

FBISE PRACTICAL BASED ASSESMENT (PBA)
BIOLOGY HSSC-II
(Curriculum 2006)

Guidelines/instructions for teachers/paper setters:

- i. There will be two Sections in PBA paper. In Section-A there will be one question having parts in it. Similarly, in Section-B there will be one question having parts in it.
- ii. In Section-A, Question No. 1 will be based only on one experiment taken from Part-I of the list of practicals.
- iii. In Section-B, Question No. 2 will be based on multiple experiments taken from Part-II of the list of practicals.
- iv. Weightage of Part-I practicals is 60% while weightage of Part-II practicals is 40% in the PBA paper.
- v. Draw diagram(s) if asked for.
- vi. In the new pattern of practicals i.e. Practical Based Assessment (PBA), there will be no marks for practical note books and viva voce. However, students may record procedures, observations, apparatus and calculation etc on any type of plain papers/work sheets / practical folder for their future memory of all aspects of practical performance in order to attempt the PBA Examination amicably.
- vii. It may be noted that performance of all the prescribed practicals is mandatory in the laboratories during the whole academic year and only those students will be able to attempt the PBA who will have performed the practicals in the laboratories as per requirement of each practical.
- viii. MCQs will not be asked in PBA paper.
- ix. The 0.5 mark question will not be asked in any section of PBA paper.

LIST OF PRACTICALS (CURRICULUM 2006)

BIOLOGY HSSC-II

SECTION A (60% of practical marks ---- 9 Marks)	
1.	Comparison and interpretation of the X-ray films of lungs of a smoker with that of a healthy man
2.	Comparison of the structure of skeletal, smooth and cardiac muscles with the help of prepared slides
3.	Observation of the MRI scan of the brain of a sleeping human and compare it with that of a fully awake individual
4.	Observation of a spider's web and recording the instincts by providing it various stimuli
5.	Evaluation of the inheritance of genes and their mixing during fertilization as based on mathematical probabilities
6.	Calculation of probability by using the dice to calculate how many times out of 100 throws can students get sixes
7.	Data collection from the class to see how many individuals have AB blood group and construction of a pie chart and histogram for the collected data
8.	Testing of blood group using Antisera and performing agglutination reaction for Rh factor

SECTION B (40% of practical marks ---- 6 Marks)	
1.	Identification of different parts of the respiratory and reproductive system of a dissected frog
2.	Examination of sheep lungs
3.	Identification of the bones of the pelvic girdles, pectoral girdle, arms and legs by using the model of human skeleton
4.	Examination of the prepared slides of histology of ovaries and drawing its structures
5.	Identification of the group of vertebrates, through diagrams of different blastula
6.	Identification of the different stages in chick development through observation of prepared slides



