



RESTRICTED



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31 Aug 2021

Assignment for students participating in HSC Exam 2021 (6th week).

Instructions for submitting assignments:-

- I. Examinees and parents must strictly follow the hygiene rules adopted to prevent COVID-19 infection.
- II. Examinees will have the assignment ready within 06 (six) days of receipt. Later, if the date of submission of assignment is given to the concerned group, it will be submitted to the institution.
- III. Examinees will fill the cover page of the assignment properly.

MD NAZIB MAHMUD SHAJIB
Lt Col
Principal

Atch :

Assignment for students participating in HSC Exam 2021 (6th week).

Distr :

Act :

Examinees participating in the HSC examination of 2021.

Class teachers (all) of 2021 HSC candidates.

Teachers, teacher assistants and staff involved in accepting and distributing assignments.

Info :

Parents of the candidates participating in the 2021 HSC examination.

College Co-Ordinator

Assistant Headmaster

Admin Officer

Office Super

Account Sec:

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Assignment no, Chapter	Assainment	Learning Outcomes/ Content	Indicator (Hints/Step/Perimeter)
04 Chapter-07 (INVERSE TRIGONOMETRIC FUNCTIONS AND TRIGONOMETRIC EQUATIONS)	Title : Solution of problems related to the 'INVERSE TRIGONOMETRIC FUNCTIONS AND TRIGONOMETRIC EQUATIONS'. $f(x) = \sin x$ and $g(x) = \tan^{-1}x$	<ul style="list-style-type: none"> Be able to explain inverse relation of trigonometric functions and determine principal value. Be able to find the general solution of trigonometric equations. Be able to find the solution of trigonometric equations in a certain interval. 	a) Show that, $\sec^2(g(5)) + \operatorname{cosec}^2(g(1/2)) = 31$
			b) If $f^{-1}(x) + \cos^{-1}y = \pi/6$ then prove that, $4(x^2 + y^2 - xy) = 3$
			c) If $f(\pi \cos \theta) = \cos(\pi/2 \pm \pi \sin \theta)$ then show that, $4\theta \pm \pi = 4 \sec^{-1}(2\sqrt{2})$
			d) Solve : $\frac{1}{f(2x)} - \frac{\sqrt{3}}{f(\frac{\pi}{2} - 2x)} = 4$
			e) In the interval $0 < \theta < 2\pi$ solve $1 + f(\pi/2 - \theta) + f(\pi/2 - 2\theta) = 0$

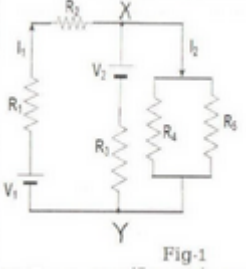
Total Marks : 16

Number range	Comment
13-16	Excellent
11-12	Very good
8-10	Good
7 or less	Progress is needed

Cantonment Public School and College, Momenshahi

Assignment for H.S.C. candidates-2021

Subject: Physics Paper: 2nd Subject Code: 175 Level: HSC

Assignment No.	Assignment	Learning outcome	Instruction	Evaluation Instruction	Comments										
<p>04</p> <p>3rd Chapter</p> <p>Chapter Title: Current electricity.</p>	<p>Title: Analysis of the role of circuit components in the current flow of electricity in a circuit.</p>  <p>Fig-1</p> <p>(A) Show with diagram what will be Kairchhoff's 2 law look like in the circuit of Fig-1.</p> <p>(B) Draw a diagram how the current will change if V1 connects by changing the end of the battery.</p> <p>Now let's think about another circuit. Suppose a bulb in a circuit is connected to the two batteries. The value of the electromotive force of the two batteries is 12V, their internal resistance is 0.50 ohm,</p>	<p>. Be able to analyze the mathematical relationship between the internal resistance of cell's and the electromotive force.</p> <p>. Be able to explain the series and parallel combination of cells in a circuit.</p> <p>. Be able to determine the electric current and potential difference of a circuit using Kirchhoff's law.</p>	<p>In case of solution of (A) it is necessary to use combination of resistance and X and Y junction points. and draw a diagram.</p> <p>(B) In this case, the combination of resistance has to be taken.</p>	<table border="1" data-bbox="1161 1108 1437 1564"> <thead> <tr> <th>Mark s interval</th> <th>Comment s</th> </tr> </thead> <tbody> <tr> <td>13-16</td> <td>Very Excellent</td> </tr> <tr> <td>11-12</td> <td>Excellent</td> </tr> <tr> <td>8-10</td> <td>Good</td> </tr> <tr> <td>less than 8</td> <td>Progress is needed</td> </tr> </tbody> </table>	Mark s interval	Comment s	13-16	Very Excellent	11-12	Excellent	8-10	Good	less than 8	Progress is needed	
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	<p>and the external resistance of the circuit is 4.5 ohm</p> <p>(C) To determine the electric current in case of series connection of the battery in the circuit.</p> <p>(D) If the internal resistance of the circuit bulb is r, in which case the bulb will be brighter, series or parallel combination of the battery?</p> <p>(E) Under what conditions the bulb will give the same brightness in case of two types of combination of the battery?</p> <p>(F) If the current flow rate decreases by 25%, what will be the decreases percentage of brightness of the bulb?</p>				
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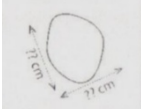
Assignment for students participating in the HSC 2021 examination

