Version No.				
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ROLL NUMBER						

CARDIO VASCULAR SCIENCE HSSC-II

SECTION – A (Marks 08)

Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed.

Do not use lead pencil.

حصہ اوّل لازمی ہے۔اس کے جوابات اسی صفحہ پر دے کر ناظم مرکز کے حوالے کریں۔کاٹ کر دوبارہ لکھنے کی اجازت نہیں ہے۔لیڈ پنسل کا استعمال ممنوع ہے۔

Answer Sheet No. _____ Candidate's Sign. _____ Invigilator's Sign. _____

Fill the relevant bubble against each question:

	Question	A	B	C	D	A	B	C	D
1.	The most common cause of ischemic heart disease is:	Asthma	Atherosclerosis	Pneumonia	Diabetes Insipidus	○	○	○	○
2.	Chest pain in angina usually occurs due to:	Brain ischemia	Temporary decrease in coronary blood flow	Kidney disease	Liver disease	○	○	○	○
3.	Angioplasty is performed to:	Measure blood pressure	Open narrowed coronary arteries	Treat pneumonia	Measure blood sugar	○	○	○	○
4.	CPR stands for:	Cardiac Pulse Recovery	Cardiopulmonary Resuscitation	Cardiac Pressure Recording	Coronary Pulse Rhythm	○	○	○	○
5.	Which blood test confirms damage to the heart muscle?	Serum Calcium	Troponin Test	Blood Glucose	Hemoglobin	○	○	○	○
6.	The P wave represents:	Ventricular depolarization	Atrial depolarization	Ventricular repolarization	Cardiac relaxation	○	○	○	○
7.	A standard ECG has how many leads?	6	8	10	12	○	○	○	○
8.	Which procedure is most useful for detecting intermittent arrhythmias?	Chest X-ray	Holter Monitor	Spirometry	Ultrasound Abdomen	○	○	○	○

CARDIO VASCULAR SCIENCE
HSSC-II

Time allowed: 2:15 Hours **Total Marks:32**

Note: Answer all parts from Section "B" and all questions from Section 'C' on the **E-sheet**.
Write your answers on the allotted/given spaces.

SECTION – B (Marks 20)

Q.2	**Attempt the following questions.**				**(2 x 10=20)**
(i)	What is the role of ECG in diagnosing ischemic heart disease?	2	OR	What is the significance of the QRS complex?	2
(ii)	Define arrhythmia and give two examples.	2	OR	Differentiate between primary (essential) and secondary hypertension.	2
(iii)	What is a Holter monitor, and when is it used?	2	OR	What should a technologist do if a patient becomes unconscious during a procedure?	2
(iv)	Explain why smoking increases the risk of coronary artery disease.	2	OR	How does regular exercise help control blood pressure?	2
(v)	Define Basic Life Support (BLS) and state its importance.	2	OR	Differentiate between angiography and angioplasty.	2
(vi)	Mention four preventive measures to reduce the risk of ischemic heart disease.	2	OR	Mention four indications for performing an ECG.	2
(vii)	What is an Exercise Tolerance Test (ETT)?	2	OR	Why is patient identification important before cardiac procedures?	2
(viii)	What is the purpose of cardiac catheterization?	2	OR	Why is informed consent necessary before invasive procedures?	2
(ix)	Name the cardiac enzymes/biomarkers used for diagnosis of MI.	2	OR	Why is proper electrode placement important in ECG?	2
(x)	Differentiate between invasive and non-invasive cardiac procedures.	2	OR	What is the difference between ischemia and infarction?	2

SECTION – C (Marks 12)

	Attempt all questions. Marks of each question are given along with each question.				**(2x6 =12)**
Q.3	Explain the normal ECG waveform. Describe the P wave, PR interval, QRS complex, ST segment, T wave, and QT interval with their clinical significance.	6	OR	Describe the classification of hypertension. Discuss its complications on the heart, brain, kidneys, and eyes.	6
Q.4	Describe coronary angiography. Explain its principle, procedure, indications, contraindications, and possible complications.	6	OR	Define patient care. Explain the principles of patient care before, during, and after cardiovascular procedures.	6