

Basic ECG Interpretation Challenge Exam

Name:

Site:

Unit/Dept:

Educator:

Date:



Directions:

This is an open book exam. You may use an ECG ruler, calipers and algorithm.

Note: Images may not be to scale so please use the small box method to calculate intervals and rates.

Please include **all** of the following information for each ECG strip:

- ♦ atrial and ventricular rate (number of beats within 5 bpm)
- ♦ rhythm's regularity (reg/irreg)
- ♦ presence of a P wave
- ♦ length of the PRI if applicable (within 0.04 sec)
- ♦ width of QRS complex (within 0.04 sec)
- ♦ an interpretation of the rhythm

You may also be required to answer the following:

- ♦ nursing interventions for the rhythm
- ♦ any medical interventions you may anticipate

Please ensure your name and area of work is included on the front page. Your exam will be marked and reviewed with you by your educator.

A minimum grade of 80% is required to complete the course. If 80% is not achieved, you will work collaboratively with your educator to develop a learning plan.

Total of 28 marks

1. Please describe the potential signs and symptoms of a patient with decreased cardiac output according to system: List at least 10 for ½ mark each. 5 marks

System	Signs/symptoms
CNS	
CVS	
Resp	
GI	
GU	
Skin	

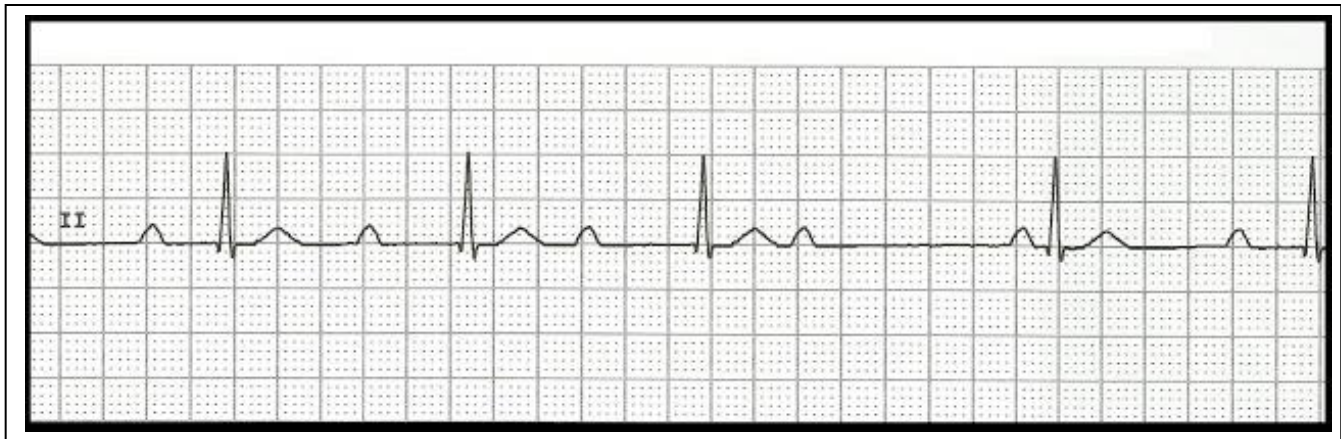
2. Describe the difference between a premature beat and an escape beat in relation to the primary pacemaker of the heart: 1 mark.