Subject: Biology

Paper: 2nd

Subject Code: 179

Level: HSC

Assignment No.	Assignment	Learning outcomes/ Content	Instruction	Evaluation instructions					Score	Comment
				Indicative	Excellence value/Number					
					4	3	2	1		
4	Chapter 02: Introduction to Animals	Be able to describe the structure of Rohu fish	<p>#Necessary materials: A Rohu fish/ snake head fish (any fish if not available), scale/ ruler/ measuring tape(suitable for measuring in centimeters). If necessary, measure with yarn and put it on the scale. All measurements of length-width will be in centimeters.</p> <p>#Two tables should be made on an A-4 or similar size paper for assignment (see next page).</p> <p>#As the maximum length when measuring the body size of the fish, measurements should be taken from mouth to end of the tail. As the maximum width, the part of the body that extends from the thorax to the dorsal side size must be taken. This measure should be taken except for the fins.</p> <p>#In case of other parts also the size should be written in the table as per the instructions. In case of lateral lines and a few distances, it is sufficient to mention only the length. In case of fins, maximum length and maximum width should be mentioned.</p> <p># Collect two scales from the dorsal surface and one from the thoracic part and</p>  <p>dry. Then put it in the designated cell of table -1 (1-4 and 1-5) and outline with pen. To draw. Then along the vertical and horizontal axes of each of the two scales the length and width should be mentioned as shown above image. Image?? the number will sit in its place.</p>	A In table-1 (External structure) A total of 9 measurements of 1-1 and 1-2	Be able to fill at least 8 of the 9 cells acceptably	Be able to fill at least 6-7 of the 9 cells acceptably	Be able to fill at least 3-5 of the 9 cells acceptably	Be able to fill at least 1-2 of the 9 cells acceptably		
				B. In table-1 (External structure) A total of 8 measurements of 1-3	Be able to fill each of the 8 cells acceptably	Be able to fill at least 6-7 of the 8 cells acceptably	Be able to fill at least 3-5 of the 8 cells acceptably	Be able to fill at least 1-2 of the 8 cells acceptably		
				C. To place and measure two samples of scales of table -1 (1-4 and 1-5)	Be able to specify two samples acceptable placement and measurement.	Be able to place two samples acceptably but measurement of one can be mentioned in an acceptable way.	Be able to place one of the two samples acceptably but measurement of one can be mentioned in an acceptable way.	Be able to place one of the two samples acceptably		

Assignment No 4: Total Marks 12

Number Range	Comment
10-12	Excellent
8-9	Very good
6-7	Good
5 or less	Progress is needed

Assignment Table

Table 1: External Structure		
1-1: Part of the head	Maximum length (cm)	Maximum width (cm)
# The body of the fish		
# Eye		
# Operculum		
1-2: Head and Lateral line		length (cm)
# Any sided lateral line		
# The distance from the nostrils on either side to the eye on that side		
# The distance from the nostrils on either side to the mouth on that side		
1-3: Fins	Maximum length (cm)	Maximum width (cm)
# Dorsal fin		
#Caudal fin		
# Any one sided Pectoral fin		
# Any one sided Pelvic fin		
1-4: A sample of Dorsal surface scales. (Measured in cm units)	1-5: A sample of thoracic scales. (Measured in cm units)	