SH-III/Physiology/302/C-6(T)/19

B.Sc. Semester III (Honours) Examination, 2018-19

PHYSIOLOGY

Course ID : 32512 **Course Code : SHPHY/302/C-6(T)**

Course Title : Circulation

Time: 1 Hour 15 Minutes **Full Marks: 25**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions from the following: 1×5=5

(a) Define Einthoven's Law.

(b) Mention the importance of circle of Willis.

(c) What is cardiac index?

(d) Write the role of adrenaline on blood vessels.

(e) What is red out?

(f) State the location and function of baroreceptor.

(g) What is triple response?

(h) What is QRS Complex?

2. Answer *any two* questions from the following: 5×2=10

(a) Describe the method of measurement of cardiac output by 'Fick Principle'. 5

(b) What is vasa vasorum? Describe the factors regulating cerebral Circulation. 1+4=5

(c) Describe the cardiovascular changes during exercise. Name the steps of wound healing. 4+1=5

(d) Why SA node is called pacemaker of heart? Describe the mechanism of transmission of action potential through the functional tissues of heart. 1+4=5

3. Answer *any one* questions from the following: 10×1=10

(a) Define cardiac reserve. What are the peculiarities of coronary circulation and placental circulation. 2+(4+4)=10

(b) Write the mechanical events of the heart. Explain briefly the events during ventricular systole and diastole of cardiac cycle. 2+(4+4)=10

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SH-III/Physiology/303C-7(T)/19

B.Sc. Semester III (Honours) Examination, 2018-19

PHYSIOLOGY

Course ID : 32513 **Course Code : SHPHY-303C-7(T)**

Course Title : Functions of the Nervous System

Time: 1 Hour 15 Minutes **Full Marks: 25**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions from the following: 1×5=5

(a) What do you mean by lower motor neurone?

(b) What is referred pain?

(c) What is 'Golgi Tendon Reflex'?

(d) Differentiate between phasic stretch reflex and tonic stretch reflex.

(e) What is REM Sleep?

(f) Write the role of 'Broca's' area.

(g) What is 'Bell-Magendie Law'?

(h) Write any one role of ARAS.

2. Answer *any two* questions from the following: 5×2=10

(a) What is pain? Briefly discuss the pain pathway? 1+4=5

(b) Briefly discuss the origin, course and termination of 'Gall and Burdach' tract. 1+3+1=5

(c) What is withdrawal reflex? Explain with diagramme the mechanism of stretch reflex. 1+(2+2)=5

(d) Discuss the role of hypothalamus on temperature regulation. 5

3. Answer *any one* questions from the following: 10×1=10

(a) Why pyramidal tract is known as "Cortico Spinal tract" justify the statement? Discuss the origin, course and termination of Cortico spinal tract. 2+3+3+2=10

(b) Briefly discuss the origin, outflow and function of parasympathetic nervous system. Write in brief the functions of cerebral cortex. 2+3+2+3=10

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SH-III/Physiology/304/GE-3(T)/19

B.Sc. Semester III (Honours) Examination, 2018-19

PHYSIOLOGY

Course ID : 32514 **Course Code : SHPHY/304/GE-3(T)**

Course Title : Environmental Pollution and Human Health

Time: 1 Hour 15 Minutes **Full Marks: 25**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions from the following: 1×5=5

যে কোনো পাঁচটি প্রশ্নের উত্তর দাও ঃ

(a) What is acid rain?
অম্লবৃষ্টি কী?

(b) Write the full form of PAN.
PAN-এর সম্পূর্ণ নাম লেখো।

(c) What is ozone hole?
ওজন গহ্বর কী?

(d) What is decibel?
ডেসিবেল কী?

(e) Write the name of two diseases caused by water pollution.
জল দূষন-এর দ্বারা হয় এমন দুটি রোগের নাম লেখো।

(f) What do you mean by bio-remediation?
বায়ো-রেমিডিয়েশন বলতে কী বোঝো?

