

APOLLO

Biostatistics and data handling

FBISE Biology Class 10 (SSC-II)

Domain K: Biostatistics and Data Handling

11 questions | questions

Original FBISE question crops. National Curriculum 2022-23 topic.

(x)	Most relevant example of biostatistics is:	Studying the effects of a new medicine	Writing a medical book	Treating a patient in a hospital	Drawing pictures of bacteria
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(ix)	How does biostatistics help in management of public health?	3
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Define mean, median and mode. Calculate the mean and mode of the given data. Score of students in a game <table border="1"> <thead> <tr> <th>Name of student</th><th>Score</th></tr> </thead> <tbody> <tr><td>A</td><td>5</td></tr> <tr><td>B</td><td>10</td></tr> <tr><td>C</td><td>4</td></tr> <tr><td>D</td><td>8</td></tr> <tr><td>E</td><td>11</td></tr> <tr><td>F</td><td>4</td></tr> <tr><td>G</td><td>7</td></tr> </tbody> </table>	Name of student	Score	A	5	B	10	C	4	D	8	E	11	F	4	G	7	3+2+1
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Q.4	What is meant by biostatistics? Explain any four applications of biostatistics.	1+4
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6.	In public health, biostatistics is useful for:	Performing surgery	Analyzing disease trends	Manufacturing vaccines	Treating infections
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(vii)	The number of fruits produced on each of the 10 trees are given. Find out the median value and mean of fruit produced. 3, 5, 18, 21, 15, 10, 8, 12, 13, 7.	1+2
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	Describe any five uses of bio-statistics.	1x5
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(x)	Most relevant example of biostatistics is:	Studying the effects of a new medicine	Writing a medical book	Treating a patient in a hospital	Drawing pictures of bacteria	○ ○ ○ ○
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OR	Define mean and mode. Calculate the mean and mode of the given data. Score of students in a game:	2+3																
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A student studied the effect of limiting factors on rate of photosynthesis and obtained following data shown in **Table 3.1**

Concentration of CO ₂ (% age)	0.00	0.02	0.04	0.06	0.08	0.10	0.12	0.14
Rate of photosynthesis in LOW LIGHT INTENSITY	0	20	29	35	39	42	45	47
Rate of photosynthesis in HIGH LIGHT INTENSITY	0	22	35	47	68	84	94	99

- Make two graphs of above data to show rates of photosynthesis in low and high intensities of light. Compare the rates of photosynthesis in both graphs. [2]
- Label the region of graphs that show carbon dioxide as limiting factor. [2]
- Name two factors other than CO₂ and light intensities, that may act as limiting factor for rate of photosynthesis. How a factor becomes limiting factor for the process of photosynthesis? [2]

Q.5

- a) The following diagram shows diffusion of ink in two glasses of water at different temperatures. Which glass will show faster diffusion? Give a reason for your answer. [2]

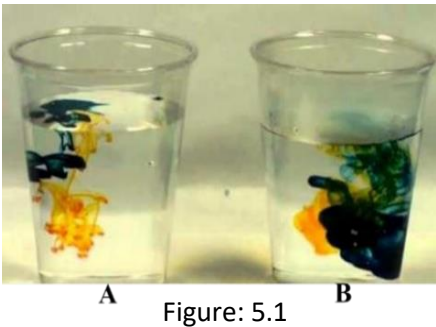


Figure: 5.1

- b) While recording the height of your classmates, you obtained the data given in table 4.1 and draw a histogram using your scale to represent this data. [2]

Table: 5.1	
Height range in inches	Number of students
59-60	2
61-62	5
63-64	12
65-66	18
67-68	9
69-70	3
71-72	1