3. Record the average PM rate for each of the following: 1 mark

SA Node	
Bundle of His	
Purkinje Fibers	

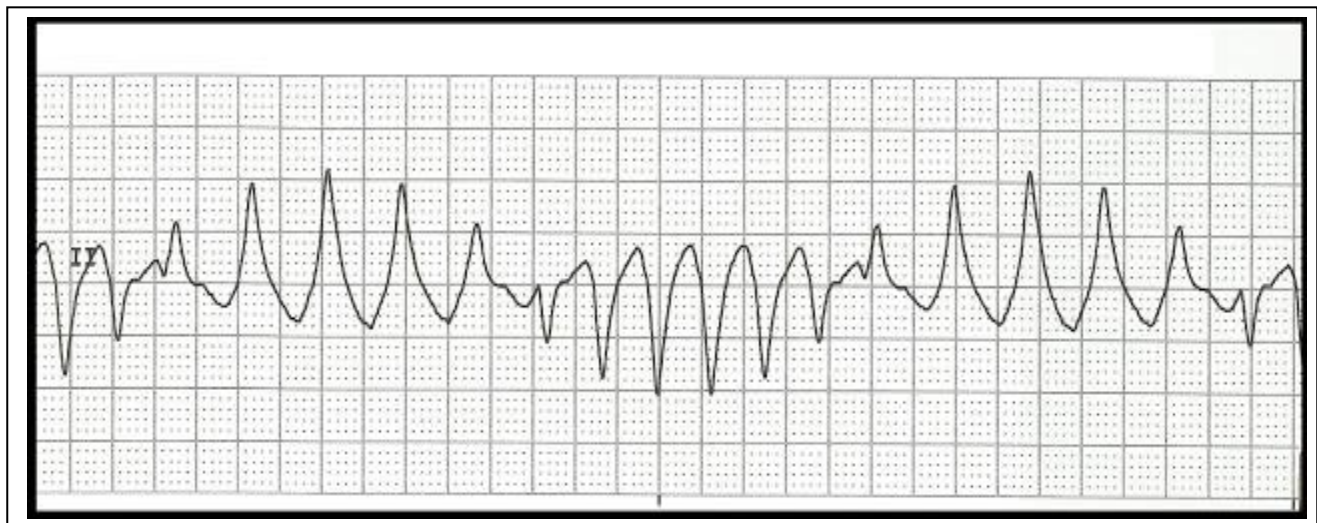
Interpret the following strips and answer the corresponding questions:

1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____

QRS: _____ ST segment _____ Interpretation _____



2 marks

Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____

QRS: _____ ST segment _____ Interpretation _____

Would this patient show signs & symptoms of decreased cardiac output? Yes or No (please circle one)

Please explain your answer to the above questions: _____

Nursing Interventions: _____

2 marks



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____

QRS: _____ ST segment _____ Interpretation _____

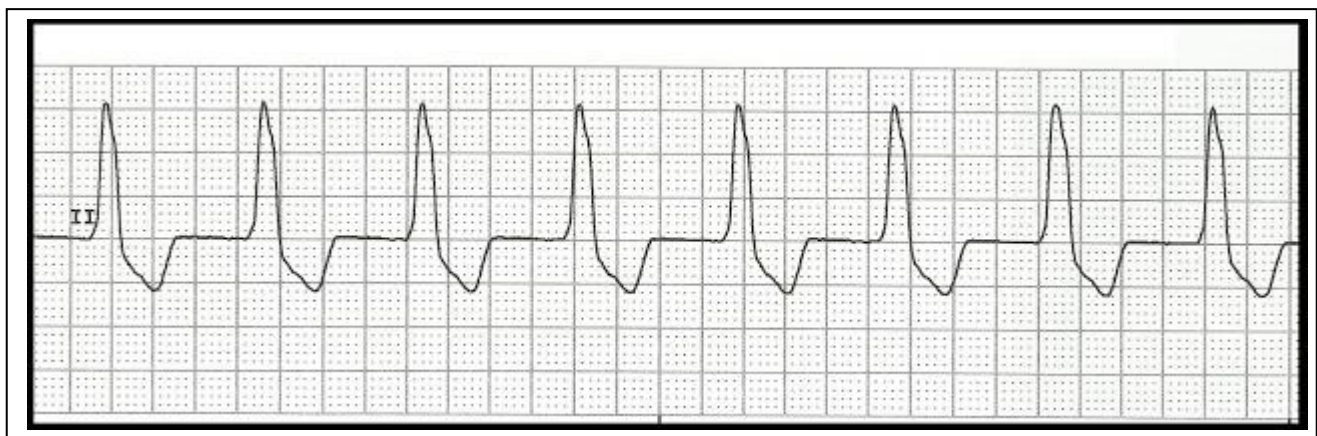
Would this patient show signs & symptoms of decreased cardiac output? Yes or No (please circle one)