(g) What is algal bloom?
শৈবাল ব্লুম কাকে বলে

(h) Write full form of WHO.
WHO-এর সম্পূর্ণ নাম লেখো।

2. Answer *any two* questions from the following: 5×2=10

(a) How does nitrogen and carbon monoxide affect the human body? 2½+2½=5
মানবদেহে নাইট্রোজেন এবং কার্বন মনোক্সাইড কিভাবে ক্ষতিসাধন করে?

(b) What is noise index? Briefly discuss the effect of sound pollution on human health. 1+4=5
শব্দসূচক কী? মানবস্বাস্থে শব্দদূষনের ক্ষতিকর প্রভাবগুলি আলোচনা করো সংক্ষেপে।

(c) Why phytoremediation is considered as novel approach for cleaning up polluted soils?
দূষিত মৃত্তিকা পরিস্কার-এর জন্য ফাইটো রেমিডিয়েশন কে আদর্শ পদক্ষেপ হিসেবে বিবেচনা করা হয় কেন?

(d) What are green-house gasses? Write a short note on global warming. 1+4=5
গ্রীন-হাউস গ্যাস কোনগুলি? বিশ্ব-উষ্ণায়ন সম্পর্কে একটি সংক্ষিপ্ত টীকা লেখো।

3. Answer *any one* questions from the following: 10×1=10

(a) Describe the causes of arsenic pollution in water. Briefly discuss the arsenic pollution on human health. 5+5=10
জলে আর্সেনিক দূষন-এর কারনগুলি লেখো। মানবস্বাস্থের ওপর আর্সেনিক দূষন-এর ক্ষতিকর প্রভাবগুলি সংক্ষেপে আলোচনা করো।

(b) What is ionizing radiation? What are the sources of ionizing radiation? briefly discuss the effect of ionizing radiation on human health. 1+2+7=10
আয়োনাইজিং রেডিয়েশন কী? আয়োনাইজিং রেডিয়েশন-এর উৎসগুলি লেখো। মানবস্বাস্থের ওপর আয়োনাইজিং রেডিয়েশন-এর ক্ষতিকর প্রভাবগুলি আলোচনা করো।

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SP-III/Physiology/301/C-1C(T)/19

B.Sc. Semester III (Programme) Examination, 2018-19

PHYSIOLOGY

Course ID : 32518 **Course Code : SPPHY/301/C-1C(T)**

Course Title : Environmental Hazards and Human Physiology

Time: 1 Hour 15 Minutes **Full Marks: 25**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions from the following: 1×5=5

যে কোনো পাঁচটি প্রশ্নের উত্তর দাও ঃ

(a) Write the name of any two primary air pollutants.
যে কোনো দুটি মুখ্যবায়ুদূষকের নাম লেখো।

(b) What is aerosol?
অ্যারোসল কী?

(c) How does carbon tetra chloride results harmful effect on our body?
কিভাবে কার্বন টেট্রাক্লোরাইড আমাদের দেহে ক্ষতি করে?

(d) What is acousting zoning?
অ্যাকাস্টিক জোনিং কী?

(e) Write the definition of drinking water.
পানীয় জলের সংজ্ঞা লেখো।

(f) What is ozone hole?
ওজোন হোল কী?

(g) What is 'Rem'
রেম কী?

(h) Write the name of two green-house gases.
দুটি গ্রীনহাউস গ্যাসের নাম লেখো।

2. Answer *any two* questions from the following: 5×2=10

(a) What is photochemical smog? How photochemical smog is formed? 1+4=5
আলোক রাসায়নিক ধোঁয়াশা কী? কিভাবে আলোক রাসায়নিক ধোঁয়াশা সৃষ্টি হয়?

