



29266-42112

Library
Brainware University
308, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125



BRAINWARE UNIVERSITY

Term End Examination 2025-2026

Programme – Dip.EE-2022/Dip.EE-2023

Course Name – Control of Electrical Machine

Course Code - DEEOE601C

(Semester VI)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

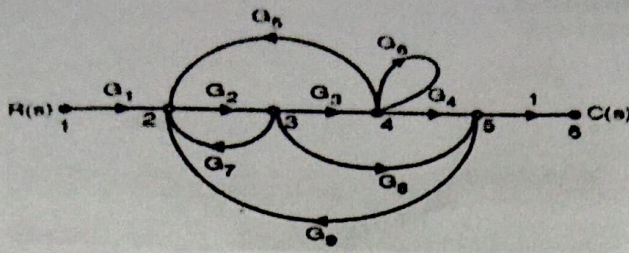
1. Choose the correct alternative from the following :

- (i) Predict the value of internal resistance of a manually operated switch
 - a) Zero
 - b) Very high
 - c) Very low
 - d) None of these
- (ii) Identify which one is not a part of any relay
 - a) Push Button
 - b) coil
 - c) bimetallic strip
 - d) None of these
- (iii) Identify which of the following is NOT a type of feedback in a control system.
 - a) Positive feedback
 - b) Negative feedback
 - c) Open-loop feedback
 - d) None of these
- (iv) Identify why the frequency response of a system is useful.
 - a) For Stability analysis
 - b) For Time-domain analysis
 - c) For Identifying system dynamics
 - d) Both a and c
- (v) In a system with integral control, identify what happens to the steady-state error for a step input.
 - a) The error increases without bound
 - b) The error becomes zero
 - c) The error remains constant
 - d) The error becomes large
- (vi) Identify that motor rating is expressed in terms of
 - a) KVA
 - b) KW
 - c) VAR
 - d) None of the above
- (vii) To save energy during braking identify what type of braking is used
 - a) dynamic
 - b) plugging
 - c) regenerative
 - d) all of the above
- (viii) Identify which speed control method preferred for constant torque drive.
 - a) field control
 - b) armature voltage control
 - c) mechanical loading
 - d) None

- (ix) Predict the condition of contacts when they are actuated, disrupt the power supply through them
- a) normally open type b) normally closed type
c) both 1. and 2. d) none from above
- (x) Select how is the noise immunity of PLCs to electrical noises as compared to that of conventional relay controllers.
- a) poor b) excellent
c) as good as noise immunity of conventional relay controllers d) unpredictable
- (xi) Choose the full form of SCADA
- a) Supervision Control And Data Acquisition b) Supervisory Control And Data Accumulation
c) Supervisory Control And Data Acquisition d) Supervisory Controller And Data Acquisition
- (xii) Identify the reference input minus the primary feedback.
- a) Manipulated variable b) actuating signal
c) primary feedback d) zero sequence
- (xiii) Identify from which of the following transfer function can be obtained.
- a) signal flow graph b) output-input ratio
c) standard block system d) analogous table
- (xiv) Tell about the speed of a DC shunt motor can be increased by
- a) Increasing the resistance in armature circuit b) Increasing the resistance in field circuit
c) Reducing the resistance in the field circuit d) Reducing the resistance in the armature circuit
- (xv) Choose which was the first city in India to adopt electric traction.
- a) Delhi b) Madras
c) Calcutta d) Bombay
- Library*
Brainware University
338, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125

12. Find overall transfer function using mason's gain formula.

(5)



Library
Brainware University
398, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125

OR

- Find overall transfer function using mason's gain formula.

(5)