Please explain your answer to the above questions: _____

Nursing Interventions: _____

Anticipated Medical Interventions: _____

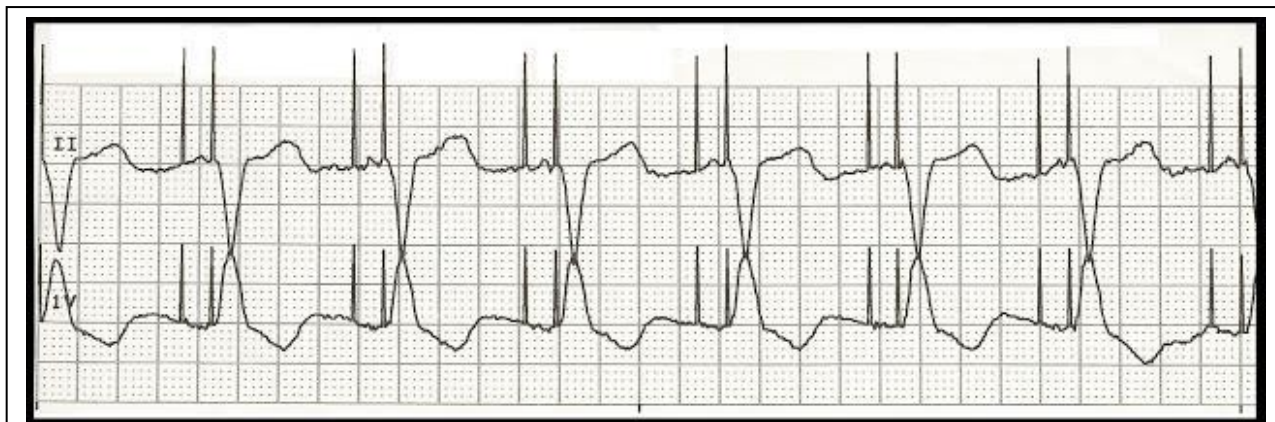
1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____

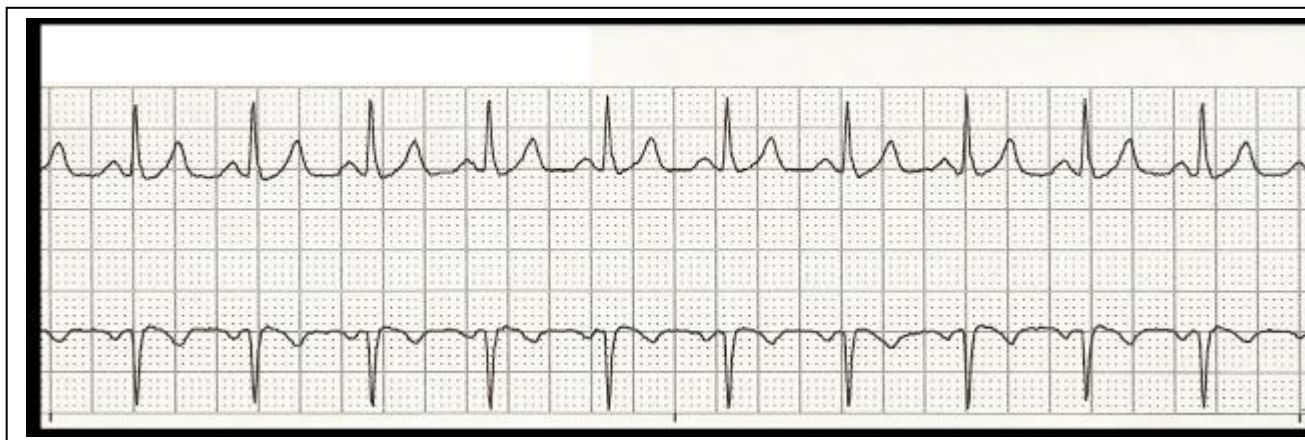
QRS: _____ ST segment _____ Interpretation _____

1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

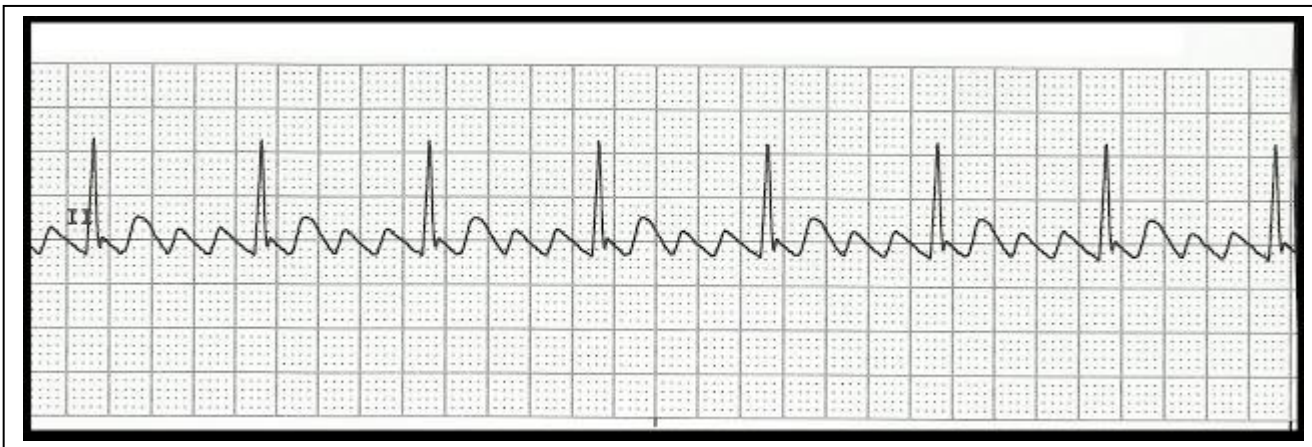
1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