(b) Write the name of two radio-active materials. Discuss about the effect of ionizing radiation on human health. 1+4=5
দুটি তেজস্ক্রিয় পদার্থের নাম লেখো। মানবস্বাস্থ্যের উপর তেজস্ক্রিয় দূষনের প্রভাব আলোচনা করো।

(c) What do you mean by thermal water pollution? Discuss about the effect of thermal water pollution on environment. 1+4=5

তাপীয় জলদূষন হলতে কী বোঝো? পরিবেশের উপর তাপীয় জলদূষনের প্রভাব আলোচনা করো।

(d) Briefly discuss about the effect soil pollution on human health. 5

মানবস্বাস্থের উপর মৃত্তিকাদূষনের প্রভাব সংক্ষেপে আলোচনা করো।

3. Answer *any one* questions from the following: 10×1=10

(a) What is 'Aldrich Mees Lines'? Discuss the effects of arsenic pollution on human health. 2+8=10

অল্ডরিচ মিজ রেখা কী? মানবস্বাস্থের উপর আর্সেনিক দূষনের প্রভাব আলোচনা করো।

(b) What are water pollutions? Briefly discuss about the effect water pollution on human health. 2+8=10

জলদূষকগুলি কী কী? সংক্ষেপে মানবস্বাস্থের উপর জলদূষনের প্রভাব আলোচনা করো।

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32521 **Course Code : SHPHY/301/C-5(PI)**

Course Title : Circulating Body Fluids Lab

Instruction to the Examiners

1. Two slides may be allowed for Q1 and Q2 practical with mentioning signature of examiner for each candidate.
Blood film staining = 2
Neutrophil focussing = 3
Without focussing any type of Neutrophil no credit should be given. 5

2. Haemin crystal focussing = 3
Diagram = 2 5

3. Credit should be given on the basis of
Laboratory notebook having regular signature by class teacher's
Percentage covered from syllabus. 3

4. Viva voce. Question will cover the practical performance is the class, instrument used and theoretical knowledge. 2

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SH-III/Physiology/301/C-5(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32521 **Course Code : SHPHY/301/C-5(P)**

Course Title : Circulating Body Fluids Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. Show the 3 lobed neutrophil of your own blood film after Leishman's staining under high power objective of compound microscope. 5

[Blood film staining = 2, Neutrophil focussing = 3]

2. Prepare and show the haemin crystal of your own blood under high power (40× or 45×) objective of compound microscope. Draw a labelled diagram of the field you have focussed. 5

[Haemin crystal focussing = 3, Diagram = 2]

3. Laboratory Notebook. 3

4. Viva voce. 2

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32521 **Course Code : SHPHY-301C-5(PI)**

Course Title : Circulating Body Fluids Lab

Instruction to the Examiners

1. Two slides may be allowed for Q1 and Q2 practical with mentioning signature of examiner for each candidate.
Blood film staining = 2
Neutrophil focussing = 3
Without focussing any type of Neutrophil no credit should be given. 5

2. Haemin crystal focussing = 3
Diagram = 2 5

3. Credit should be given on the basis of
Laboratory notebook having regular signature by class teacher's
Percentage covered from syllabus. 3

4. Viva voce. Question will cover the practical performance is the class, instrument used and theoretical knowledge. 2

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SH-III/Physiology/302C-6(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32522 **Course Code : SHPHY/302/C-6(P)**

Course Title : Circulation Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the following questions: 10

1. (a) Give a tabular representation of working fluid's composition of amphibian Ringer solution. 2

(b) Measure the average height of contractions of perfused heart curve of toad (supplied to you through lottery) in

(i) normal fluid pressure condition

(ii) high fluid pressure condition, and

(iii) low fluid pressure condition. 2+2+2=6

(c) Interpreted the effects of changes in perfusion fluid pressure on heart curve of Toad. 2

2. Laboratory Notebook. 3

3. Viva voce. 2

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32522 **Course Code : SHPHY/302/C-6(PI)**

Course Title : Circulation Lab

Instruction to the Examiners.

1. (a) Marks should be deducted for spelling mistake, wrong units and amounts.

(b) Average heights are to be checked by the examiners. For incorrect measurements, marks should be deducted. Candidates are required to mention the card number of the graph supplied through lottery in their answer script and should be signed by the examiner. 10

2. Marks for Laboratory Notebook should be on the basis of regular signature by the Teacher(s), neatness and syllabus covered. 1+1+1=3

3. Viva voce questions are to be asked from Practical components performed, instruments used and theoretical syllabus. 2

[All part markings should be noted in the answer script.

