TECHNICAL SPECIFICATIONS

General:

(i) Basic Quality: Ballast should be hard, durable and as far as possible angular along edges / corners, free from weathered portions of parent rock, organic impurities and inorganic residues.

(ii) Particle shape: Ballast should be cubical in shape as far as possible individual pieces should not be flaky and have generally flat faces with not more than two rounded / sub rounded faces.

(iii) Mode of manufacture: Ballast shall be machine crushed.

(iv) Physical prosperities: The Ballast should satisfy the following physical properties in accordance with IS: 2386 Part JV – 1963 when tested.

Sl. No.	Type of Test	Limits
1	Aggregate Abrasion value	30% Max. +
2	Aggregate Impact value	30% Max. +
3	Water Absorption	1.00%

(v) **Size and Gradation:**

The Ballast should satisfy the following size and gradation:

	Size and Gradation of Ballast	
Sl. No.	Size of Sieve	% Retained
1	Retained on 65 mm Sq. mesh Sieve	5.00% Maximum
2	Retained on 40 mm Sq. mesh Sieve	40% to 60%
3	Retained on 20 mm Sq. mesh Sieve	Not less than 98.00%

The Ballast stacks not confirming to above requirements shall be rejected.

2.0 Method of Sieve Analysis:

(i) The screen for sieving the ballast shall be of square mesh and shall not be less than 100 cm in length, 70 cm in breadth and 10 cm in height in sides.

(ii) The percentage passing through or retained on the sieve shall be determined by weight. The required number of screens, weigh balance and man power etc. required for performing the tests shall be arranged by the contractor at his own cost.

(iii) Sieve Analysis to be submitted for every 250 cubes of ballast.

3.0 Sampling and Testing:

(i) A minimum of three (03) samples of ballast for sieve analysis shall be taken for measurement done on any particular date even if the numbers of stacks to be measured are less than three.

(ii) The tests viz. determination of Abrasion Value, Impact Value and Water Absorption should be got done through approved laboratories.