# HAKUR COLLEGE OF NGINEERING & TECHNOLOGY tonomous College Affiliated to University of Mumbai

Autonomous College Affiliated to University of Mumbai Approved by All India Council for Technical Education(MICTE) and Government of Maharashtru(GoM) Conferred Autonomous Status by University Grants Commission (UGC) for 10 years w.e.f. A.Y 2019-20 Amongat Top 200 Colleges in the Country, Ranked 195° in NNRF India Ranking 2019 in Engineering College categor 1809 9001/2015 Certified \* Programmes Accredited by National Board of Accreditation (NRA), New Welli

### BE-VII-CBCGS-H-ESE-SEPT20 SUB- ISED SAMPLE QUE SET

------Section-1------

### **QUE-SET (1MARKS)**

- .1, of these actions are carried out by hydraulic cylinder?
- a. pushing
- b. lifting
- c. Pushing and lifting
- d. Sliding
- 2. In industrial applications which of the following systems are used to generate more energy?
- a. hydraulic systems
- b. pneumatic systems
- c. both systems generate same energy
- d. cannot say
- 3. The scientific principle that makes hydraulic systems possible is
- a) Pascal's principle
- b) Boyle's law
- c) Bernoulli's principle
- d) The fluid flow principle
- 4. It is one way valve and that lets air into the reservoir of a compressor, but doesn't let it out,
- is......a) Check valve
- b) Receiver valve
- c) Control valve
- d) Three way valve
- 5. The most commonly used hydraulic fluid is:
- a) Mineral oil
- b) Synthetic fluid
- c) Water
- d) Diesel
- 6. Which of these are used to control the flow of liquid in a single direction?
- a) Butterfly valve
- b) Ball valve
- c) Check valve
- d) Plug valve
- 7. The use of OPamp in open loop mode is ......
- a. Inverting Amplifier
- b.Comparator
- c.V to I converter
- d.Oscillator
- 8. RS' stands for -----in RS232 as Serial data standards
- a- Reference Standard b- Recommended Standard c- Revised Standard d- None of the above

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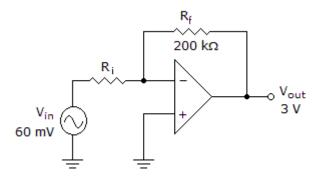
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- 9.Designing the any DCCS, are:
- a -The communication protocol used.
- b The interoperability of the units.
- c- The topology of the network used.
- d-All the above
- 10. Field buses. Name:
- a Controller Area Network (CAN).
- b-Process Field Bus (PROFIBUS).
- c-World Factory Instrumentation Protocol (WorldFIP)
- d-All the above

-----section-2-----

## **QUE SET 2 MARKS**

1. The gain of this circuit is ......



- a. 50
- b. 100
- c. 20
- d. 5
- 2.a) Find the Value of Ri if the output Voltage changed to 2 V....

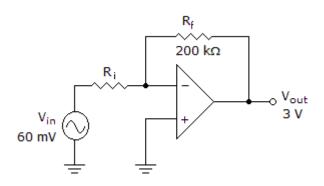
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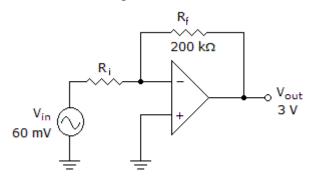
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\* ISC 9001/2013 Certified \* Programmes Accredited by National Board of Accreditation (NAP), New Delhi

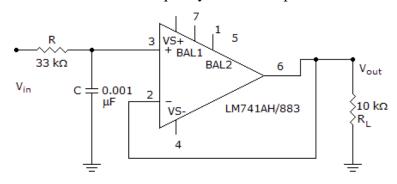
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- a. 6.5K
- b. 6.1K
- c. 12 k
- d. 1k
- 3.. In the following circuit the value of Ri is.....



- a. 50K
- b. 4K
- c. 20 k
- d. 1k
- 4.. What is the cutoff frequency of this low-pass filter?



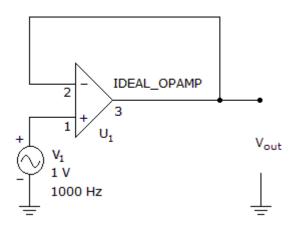
- a. 4.8 kHz
- b. 3.8 kHz
- c. 2.8 kHz
- d. 1.8 kHz

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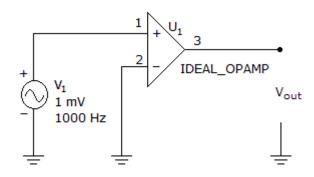
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## 5.. What is the output wave form of this circuit?



- a. sine wave same as input
- b. square wave with 1 V amplitude
- c. +15 V
- d. -15 V

### 6.. What is the output wave form of this circuit?



- a. sine wave same as input
- b. square wave
- c. Saw tooth wave
- d. -15 V

## 7. The pass band voltage gain of a second order low pass butterworth filter is

- a) 1.586
- b) 8.32
- c) 0.586
- d) 0.707
- 8. Physical parameters of system change due to \_\_\_\_\_
- a) voltage
- b) current

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c) external and internal disturbances d) power
9. Electrical transducers are a) Big and expensive b) Simple and non-portable c) small and compact d) large and portable 10The input can be isolated from the system by a) using optocouplers b) using Transformers c) using a RC circuit d) using rectifiers
11. The simplest A/D converter is
a-Sensor -Signal conditioning part- A/D converter.
b-Sensor -Signal conditioning part- D/A converter.
C-Transformer -Signal conditioning part- A/D converter.
d-None of the above
13is the programming language used in Lab VIEW
a-C++ b- Python c- G stands for graphical d- Android
14. A SAMA diagram appear with showing
a_flow transmitter (FT)- PID controller- flow control valve (FCV)
b-PID controller- flow control valve (FCV)- flow transmitter (FT)
cflow transmitter (FT)- flow control valve (FCV) -PID controller
d-None
15. Calibration is athat must be performed at regular intervals

------25.09.20------

a-Experiments b- procedure c-programme d- all the above



Auglu Singh Charitable "Trust's (Asgd.)

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