERAPY - 2<sup>ND</sup> YEAR ANNUAL EXAMINATIONS; JUNE 2018  
(SUBJECT:- EXERCISE THERAPY; PAPER CODE:- 3050206)**

**Time: 03:00 Hrs.**

**Max Mark: 80**

**Instructions:**

1. Write your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with the correct question paper. Complaints in this regards, If any, should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. Attempt **SIX (06)** Questions in all. **Q.1.** is compulsory. Attempt any Five (**05**) Questions from **Q.2** to **Q.8.** Marks are indicated against each question.
4. Draw the diagram wherever required.

- Q.1** What are Assistive Devices and their indications. Explain about Axillary Crutches and gait training? **(5+10=15)**
- Q.2** What are levers? Explain with examples and mechanical advantage. **(13)**
- Q.3** What do you mean by Fundamental positions? Explain muscle work, effects and uses of Kneeling position. **(5+8=13)**
- Q.4** Discuss in detail Therapeutic Gymnasium, equipments and health benefits **(3,7,3=13)**
- Q.5** a) Benefits of Hydrotherapy **(7)**  
b) Principle and indications of Traction **(6)**
- Q.6** Write Notes-  
a) Suspension therapy **(6)**  
b) Breathing Exercises **(7)**
- Q.7** Write Notes-  
a) Define Axis and Planes **(6.5)**  
b) Group Therapy **(6.5)**
- Q.8** Discuss the following-  
a) Principles of MMT **(6)**  
b) Benefits of exercises in health promotion **(7)**

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Roll No. \_\_\_\_\_

**BACHELOR OF PHYSIOTHERAPY - 2<sup>ND</sup> YEAR ANNUAL EXAMINATIONS; JUNE 2018  
(SUBJECT:- EXERCISE THERAPY; PAPER CODE:- 3050206)**

**Time: 03:00 Hrs.**

**Max Mark: 80**

**Instructions:**

1. Write your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided with the correct question paper. Complaints in this regards, If any, should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. Attempt SIX (06) Questions in all. Q.1. is compulsory. Attempt any Five (05) Questions from Q.2 to Q.8. Marks are indicated against each question.
4. Draw the diagram wherever required.

- Q.1** What are Assistive Devices and their indications. Explain about Axillary Crutches and gait training? (5+10=15)
- Q.2** What are levers? Explain with examples and mechanical advantage. (13)
- Q.3** What do you mean by Fundamental positions? Explain muscle work, effects and uses of Kneeling position. (5+8=13)
- Q.4** Discuss in detail Therapeutic Gymnasium, equipments and health benefits (3,7,3=13)
- Q.5** a) Benefits of Hydrotherapy (7)  
b) Principle and indications of Traction (6)
- Q.6** Write Notes-  
a) Suspension therapy (6)  
b) Breathing Exercises (7)
- Q.7** Write Notes-  
a) Define Axis and Planes (6.5)  
b) Group Therapy (6.5)
- Q.8** Discuss the following-  
a) Principles of MMT (6)  
b) Benefits of exercises in health promotion (7)

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Roll No. \_\_\_\_\_

**BPT- 2<sup>nd</sup> YEAR EXAMINATIONS; JUNE 2018**  
**(SUB:-PSYCHOLOGY & SOCIOLOGY; PAPER CODE: 03050206)**  
**(RE-APPEAR)**

**Time: 03:00**

**Max. Marks: 80**

**Instructions:-**

1. Write your Roll No. on the Question paper.
2. Candidate should ensure that they have been provided correct question paper. Complaints in this regard, if any, should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. Question paper consist of **two parts; Part-I & Part-II**. Max marks for each part are **40 marks**. Use **separate answer book for each part**. Any mistake in this regard shall be at the risk and responsibility of the examinee and no complaint will be entertained after the exam.
4. All questions carry marks as noted against each question.
5. Draw diagram wherever required.

**PART – I (PSYCHOLOGY)**

Attempt **five** questions in all. Q.1. is compulsory. Attempt other **four** question from Q.2. to Q.7.

- Q.1 What is psychology? Explain the scope of psychology? (10)
- Q.2 Define leadership? Explain psychological and physical characteristic of a leader? (7.5)
- Q.3 What are emotions? What are different kinds of emotion? How can we manage emotion? (7.5)
- Q.4 What is personality? explain it with the help of model or theory? (7.5)
- Q.5 What do you mean by intelligence write down the formula of IQ? (7.5)
- Q.6 What are the different types of motivation? Explain with examples? (7.5)
- Q.7 Discuss the following defence mechanism of ego? (7.5)
- a) Denial
  - b) Projection
  - c) Identification
  - d) Repression

**PART – II (SOCIOLOGY)**

**ATTEMPT ALL QUESTIONS:**

**Q.1** Define the concept social groups and the role of social group in hospitals and rehabilitation settings. (10)

**Q.2** Answer (any two):- (2x10=20)

- a) Explain the importance of family on individual's health.
- b) Explain the importance of study of sociology for health care professionals.
- c) Explain the role of medical social worker.

**Q.3** Answer the following in brief:- (5x2=10)

- a) Prostitution
- b) Juvenile Delinquency
- c) Social Security
- d) Social change and deviance
- e) Problems of women employment

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**BPT – 2<sup>nd</sup> YEAR ANNUAL EXAMINATIONS; JUNE 2018**  
**(SUB:- Environmental Sciences; PAPER CODE:- 0305207)**

Time: 03:00 Hours

Max Marks- 75

**Instructions:**

1. Write your Roll no. on the Question paper.
2. Candidate should ensure that they have been provided correct question paper. Complaint(s) in this regard, if any, should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter
3. Attempt **five (05)** questions in all. **Q.1** is compulsory. Attempt other **four (04)** questions selecting **one (01)** from each unit. Marks are indicated against each question.
4. Draw diagram wherever required

**Q.1 Answer the following questions**

- a) What is Atmosphere (02)
- b) What is e-waste? (02)
- c) What is a pollutant? (02)
- d) What do you mean by deforestation? (02)
- e) What are bio-fuels? (02)
- f) What is Sustainable development? (02)
- g) What is population explosion? (02)
- h) Define Biodiversity? (01)

**UNIT-I**

**Q.2** Why Environmental study is called as multidisciplinary field? (15)

**OR**

**Q.3** What are mineral resources? Discuss the benefits of renewable resources. (15)

**UNIT-II**

**Q.4** Write short notes on: (15)

- a) Wind energy
- b) forest resources

**OR**

**Q.5** Define producers, consumers and decomposers in an ecosystem. Discuss any one ecosystem? (15)

**UNIT-III**

**Q.6** Discuss water pollution, their sources and effects on human beings. (15)

**OR**

**Q.7** Write short notes on: (15)

- a) Biomedical waste
- b) Consumerism
- c) Environmental Acts

**UNIT-IV**

**Q.8** What are green house gases? Discuss energy problem related to urban people. (15)

**OR**

**Q.9** Discuss various roles of information technology in the protection of human health and the environment. (15)

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