Total No. of Questions : 8]

[Total No. of Printed Pages: 2

Roll No .....

## EX-8003 (3) (CBGS)

## **B.E. VIII Semester**

Examination, November 2019

## Choice Based Grading System (CBGS)

## Special Machine

Time: Three Hours

Maximum Marks: 70

Note: i) Attempt any five questions.

http://www.rgpvonline.com

All questions carry equal marks.

1. a) Draw the permanent Magnet Motor Rotor Structure. 7

 b) Derive how the Torque is produced in permanent magnet motor.

 a) Explain the principle operation of Switched Reluctance Motor.

b) Derive Torque Produced in Reluctance Motor.

 a) Explain how the speed of Brushless DC Motor is controlled.

Explain series and parallel winding patterns of Brushless
DC Motor.

 a) Draw and explain the characteristics of Permanent magnet DC Motor.

b) What are the different applications of Permanent Magnet DC Motor? 7 http://www.rgpvonline.com

PTO

http://www.rgpvonline.com

http://www.rgpvonline.com

[2]

5. a)	How to reduce the Torque Pulsations in Permanent	magner
	Synchronous Motor.	. 7

 Explain any applications of Permanent Magnet Synchronous Motor.

 a) How dynamic torque is produced in switched Reluctance Motor. http://www.rgpvonline.com

Explain the advantages and disadvantages of Solid Rotors.

 a) Write the differences between Permanent, Hybrid Stepper Motors.

b) What are the speed control techniques of Permanent Magnet Synchronous Motor? 7

a) Explain how load angle is controlled in Stepper Motor.

 b) In detail explain sensor less control of Permanent Magnet Synchronous Motor.

\*\*\*\*\*

EX-8003 (3) (CBGS)

http://www.rgpvonline.com