Award list, Sample key, Answer scripts and relevant papers should be submitted along with the packet for scrutiny Head Examiner.]

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SH-III/Physiology/302C-6(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32522 **Course Code : SHPHY/302/C-6(P)**

Course Title : Circulation Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the following questions: 10

1. (a) Give a tabular representation of working fluid's composition of amphibian Ringer solution. 2

(b) Measure the average height of contractions of perfused heart curve of toad (supplied to you through lottery) in

(i) normal fluid pressure condition

(ii) high fluid pressure condition, and

(iii) low fluid pressure condition. 2+2+2=6

(c) Interpreted the effects of changes in perfusion fluid pressure on heart curve of Toad. 2

2. Laboratory Notebook. 3

3. Viva voce. 2

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32522 **Course Code : SHPHY/302/C-6(PI)**

Course Title : Circulation Lab

Instruction to the Examiners.

1. (a) Marks should be deducted for spelling mistake, wrong units and amounts.

(b) Average heights are to be checked by the examiners. For incorrect measurements, marks should be deducted. Candidates are required to mention the card number of the graph supplied through lottery in their answer script and should be signed by the examiner. 10

2. Marks for Laboratory Notebook should be on the basis of regular signature by the Teacher(s), neatness and syllabus covered. 1+1+1=3

3. Viva voce questions are to be asked from Practical components performed, instruments used and theoretical syllabus. 2

[All part markings should be noted in the answer script.

Award list, Sample key, Answer scripts and relevant papers should be submitted along with the packet for scrutiny Head Examiner.]

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SH-III/Physiology/303/C-7(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32523 **Course Code : SHPHY/303/C-7(P)**

Course Title : Functions of the Nervous System Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. Determine the deep reflex (Knee jerk) by 'Rubber' hammer provided to you.

(a) Write the procedure for the conduction of experiment (Kneejerk reflex).

(b) Prepare a data table by taking data atleast three times.

(c)Interpret your results. 2+1+2=5

2. Measure the reaction time of your subject by stick drop method.

(a) Write the principle of the method.

(b) Prepare a data table by taking data atleast 10 times.

(c) Calculate and interpret your results. 1+2+1+1=5

3. Laboratory Notebook. 3

4. Viva voce. 2

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32523 **Course Code : SHPHY/303/C-7(PI)**

Course Title : Functions of the Nervous System Lab

Instruction to the Examiners.

1. (a) Procedure in brief. 2

(b) Collection of data at least 3 times and tabulation. 1

(c) Interpretation. 2

(Examiner should check the observations with signature.)

2. (a) Principle of the experiment (in brief). 1

(b) Collection of data and tabulation. 2

(c) Calculation and interpretation. 1+1=2

(Examiner should check the observations with signature.)

3. Lab notebook: 2

Credit should be given on the basis of

(a) Notebooks having regular signature by teacher(s).

(b) Neat preparation of the notebook.

4. Viva voce: 3

(a) Questions will cover the practical performed in the classes, including instruments used for practical purposes.

(b) Theoretical basis and related questions on practical done.

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SH-III/Physiology/303/C-7(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32523 **Course Code : SHPHY/303/C-7(P)**

Course Title : Functions of the Nervous System Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. Determine the deep reflex (Knee jerk) by 'Rubber' hammer provided to you.

(a) Write the procedure for the conduction of experiment (Kneejerk reflex).

(b) Prepare a data table by taking data atleast three times.

(c)Interpret your results. 2+1+2=5

2. Measure the reaction time of your subject by stick drop method.

(a) Write the principle of the method.

(b) Prepare a data table by taking data atleast 10 times.

(c) Calculate and interpret your results. 1+2+1+1=5

3. Laboratory Notebook. 3

4. Viva voce. 2

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32523 **Course Code : SHPHY/303/C-7(PI)**

Course Title : Functions of the Nervous System Lab

Instruction to the Examiners.

1. (a) Procedure in brief. 2

(b) Collection of data at least 3 times and tabulation. 1

(c) Interpretation. 2

(Examiner should check the observations with signature.)

2. (a) Principle of the experiment (in brief). 1

(b) Collection of data and tabulation. 2

(c) Calculation and interpretation. 1+1=2

(Examiner should check the observations with signature.)

