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

Approved by All India Council for Technical Education(AICTE) and Government of Maharashtra(GoM)
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### 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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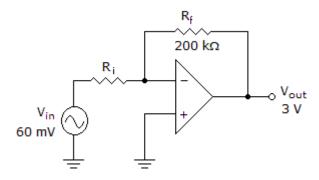
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- 9. Designing the any DCCS, are:
- a -The communication protocol used.
- b The interoperability of the units.
- c- The topology of the network used.
- d-All the above
- 10. Field buses. Name:
- a Controller Area Network (CAN).
- b-Process Field Bus (PROFIBUS).
- c-World Factory Instrumentation Protocol (WorldFIP)
- d-All the above

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

### **QUE SET 2 MARKS**

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

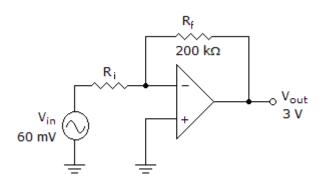


- a. 50
- b. 100
- c. 20
- d. 5
- 2.a) Find the Value of Ri if the output Voltage changed to 2 V....

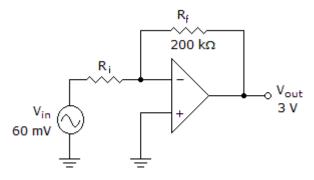
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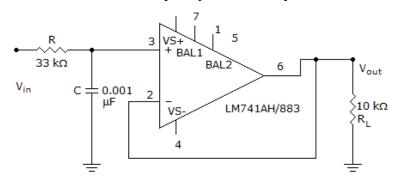
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- a. 6.5K
- b. 6.1K
- c. 12 k
- d. 1k
- 3.. In the following circuit the value of Ri is.....



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



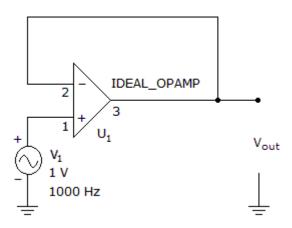
- a. 4.8 kHz
- b. 3.8 kHz
- c. 2.8 kHz
- d. 1.8 kHz

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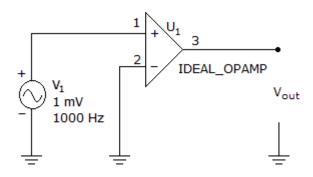
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## 5.. What is the output wave form of this circuit?



- 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) Dual Slope
b) Counter type ADC
c) Flash type ADC
d) Integrating Type
12.sensor module principally consists of three main parts:
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
a-Experiments h- procedure c-programme d- all the above

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