**FEDERAL BOARD OF INTERMEDIATE AND
SECONDARY EDUCATION
H-8/4, ISLAMABAD**



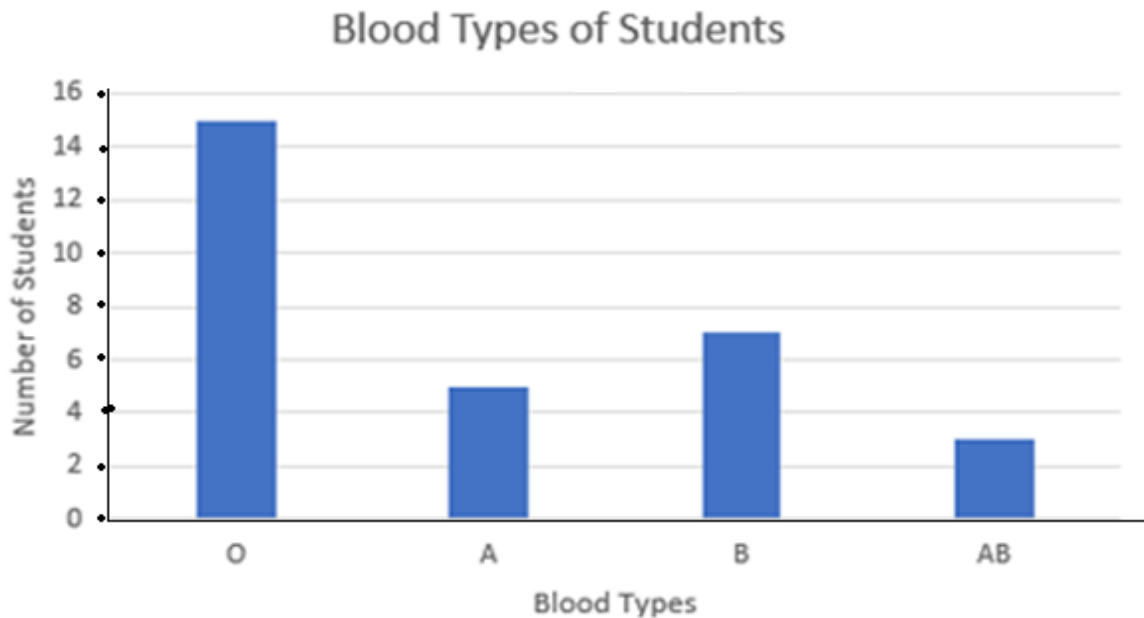
**Model Questions Paper Biology HSSC-II
Practical Based Assessment (PBA) (2025)**

Total Marks: 15

Time: 01 hour

SECTION A

Q1. A group of students performed ABO blood group testing in biology lab. After getting results, the data was plotted into following graph.



i. Name the type of graph shown. Which variable is on x-axis and which one is on y-axis? (1)

ii. Name and sketch another type of graph which can be plotted by using this data. (1)

iii. Write the numbers of students having each blood type according to this graph. (2)

iv. Complete the following table.

Blood Group Phenotype	Genotype	Antigen on RBCs	Antibody present in blood plasma
A			
B			
AB			
O			

(1)
(1)
(1)
(1)

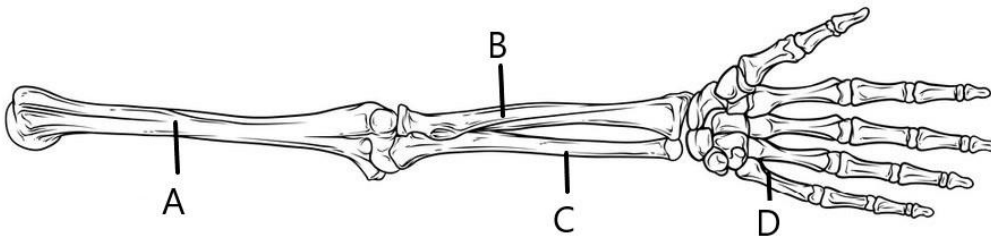
v. Which blood group is considered as universal donor and why?

(1)

SECTION B

Q2. (i) Identify labelled bones from following diagram.

(2)

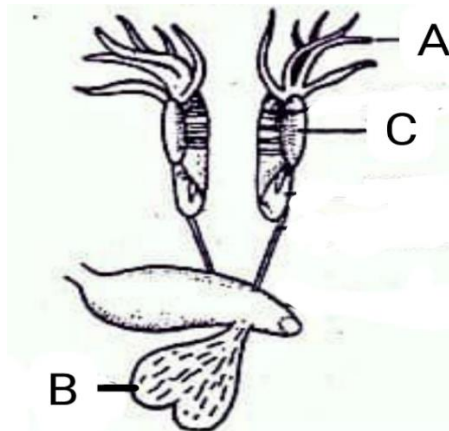


A: _____ B: _____
C: _____ D: _____

(ii). Identify the parts labelled A & B of the reproductive system of Frog.

(1)

A: _____ B: _____



(iii). Give function of part labelled C in above diagram (given in part ii).

(1)

(iv). Identify the developmental stage shown in the following slide and the group of vertebrates to which it belongs. (2)