3. Lab notebook: 2

Credit should be given on the basis of

(a) Notebooks having regular signature by teacher(s).

(b) Neat preparation of the notebook.

4. Viva voce: 3

(a) Questions will cover the practical performed in the classes, including instruments used for practical purposes.

(b) Theoretical basis and related questions on practical done.

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SH-III/Physiology/305/SEC-1B(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32525 **Course Code : SHPHY/305/SEC-1B(P)**

Course Title : Haematological Techniques Lab

Time: 4 Hours **Full Marks: 40**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. Draw a film of your own blood. Stain it suitably with Leishman's stain. Focus a large lymphocyte at the middle of the field under high power objective of a compound microscope. Draw the field exactly which you have focussed and label properly. 15

[Marks distribution: (a) blood film = 3, (b) Proper staining = 4, correct identification = 5, correct labelled diagram of your focussed field = 3]

2. Determine the haemoglobin level from the supplied blood sample by cyanmethaemoglobin method. Interprete your results. 15

[Marks distribution: (a) Principle = 2, (b) procedure = 2, (c) Result = 2 calculation = 7, (d) Interpretation = 2]

[Error upto 10% = 7, within 10% – 15% = 4 Above 15% = 2]

3. Laboratory Notebook. 5

4. Viva voce. 5

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32525 **Course Code : SHPHY/305/SEC-1B(PI)**

Course Title : Haematological Techniques Lab

Instruction to the Examiners

1. Two slide should be marked by dimond pencil per student.
   Blood film preparation = 3
   Staining = 4
   Focussing of Lymphocnte = 5
   Labelling = 1
   Diagram = 2

2. Principle = 2
   Procedure = 2
   Result = 2
   Calculation = 7
   Error upto 10% = 4
   Within 10 – 15% = 4
   Above 15% = 2
   Interpretation = 2

3. Laboratory notebook having regular signature and syllabus covered.

4. Question to be asked from practical performed, instrument used and theoretical knowledge.

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SH-III/Physiology/305/SEC-1B(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32525 **Course Code : SHPHY/305/SEC-1B(P)**

Course Title : Haematological Techniques Lab

Time: 4 Hours **Full Marks: 40**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. Draw a film of your own blood. Stain it suitably with Leishman's stain. Focus a large lymphocyte at the middle of the field under high power objective of a compound microscope. Draw the field exactly which you have focussed and label properly. 15

[Marks distribution: (a) blood film = 3, (b) Proper staining = 4, correct identification = 5, correct labelled diagram of your focussed field = 3]

2. Determine the haemoglobin level from the supplied blood sample by cyanmethaemoglobin method. Interprete your results. 15

[Marks distribution: (a) Principle = 2, (b) procedure = 2, (c) Result = 2 calculation = 7, (d) Interpretation = 2]

[Error upto 10% = 7, within 10% – 15% = 4 Above 15% = 2]

3. Laboratory Notebook. 5

4. Viva voce. 5

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32525 **Course Code : SHPHY/305/SEC-1B(PI)**

Course Title : Haematological Techniques Lab

Instruction to the Examiners

1. Two slide should be marked by dimond pencil per student.
   Blood film preparation = 3
   Staining = 4
   Focussing of Lymphocnte = 5
   Labelling = 1
   Diagram = 2

2. Principle = 2
   Procedure = 2
   Result = 2
   Calculation = 7
   Error upto 10% = 4
   Within 10 – 15% = 4
   Above 15% = 2
   Interpretation = 2

3. Laboratory notebook having regular signature and syllabus covered.

4. Question to be asked from practical performed, instrument used and theoretical knowledge.

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SH-III/Physiology/304/GE-3(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32524 **Course Code : SHPHY/304/GE-3(P)**

Course Title : Environmental Pollution and Human Health Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Measure the amount of dissolve O_2 present in supplied water sample by modified 'Wrinkler's' method. 10

মডিফায়েড 'Wrinkler's'পদ্ধতিতে সরবরাহকৃত জলের নমুনা দ্রবনে উপস্থিত দ্রবীভূত O_2-এর পরিমান নির্ণয় করো।

