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202032

3rd Year / Branch : Advance Diploma in tool and Die making

Subject:- Electrical and Electronics Engineering

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 The resistance of wire varies inversely as CO1

a) Area of cross-section b) Length
c) Resistivity d) Temperature

Q.2 Which of the following is the unit of inductance? CO1

a) Ohm b) Henery
c) Faraday d) None

Q.3 In a.c. circuits, the a.c. meters measure CO5

a) R.M.S. value b) peak values
c) Mean value d) mean square value

Q.4 Elements of electric heaters are made of CO3

a) Copper b) Nichrome
c) Carbon d) Tungsten

Q.5 Transformer are rated in CO2

a) KW b) KV
c) KWH d) KVA

Q.6 Which of the following is not a part of transformer CO2

a) Conservator b) Breather
c) Buchholz relay d) Exciter

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Describe half wave rectifier with working principle and its application. CO6

Q.37 What is a D.C. motor? Explain its different types. CO2

Q.38 Explain working principle, construction and application of servo motor. CO6

(**Note:** Course outcome/CO is for office use only)

Q.7 E in ELCB stands for CO3

a) Earth b) Electron

c) Energy d) Electrode

Q.8 A Diode has _____ terminals. CO6

a) 1 b) 2

c) 3 d) 4

Q.9 The primary purpose of earthing is CO4

a) Voltage regulation b) Current regulation

c) Safety d) Cost saving

Q.10 Two resistance of 4 ohm and 2 ohm are connected in series. Total resistance will be. CO1

a) 2 ohm b) 6 ohm

c) 4/3 ohm d) 8 ohm

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 What is self induction? CO2

Q.12 Frequency of D.C. is _____. CO1

Q.13 Unit of current is _____. CO1

Q.14 Give any two applications of squirrel cage induction motor. CO2

Q.15 Name any two uses of 3 phase circuit. CO2

Q.16 Which motor is self start? (Single phase/ 3 phase) CO2

Q.17 Name any two semiconductor materials. CO6

Q.18 Draw the symbol of diode. CO6

Q.19 Define binary number. CO6

Q.20 Define transformer. CO2

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Define frequency, r.m.s. value, form factor. CO1

Q.22 Explain the construction of the squirrel cage induction motor. CO2

Q.23 Write a note on semiconductor diodes. CO6

Q.24 Explain the basic logic gates and truth table. CO6

Q.25 Write I.E. rules for electrical installation. CO3

Q.26 Explain the methods of cooling the transformer. CO2

Q.27 Write a note on AC on a pure inductor. CO1

Q.28 Difference between single phase and three phase systems. CO1

Q.29 Write the different applications of D.C. motor. CO2

Q.30 Write the EMF equation for alternator. CO2

Q.31 Why electrical earthing is necessary in electrical appliances. CO4

Q.32 Define electric heating and explain its types. CO3

Q.33 Explain the working principle of moving iron instruments. CO5

Q.34 State different applications of filters. CO6

Q.35 Write a note on the operational amplifier. CO6