TIME – 2.30 HRS   MAX MARKS: 80

Microbiology & Pathology

Your answers should be specific to questions asked.
Draw neat labelled diagrams wherever necessary.

Section - A
Microbiology (40 marks)
QP Code : P106 A
(Use Separate answer booklet for Section A & B)

LONG ESSAY   1 X 10 = 10 marks

1. Describe the source, modes of transmission, clinical diseases, samples to be collected & diagnostic methods for Tuberculosis (1+1+4+2+2)

SHORT ESSAYS (Answer Any Three)   3 X 5 = 15 marks

2. Bacterial capsule: functions ,methods of detection, clinical significance
3. Type 1 Hypersensitivity : principle, biological mediators, clinical significance
4. Map the lesions of *Candida albicans* on Human body
5. Describe the mechanisms of autoimmunity

SHORT ANSWERS (Answer Any Five)   5 X 3 = 15 marks

6. List 3 opportunistic fungi
7. Nosocomial infection: definition, types
8. Name any 3 disinfectants used in hospital
9. Artificial passive immunity
10. Mode of transmission of HIV
11. Name three diseases transmitted by mosquitoes

Section - B
Pathology (40 marks)
QP Code : P106B
(Use Separate answer booklet for Section B)

LONG ESSAY   1 X 10 = 10 marks

1. Define thrombosis. What are the components of Virchow's triad. Describe the fate of thrombus

SHORT ESSAY (Answer any Three)   3 X 5 = 15 marks

2. Define hyperplasia and describe the morphology with labelled diagram. List three examples of hyperplasia
3. Describe the differences between benign and malignant tumors.
4. Pneumonia.
5. Myocardial Infarction.

SHORT ANSWERS (Answer any Five)   5 X 5 = 15 marks

6. Discuss the factors affecting wound healing
7. List clinical signs of Vitamin C deficiency
8. List THREE causes of microcytic hypochromic anaemia
9. List THREE causes for neutrophilia
10. Define inflammation and write types of inflammation
11. Mention THREE complication of TB osteomyelitis

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

Bachelor of Physiotherapy, Second Year Semester-III, January-2019 Examination.

TIME - 3 HRS   MAX MARKS:100

EXERCISE THERAPY

Q.P. CODE: PT107

Your answers should be specific to questions asked.
Draw neat labelled diagrams wherever necessary.

LONG ESSAY (Answer any Two)   2 X 10 = 20 Marks

1. Define PNF, give the neurophysiological principles and describe D1& D2 upper limb pattern.
2. Write the principles, types of suspension therapy.enumerate the technique to improve elbow jt flexion/extension.
3. What re the causes of impaired balance and how to evaluate it.

SHORT ESSAY (Answer any Ten)   10X 5 = 50 Marks

4. Explain the technique of strengthening of hamstrings from grade 2 to grade 5.
5. Write the functional re-education from sitting to standing.
6. What is PRE? Describe DeLorme's technique.
7. Discuss the determinants and tissue response to stretching.
8. Describe Pre – crutch training and its importance.
9. What are the Indications for joint mobilization & effects of accessory movements on a joint.
10. Describe postural mechanisms.
11. What are the merits & demerits of hydrotherapy .
12. How will you organize group exercise.
13. Describe the indications and technique of stretching TFL tightness.
14. Write the principles and technique of Co – ordination exercises.
15. Explain the technique of measuring limb length & girth.

SHORT ANSWER (Answer any Ten)   10 X 3 = 30 Marks

16. Define static power test.
17. Give 3 derived postion in standing.
18. Stretching technique for Quadriceps muscle.
19. Differentiate between contracture & tightness.
20. Mention any 3 uses of parallel bar.
21. Write the uses of PFT.
22. Define Waddling gait.
23. Name 3 limitations of goniometry.
24. Name 3 uses of overhead pulleys.
25. What are active & inactive postures.
26. Define isokinetic exercises.
27. What is BRIM.