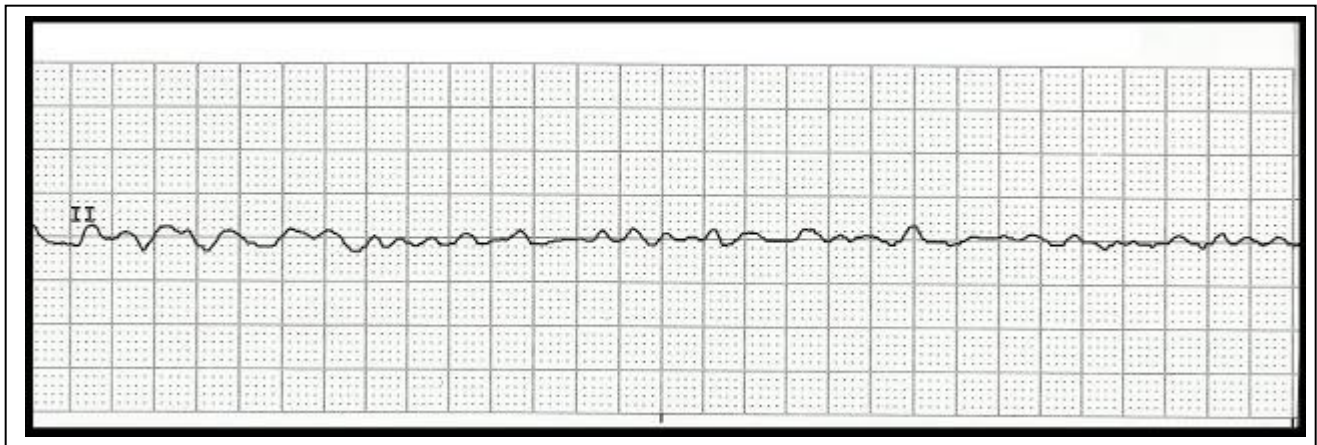
What are the possible causes of this rhythm: _____

1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

2 marks



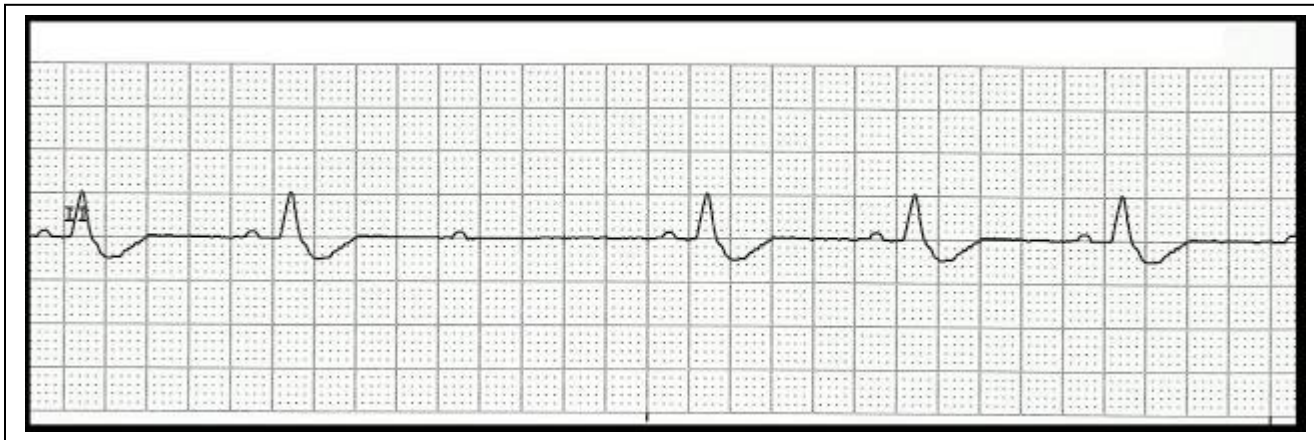
Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