2. Laboratory Notebook. 2

পরীক্ষাগার নথি।

3. Viva voce 3

মৌখিক পরীক্ষা।

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32524 **Course Code : SHPHY/304/GE-3(PI)**

Course Title : Environmental Pollution and Human Health Lab

Instruction to the Examiner

1.	(a) Principle in brief.	1
	(b) Procedure of experiment in details.	4
	(c) Data table preparation.	2
	(d) Calculation and interpretation	1½+1½=3
	[NB: Data table should check by examiner and signed]	
2.	Laboratory Notebook.	2
3.	Viva voce.	3

SH-III/Physiology/304/GE-3(P)/19

B.Sc. Semester III (Honours) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32524 **Course Code : SHPHY/304/GE-3(P)**

Course Title : Environmental Pollution and Human Health Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Measure the amount of dissolve O_2 present in supplied water sample by modified 'Wrinkler's' method. 10

মডিফায়েড 'Wrinkler's'পদ্ধতিতে সরবরাহকৃত জলের নমুনা দ্রবনে উপস্থিত দ্রবীভূত O_2-এর পরিমান নির্ণয় করো।

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পরীক্ষাগার নথি।

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B.Sc. Semester III (Honours) Practical Examination, 2018-19

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SH-III/Physiology/301/C-1C(P)/19

B.Sc. Semester III (Programme) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32528 **Course Code : SHPHY/301/C-1C(P)**

Course Title : Environmental Hazards and Human Health Lab

Time: 2 Hours **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. (a) Measure the maximum height of contractions of heart curve of toad (supplied to you through lottery) in

(i) Normal heat curve

(ii) Effect of temperature

(iii) Count the number of heart rates for 5 seconds in both the normal and effect of temperature heart curves.

(b) interprete the effects of temperature on heart curve of toad. 2+2+3+3=10

2. Laboratory Notebook. 3

3. Viva voce. 2

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B.Sc. Semester III (Programme) Practical Examination, 2019

PHYSIOLOGY

Course ID : 32528 **Course Code : SHPHY/301/C-1C(PI)**

Course Title : Environmental Hazards and Human Health Lab

Instruction to the Examiners.

1. Model heart curves bearing normal and effect of temperature should be distributed through lottery. Examiner should sign against the code number of each curve in the examinees answer script and subsequently should take a record for sample key in each day.
   Proper counting and measurement of degree of contraction with unit(s) should only carry full marks.
   Result are to be mentioned in a tabular form.
2. Regular signature by the Teacher(s) and neatness should carry credit marks. Marks are to be given on the basis of member of practically performed in regular class.
3. Question should be asked from practical component, instrument used and theoretical basis.

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SH-III/Physiology/301/C-1C(P)/19

B.Sc. Semester III (Programme) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32528 **Course Code : SHPHY/301/C-1C(P)**

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3. Viva voce. 2

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B.Sc. Semester III (Programme) Practical Examination, 2019

PHYSIOLOGY

Course ID : 32528 **Course Code : SHPHY/301/C-1C(PI)**

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SP-III/Physiology/304/SEC-1(P)/19

B.Sc. Semester III (Programme) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32520 **Course Code : SPPHY/304/SEC-1(P)**

Course Title : Food Pollutants Lab

Time: 4 Hours **Full Marks: 40**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all questions.

1. Identify three common adulterants in the supplied samples collected by lottery through proper sequential biochemical test. Write the procedures of biochemical tests sequentially. 10+10+10=30

তিনটি নমুনা খাদ্যে মেশানো তিনটি অ্যাডালটেরন্টকে লটারীর দ্বারা সংগৃহীত সঠিক ক্রম অনুসারে প্রাণ রাসায়নিক পরীক্ষাগুলির সাহায্যে সনাক্ত করো। সঠিক ক্রমে রাসায়নিক পরীক্ষাসমূহের পদ্ধতি লেখো।

