SELF-ASSESSMENT: MODULE H – CARDIOVASCULAR AGENTS

1. Define inotropic: **AGENTS THAT AFFECT THE FORCE OF CONTRACTION.**

2. Define chronotropic: **AGENTS THAT AFFECT THE RATE OF CONTRACTION (HEART RATE).**

3. Tachycardia is when the heart rate is **GREATER THAN 100/MIN** and bradycardia is when the heart rate is **LESS THAN 60/MIN**.

4. Blood pressure is dependent upon **CARDIAC OUTPUT** and **SYSTEMIC VASCULAR RESISTANCE**.

5. Cardiac output is **STROKE VOLUME** multiplied by **HEART RATE**.

6. Increasing the SVR will **DECREASE** the cardiac output.

7. Cardiac glycosides have a **POSITIVE INOTROPIC** and a **NEGATIVE CHRONOTROPIC** effect on the heart.

8. Cardiac glycosides are frequently used in the treatment of **CHF**.

9. List three cardiac glycosides:

   A. **digitalis**
   B. **digoxin (Lanoxin)**
   C. **digitoxin**

10. List two inotropic catecholamines:

    A. **epinephrine (First drug for all pulseless patients)**
    B. **dobutamine (Dobutrex)**
    C. **dopamine (Inotropin)**
    D. **isoproterenol (Isuprel)**

11. State the effect of atropine on heart rate. **INCREASES THE RATE**

12. State the three types of drugs used to reduce blood pressure:

    A. **VASODILATORS**
    B. **BETA BLOCKERS**
    C. **ACE (I and II) INHIBITORS**

13. List two nitrate vasodilators:

    A. **SODIUM NITROPRUSSIDE (NIPRIDE)**
    B. **NITROGLYCERINE**

14. State the function of ACE-inhibitor therapy.
    FUNCTION BY INHIBITING THE CONVERSION OF ANGIOTENSIN I INTO ANGIOTENSIN II

15. Describe why β-blockers should be used with caution in patients with reactive airways.
    β-BLOCKADE CAN INDUCE BRONCHOCONSTRICTION.

16. List two anti-hypotensive agents:

    A. **NOREPINEPHRINE (Levophed)**
    B. **DOPAMINE (Intropin)**

17. Define angina.
    A HEART CONDITION MARKED BY PAROXYSMS OF CHEST PAIN DUE TO REDUCED OXYGEN TO THE HEART.

18. List three groups of drugs that can be used to improve coronary blood flow and reduce angina.

    A. **NITRATES (NITROGLYCERIN)**
    B. **BETA BLOCKERS**
    C. **CALCIUM-CHANNEL BLOCKERS**

19. List the key structures (in order) associated with cardiac conduction:

    A. **SINUS (SINOATRIAL) NODE**
    B. **ATRIOVENTRICULAR (AV) NODE**
    C. **BUNDLE OF HIS (ATRIOVENTRICULAR BUNDLE)**
    D. **BUNDLE BRANCHES (RIGHT & LEFT)**
    E. **PURKINJE FIBERS**

20. Define ectopic as it relates to an EKG: **WHEN AN IMPULSE ORIGINATES FROM OUTSIDE THE NORMAL CONDUCTION PATHWAY.**

21. State the cardiac function associated with each of the following:

    A. P wave: **ATRIAL DEPOLARIZATION**

    B. ~~PR Interval:~~ **SKIP**

    C. QRS Complex: **VENTRICULAR DEPOLARIZATION**

    D. T wave: **VENTRICULAR REPOLARIZATION**

22. **VERAPAMIL (ISOPTIN)** is a calcium-channel blocker used to treat tachydysrhythmias.

23. List five anti-dysrhythmic agents discussed in class:

    A. **Lidocaine (Xylocaine)**
    B. **Pronestyl (Procainamide)**
    C. **Amiodarone (Cordarone)**
    D. **Adenosine (Adenocard)**
    E. **Verapamil (Calan)**

24. List two anti-coagulants and the antidote for each:

    A. **HEPARIN – PROTAMINE SULFATE**
    B. **WARFARIN (COUMADIN) – VITAMIN K**

25. List three thrombolytics used to treat myocardial infarctions, strokes and pulmonary embolism:

    A. **ALTEPLASE (ACTIVASE) TPA**
    B. **RETEPLASE (RETAVASE) TPA**
    C. **UROKINASE**
    D. **STREPTOKINASE**