Would this patient show signs & symptoms of decreased cardiac output? Yes or No (please circle one)

Please explain your answer to the above questions: _____

Nursing Interventions: _____

2 marks

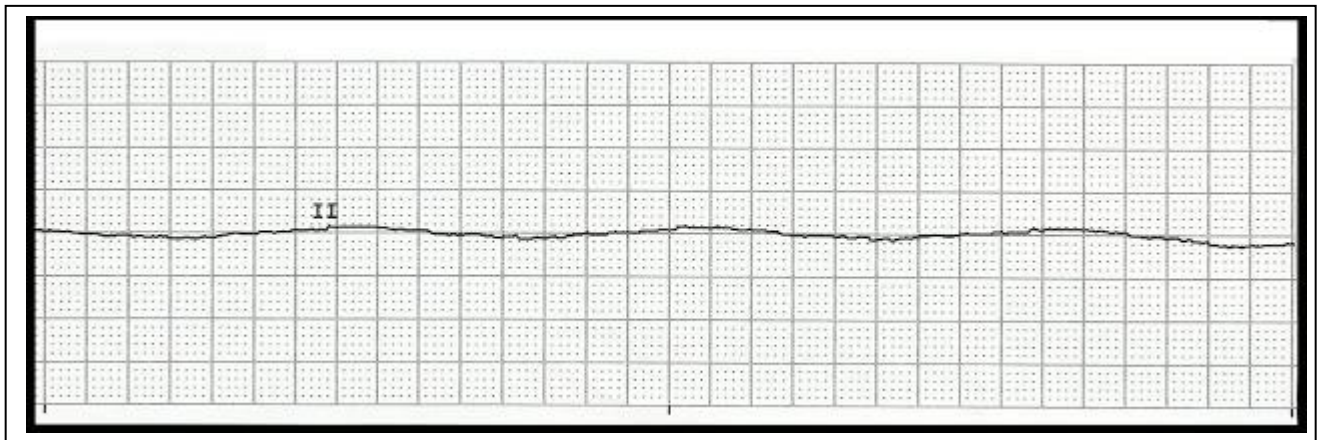


Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

Would this patient show signs & symptoms of decreased cardiac output? Yes or No (please circle one)

Please explain your answer to the above questions: _____

2 marks



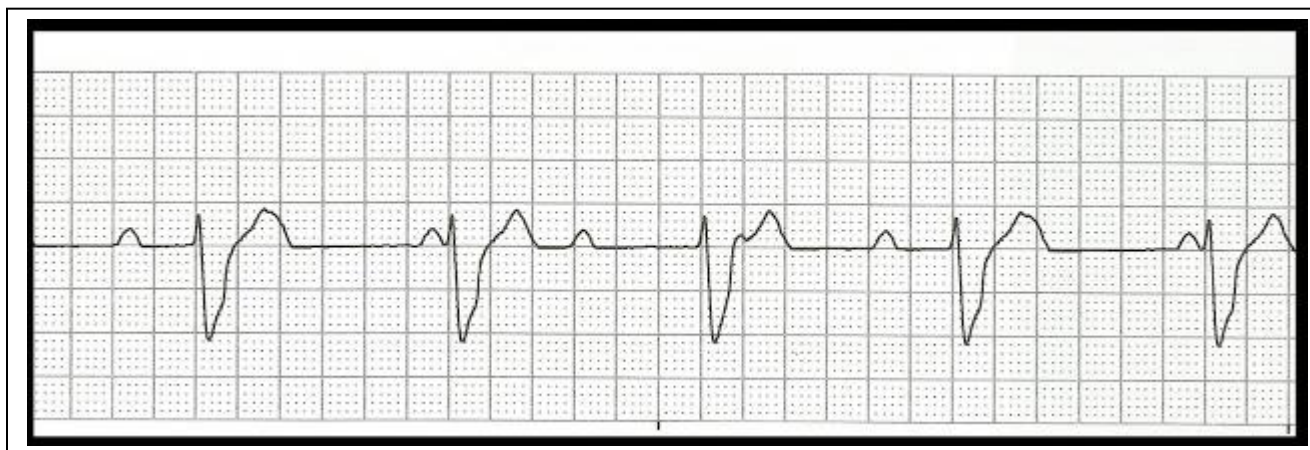
Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