2. Laboratory Note Book. 5
পরীক্ষাগারে ব্যবহৃত খাতাসমূহ।

3. Viva voce. 5
মৌখিক প্রশ্নোত্তর।

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B.Sc. Semester III (Programme) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32520 **Course Code : SPPHY/304/SEC-1(PI)**

Course Title : Food Pollutants Lab

Instruction to the Examiners

1. Ten food samples to be prepared than the following groups containing common adulterants: 10×3=30

(a) Metanil yellow in sweet
(b) Saccharine foil in sweet
(c) Aluminium foil in sweet
(d) Margarine in butter
(e) Turmeric powder in Ice cream
(f) Sugar in Honey
(g) Monosodium glutamate in meat
(h) Besan in chalk powder
(i) Pb in noodles
(j) Hg in chocolate

Sample should be prepared as— A1, A2, A3 etc..... with confidential key.

Making for each sample—
Systematic analysis — 8
Confirmatory test — 2

No marks for wrong identification and without any test.

2. Laboratory Notebook having regular signature by class teacher(s).

% catered than the syllabus.

Neat presentation of the Notebook. 5

3. Viva voce:

Questions should be on practicals performed in the classes instruments used and the theoretical knowledge. 5

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SP-III/Physiology/304/SEC-1(P)/19

B.Sc. Semester III (Programme) Practical Examination, 2018-19

PHYSIOLOGY

Course ID : 32520 **Course Code : SPPHY/304/SEC-1(P)**

Course Title : Food Pollutants Lab

Time: 4 Hours **Full Marks: 40**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all questions.

1. Identify three common adulterants in the supplied samples collected by lottery through proper sequential biochemical test. Write the procedures of biochemical tests sequentially. 10+10+10=30

তিনটি নমুনা খাদ্যে মেশানো তিনটি অ্যাডালটেরন্টকে লটারীর দ্বারা সংগৃহীত সঠিক ক্রম অনুসারে প্রাণ রাসায়নিক পরীক্ষাগুলির সাহায্যে সনাক্ত করো। সঠিক ক্রমে রাসায়নিক পরীক্ষাসমূহের পদ্ধতি লেখো।

2. Laboratory Note Book. 5
পরীক্ষাগারে ব্যবহৃত খাতাসমূহ।

3. Viva voce. 5
মৌখিক প্রশ্নোত্তর।

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B.Sc. Semester III (Programme) Practical Examination, 2018-19

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Sample should be prepared as— A1, A2, A3 etc..... with confidential key.

Making for each sample—
Systematic analysis — 8
Confirmatory test — 2

No marks for wrong identification and without any test.

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Neat presentation of the Notebook. 5

3. Viva voce:

Questions should be on practicals performed in the classes instruments used and the theoretical knowledge. 5

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SH-III/Physiology/301/C-5(T)/19

B.Sc. Semester III (Honours) Examination, 2018-19

PHYSIOLOGY

Course ID : 32511 **Course Code : SHPHY/301/C-5(T)**

Course Title : Circulating Body Fluids

Time: 1 Hour 15 Minutes **Full Marks: 15**

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions from the following: 1×5=5

(a) What is blood typing?

(b) Name one natural and one chemical anticoagulants.

(c) Write any one difference between red and yellow bone marrow?

(d) What is fibrinolysis?

(e) What is erythroblastosis foetalis?

(f) What are the 'T' and 'R' forms of haemoglobin?

(g) What is leukopenia?

(h) What is 'Arneth Count'?

2. Answer *any two* questions from the following: 5×2=10

(a) Name the plasma proteins? Mention their functions. 1+4=5

(b) What are the functions of platelets? Write the clinical consequence of thrombocytopenia. 2½+2½=5

(c) Discuss the composition and functions of lymph. 2+3=5

(d) Explain the basis of 'ABO' blood grouping. State any two condition for blood transfusion. 3+2=5

3. Answer *any one* questions from the following: 10×1=10

(a) Describe in brief the modern concept of blood coagulation. What thrombus? Write the role of calcium on blood coagulation. 7+1+2=10

(b) What is erythropoiesis? Describe the different stages of erythropoiesis. Mention the factor regulating erythropoiesis. 1+6+3=10

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