S.B. Roll No……

CHASSIS BODY AND TRANSMISSION-II

5th/AUTO/9322/Nov'15

Duration: 3 Hrs **M.Marks=75**

SECTION-A

Q1. Fill in the blanks: - **1x10=10**

a) The brake bleeding process is removes _____ from system.
b) Mac person strut is used in _____ suspension system.
c) ABS stands for _____.
d) Hydraulic brake works on the principle of _____.
e) _____ springs are used in independent suspension system.
f) _____ brakes are commonly used on heavy vehicles.
g) Another name for torsion bar is _____.
h) _____= weight of body and chassis+ weight of suspension springs.
i) Air assisted and vacuum assisted hydraulic brakes are _____ brakes.
j) Shock absorber in automobile is used to _____ energy.

SECTION-B

Q2. Short answer type. Attempt any FIVE: - **5x7=35**

a) Describe briefly the working of master cylinder with neat sketch.
b) What are the different types of suspension springs? Explain any one in detail.
c) Explain briefly the wheel balancing.
d) Explain briefly the air brakes.
e) Explain the principle and functions of shock absorber.
f) What are the advantages and disadvantages of tubeless tyres over the tubed tyres?
g) Differentiate between drum and disc brakes.
h) Describe briefly the various types of power steering system.

SECTION-C

Q3. Long answer type. Attempt any TWO: - **2x15=30**

a) Explain in detail the construction and working of air- assisted hydraulic braking system.
b) Explain in detail the construction and working of mac person strut type independent suspension system.
c) Write short note on:-
  I. Torsion bar.
  II. Air bag.
  III. Recent developments in automobile industry.
  IV. Wheel cylinder.
  V. Seat belt.