## PARUL UNIVERSITY Faculty of Engineering & Technology B Tech Examination

Subject Code: (203104348)Subject Name: Metro System & EngineeringBranch/Semester:CIVIL ENGINEERING[Date: 3/8/2022][Time: 10:30 to 12:00][Total Marks: 40]

Sr.No. Marks 05 Q.1 (A) Multiple Choice Questions (i) Which of the following is not a component of the rail? a) Ballast b) Foot c) Web d) Head (ii) Which type of gauge is used in metro (b) standard (a) Narrow (c) Brodd gauge (d) meter gauge (iii) Width of standard gauge is? (a) 1.4m (b) 1.6m (c) 1.0m (d)0.76m (iv) The first metro train is started in which city? (a) Delhi (b) Noida (c) Bombay (d) Kolkata (v) Design speed of metro is? (a) 75 kmph (b) 80kmph (c) 100kmph (d) 85kmph (B) Fill in Blanks 05 (i) Full form of PHPDT is? (ii) Metro system is a grade separated dedicated system for high peak hour traffic densities exceeding PHPDT (iii) Light Capacity Metro System is a dedicated metro rail system for moderate peak hour traffic densities exceeding PHPDT. (iv) Desirable Minimum radius of horizontal curve is ? (v) The viaducts carrying the tracks will have a vertical clearance of rmrumum above road level Q.2 Attempt any four(Short Questions) (12)(1). Write Brief history of metro rail (2) Write advantages of metro rail system (3) Write types of rail used in public transport (4) Discuss different between monorail & metro rail (5) Enlist the name of Indian cities are having metro rail.