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
Bachelor of Physiotherapy, Second Year Semester-III, January-2019 Examination.

TIME – 2.30 HRS   MAX MARKS: 80

Research Methodology and Biostatistics

Your answers should be specific to questions asked.
Draw neat labelled diagrams wherever necessary.

Section – A
Research Methodology (40 marks)
QP Code : P108 A
(Use Separate answer booklet for Section A & B)

LONG ESSAY   1 X 10 = 10 Marks

1. Define 'sampling'. List the characteristics of good sample. Classify sampling designs with examples for each. (1+3+6)

SHORT ESSAY (Answer any Three)   3 X 5 = 15 Marks

2. What is 'qualitative research'? List the methods to do qualitative research.
3. List the criteria for good research.
4. List the types and characteristics of Skewed distribution with help of diagrams.
5. What is 'questionnaire'? List the characteristics of a good questionnaire.

SHORT ANSWER (Answer any Five)   5 X 3 = 15 Marks

6. List the measures of central tendency with example.
7. Differentiate between case control and cohort study.
8. PICOT criteria.
9. List types of 'Consent'.
10. List the limitations of computer based analysis in Research.
11. Composition of Institutional Ethics Committee.

Section – B
Biostatistics (40 Marks)
QP Code : P108B
(Use separate answer booklet for section B)

LONG ESSAY   1 X 10 = 10 Marks

1. Define variation. Mention 3 measures of variation. Calculate standard deviation for the data on age of patients 58, 62, 60, 55, 65.

SHORT ESSAY (Answer any Three)   3 X 5 = 15 Marks

2. Graphical presentation of data.
3. Explain Simple Random Sampling.
4. Measures of dispersion.
5. Student t test.

SHORT ANSWER (Answer any Five)   5 X 3 = 15 Marks

6. Skewness and Kurtosis.
7. Representative sample.
8. Interval scale of measurement.
9. Median.
10. Methods of data collection.
11. Bar diagrams.

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
Bachelor of Physiotherapy (CBCS), Second Year Semester-III, January-2019 Examination.

TIME - 3 HRS   MAX MARKS:100

EXERCISE THERAPY

Q.P. CODE: B3060
Your answers should be specific to questions asked.
Draw neat labelled diagrams wherever necessary.

LONG ESSAY (Answer any Two)   2 X 10 = 20 Marks

1. Define PNF, give the neurophysiological principles and describe D1& D2 upper limb pattern.
2. Write the principles, types of suspension therapy.enumerate the technique to improve elbow jt flexion/extension.
3. What re the causes of impaired balance and how to evaluate it.

SHORT ESSAY (Answer any Ten)   10X 5 = 50 Marks

4. Explain the technique of strengthening of hamstrings from grade 2 to grade 5.
5. Write the functional re-education from sitting to standing.
6. What is PRE? Describe DeLorme's technique.
7. Discuss the determinants and tissue response to stretching.
8. Describe Pre – crutch training and its importance.
9. What are the Indications for joint mobilization & effects of accessory movements on a joint.
10. Describe postural mechanisms.
11. What are the merits & demerits of hydrotherapy .
12. How will you organize group exercise.
13. Describe the indications and technique of stretching TFL tightness.
14. Write the principles and technique of Co – ordination exercises.
15. Explain the technique of measuring limb length & girth.

SHORT ANSWER (Answer any Ten)   10 X 3 = 30 Marks

16. Define static power test.
17. Give 3 derived postion in standing.
18. Stretching technique for Quadriceps muscle.
19. Differentiate between contracture & tightness.
20. Mention any 3 uses of parallel bar.
21. Write the uses of PFT.
22. Define Waddling gait.
23. Name 3 limitations of goniometry.
24. Name 3 uses of overhead pulleys.
25. What are active & inactive postures.
26. Define isokinetic exercises.
27. What is BRIM.

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TIME – 2.30 HRS   MAX MARKS: 80

Pathology & Microbiology

Your answers should be specific to questions asked.
Draw neat labelled diagrams wherever necessary.

