

(ENGLISH)

[TIME ALLOWED—3 HOURS]

(MARKS—100)

ELECTRICAL SYSTEMS AND CHASSIS (THEORY-II)**Marks**1. (a) Fill in the blanks (any *five*) :—

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(i) Generally in Two Wheeler type of Ignition Switch is used.

(a) INOINC-SPDT

(b) 2NC-SPDT,

(c) INC-DPDT

(d) none of the above.

(ii) Generally in Two Wheeler type of Voltage and Current Regulator is used.

(a) Mechanical

(b) Electrical

(c) contactless

(d) none of the above.

(iii) type of Horn used in Two Wheelers.

(a) Air

(b) Electrical

(c) pressurised air

(d) Pressure.

(iv) Generally in Two Wheeler type of accumulator is used.

(a) Dry

(b) Wet

(c) Semi

(d) none of the above.

(v) Generally in Two Wheeler type of suspension is used.

(a) Mechanical

(b) Hydraulic

(c) Pneumatic

(d) None of the above

(vi) In general maximum degree caster angle allowed in two wheelers.

(a) 3

(b) 4

(c) 5

(d) none of the above.

(b) Write *true* or *false* (any *five*) :—

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(i) Spark booster are used for improving spark.

(ii) C. B. points are replaced by Pick-up coil in Ignition system of two wheeler.

(iii) Over inflation leads to wear out middle of the Tyre.

(iv) Chassis No. (Frame No.) is written left side of the chassis or frame.

(v) Function of seat is also to cushioning and assisting suspension system.

(vi) 12V15W type of brake light bulb is used in two wheeler vehicle.

(c) State long form (any *five*) :—

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(i) CB Point

(ii) CDI Unit

(iii) TWI

(iv) Aux.

(v) JB

(vi) HT.

[Turn over

- (d) Match the pair :— 5
- | ‘ A ’ Group | ‘ B ’ Group |
|--------------------|-----------------------------|
| (i) Magneto | (a) Used in Engine cranking |
| (ii) Accumulator | (b) Used in ignition system |
| (iii) Crash Bars | (c) to avoid rusting |
| (iv) Fuse | (d) Provided for safety |
| (v) Electroplating | (e) Used for protection. |
2. Answer the following (any *two*) :— 16
- (a) Explain voltage and current regulator.
 - (b) Difference between starters and dynameters.
 - (c) Explain head lamp, tail lamp, brake lamp and other lamps used in Two Wheelers.
 - (d) Explain function of Chassis (Frame) used in Two Wheelers.
3. Answer the following (any *two*) :— 16
- (a) How Chassis is protected from dust, rust and mechanical damage ?
 - (b) Difference between Wheel alignment and Wheel suspension ?
 - (c) How rear views mirror, wind shield, mudguard and splash guard are adjusted ?
 - (d) Write types of steering handle bar mountings. Explain any one.
4. Answer in brief (any *two*) :— 16
- (a) What is Chassis ? Name the components coming under the name Chassis.
 - (b) Write types of Tyres and tubes. Explain any one.
 - (c) Explain CDI unit used in Two Wheeler vehicles.
 - (d) Importance of Chassis No. in legal aspects used for Two Wheelers.
5. Write a short note (any *four*) :— 16
- (a) Wheel.
 - (b) Heating and Cooling of types.
 - (c) Brake Drum.
 - (d) Types of Seats and Fuel tanks.
 - (e) Caster angle.
 - (f) Generators / alternators / magnetos used in Two Wheelers.
6. Attempt the following (any *two*) :— 16
- (a) Requirements of Chassis to reduce the damage in case of accident.
 - (b) Explain care and maintenance of wheels.
 - (c) Explain switches, fuses and Junction Boxes.
 - (d) Explain importance of spark plug gap and method of adjustments.
 - (e) Explain method of dismantling and assembling wheels.
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