Would this patient show signs & symptoms of decreased cardiac output? Yes or No (please circle one)

Please explain your answer to the above questions: _____

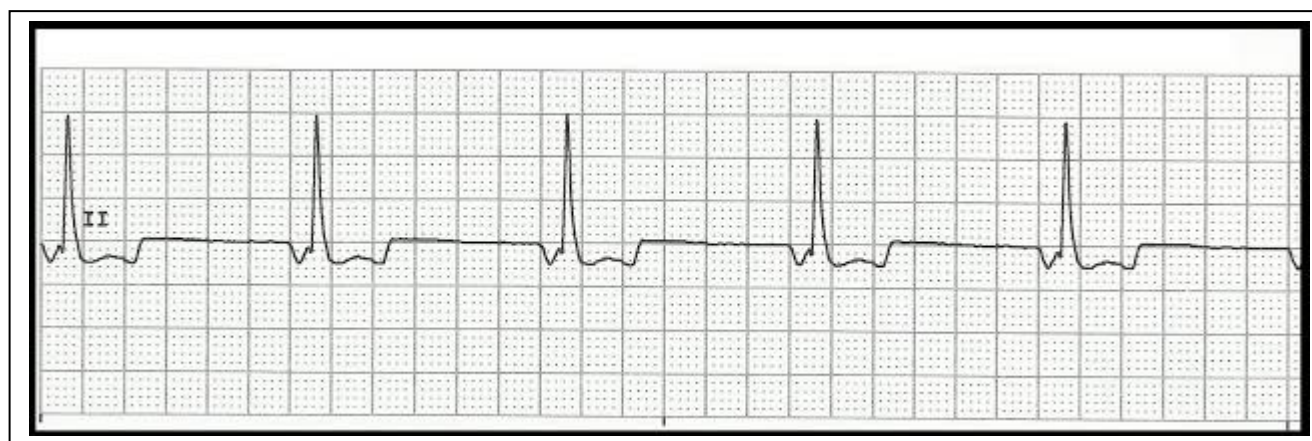
Nursing Interventions: _____

1 mark



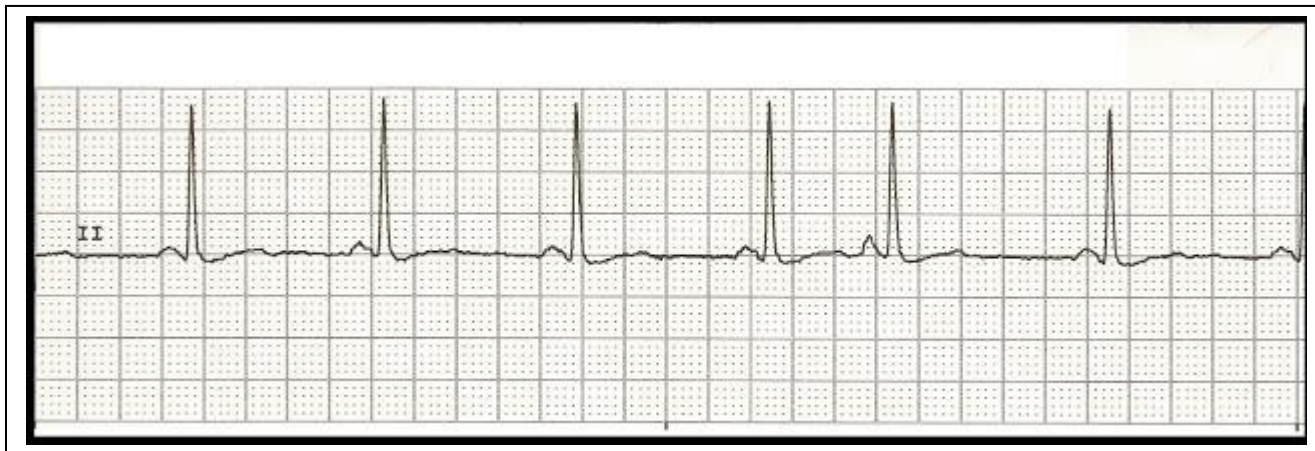
Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____
QRS: _____ ST segment _____ Interpretation _____