Section - A
Pathology (40 marks)
QP Code : B3076
(Use Separate answer booklet for Section A & B)

LONG ESSAY   1 X 10 = 10 marks

1. Define thrombosis. What are the components of Virchow's triad. Describe the fate of thrombus

SHORT ESSAY (Answer any Three)   3 X 5 = 15 marks

2. Define hyperplasia and describe the morphology with labelled diagram. List three examples of hyperplasia
3. Describe the differences between benign and malignant tumors.
4. Pneumonia.
5. Myocardial Infarction.

SHORT ANSWERS (Answer any Five)   5 X 5 = 15 marks

6. Discuss the factors affecting wound healing.
7. List clinical signs of Vitamin C deficiency.
8. List THREE causes of microcytic hypochromic anaemia.
9. List THREE causes for neutrophilia.
10. Define inflammation and write types of inflammation.
11. Mention THREE complication of TB osteomyelitis.

Section - B
Microbiology (40 marks)
QP Code : B3075
(Use Separate answer booklet for Section B)

LONG ESSAY   1 X 10 = 10 marks

1. Describe the source, modes of transmission, clinical diseases , samples to be collected & diagnostic methods for Tuberculosis. (1+1+4+2+2)

SHORT ESSAYS (Answer Any Three)   3 X 5 = 15 marks

2. Bacterial capsule: functions ,methods of detection, clinical significance.
3. Type 1 Hypersensitivity : principle, biological mediators, clinical significance.
4. Map the lesions of Candida albicans on Human body.
5. Describe the mechanisms of autoimmunity.

SHORT ANSWERS (Answer Any Five)   5 X 3 = 15 marks

6. List 3 opportunistic fungi.
7. Nosocomial infection: definition, types.
8. Name any 3 disinfectants used in hospital.
9. Artificial passive immunity.
10. Mode of transmission of HIV.
11. Name three diseases transmitted by mosquitoes.

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
Bachelor of Physiotherapy (CBCS), Second Year Semester-III, January-2019 Examination.

TIME – 2.30 HRS   MAX MARKS: 80

Research Methodology and Biostatistics

Your answers should be specific to questions asked.
Draw neat labelled diagrams wherever necessary.

Section - A
Research Methodology (40 marks)
QP Code : B3085
(Use Separate answer booklet for Section A & B)

LONG ESSAY   **1 X 10 = 10 Marks**

1. Define 'sampling'. List the characteristics of good sample. Classify sampling designs with examples for each. (1+3+6)

SHORT ESSAY (Answer any Three)   **3 X 5 = 15 Marks**

2. What is 'qualitative research'? List the methods to do qualitative research.
3. List the criteria for good research.
4. List the types and characteristics of Skewed distribution with help of diagrams.
5. What is 'questionnaire'? List the characteristics of a good questionnaire.

SHORT ANSWER (Answer any Five)   **5 X 3 = 15 Marks**

6. List the measures of central tendency with example.
7. Differentiate between case control and cohort study.
8. PICOT criteria.
9. List types of 'Consent'.
10. List the limitations of computer based analysis in Research.
11. Composition of Institutional Ethics Committee.

Section – B
Biostatistics (40 Marks)
QP Code : B3086
(Use separate answer booklet for section B)

LONG ESSAY   **1 X 10 = 10 Marks**

1. Define variation. Mention 3 measures of variation. Calculate standard deviation for the data on age of patients 58, 62, 60, 55, 65.

SHORT ESSAY (Answer any Three)   **3 X 5 = 15 Marks**

2. Graphical presentation of data.
3. Explain Simple Random Sampling.
4. Measures of dispersion.
5. Student t test.

SHORT ANSWER (Answer any Five)   **5 X 3 = 15 Marks**

6. Skewness and Kurtosis.
7. Representative sample.
8. Interval scale of measurement.
9. Median.
10. Methods of data collection.
11. Bar diagrams.

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