

Object-Oriented Programming Concepts

Company ABC recruits employees based on their interview results, UG and PG results, and other criteria. Two different teams are involved in this process, namely the recruiting and HR teams. The recruit team checks the criteria of candidates, conducts an interview, and calculates their final marks. Finally, the HR team will get all the final results of the evaluation and inform the candidates of the results.

The eligible candidates are selected based on the following criteria:

- A candidate whose date of birth falls on or after July 1999
- Candidates should have secured an aggregate of 60% in Physics, Chemistry, and Mathematics/Biology in the HSC exam.
- The average marks obtained in the subjects of physics, chemistry, mathematics, or biology (PCM or PCB) in the HSC exam put together should be 50% for the SC and ST.
- Candidates should have secured a CGPA of 8 or above in the UG exam.
- Candidates should have secured a CGPA of 8 or above in the PG exam.
- The candidate should have done a minimum of two projects during the course of study.
- Candidates who have studied full-time are eligible.
- Candidates should have scored 35 or above in the interview selection process.
- The candidate should be a citizen of India.

For the given scenario, how many classes are required, naming them with their appropriate data fields and methods? Depict it using an appropriate diagram and solve it by applying all the constraints using object-oriented programming concepts in Java.

KEY:

Students must use appropriate classes, inheritance, constructors, static and abstract classes, and methods with proper justification.