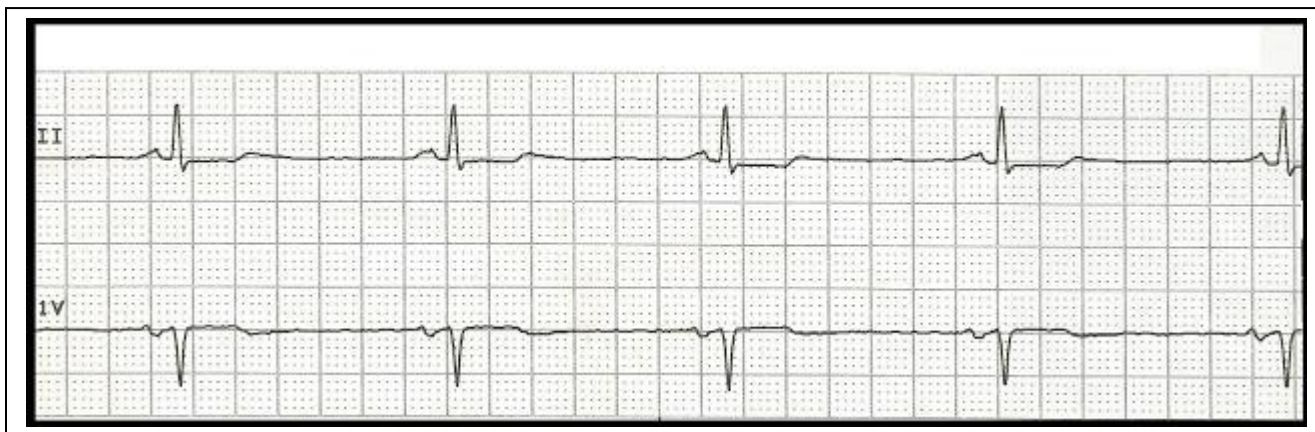
1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____

QRS: _____ ST segment _____ Interpretation _____

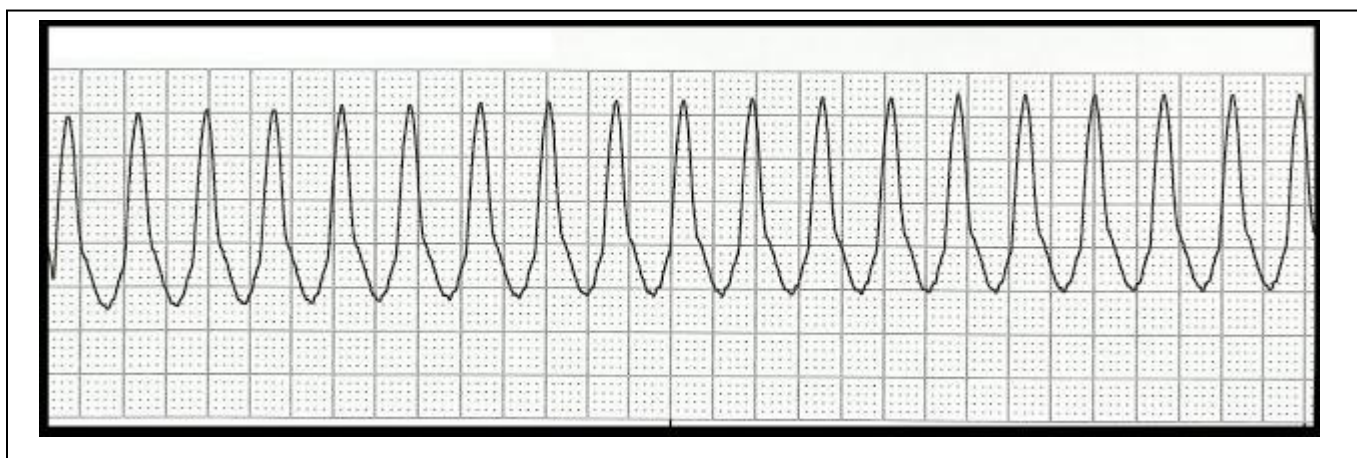
1 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____

QRS: _____ ST segment _____ Interpretation _____

2 mark



Atrial Rate: _____ Vent Rate _____ Reg: _____ Irreg _____ P wave: _____ PRI: _____

QRS: _____ ST segment _____ Interpretation _____

Would this patient show signs & symptoms of decreased cardiac output? Yes or No (please circle one)

Please explain your answer to the above questions: _____

Nursing Interventions: _____