

International Board of Heart Rhythm Examiners		Spec %
Cardiac Device Remote Monitoring Specialist (CDRMS) Exam Content Outline		
1. Rhythm Recognition		38%
A. Rhythm strip		11%
1. Atrial fibrillation/Atrial flutter		1%
a. Bradycardia-tachycardia		
b. Rapid ventricular response		
2. Ventricular tachycardias		2%
a. Polymorphic		
b. Monomorphic		
c. Torsades de pointes		
d. Nonsustained		
e. Sustained		
3. Supraventricular tachycardias		1%
a. Atrial tachycardia		
b. Reentrant atrial tachycardia		
4. Sinus tachycardia		1%
5. AV block		2%
a. Mobitz I		
b. Mobitz 2		
c. Complete		
6. Normal sinus, junctional, aberrancy, PVC, PAC		1%
7. Sinus arrhythmia		1%
a. Sinus pause/arrest		
b. Nocturnal pause		
8. VA conduction		1%
9. Artifacts		1%
a. EMI		
b. Undersensing		
c. Oversensing		
d. Myopotentials		
B. Intracardiac EGM / ILR recordings		26%
1. Atrial fibrillation Atrial flutter		2%
2. Ventricular tachycardias		4%
a. Polymorphic		
b. Monomorphic		
c. Torsades de pointes		
d. Nonsustained		
e. Sustained		
f. 1:1 VA conduction		

g. Dual tachycardia	
1. Rhythm Recognition (cont.)	
3. Far-field electrogram	1%
4. Supraventricular tachycardias	3%
a. Atrial tachycardia	
b. AV node reentrant tachycardia	
c. Long R-P tachycardia	
5. Sinus tachycardia	2%
6. AV block	2%
a. Mobitz I	
b. Mobitz 2	
c. Complete	
7. Normal sinus, sinus arrhythmia, junctional, aberrancy, PVC, PAC	3%
8. Sinus arrhythmia	1%
a. Sinus pause/arrest	
b. Nocturnal pause	
9. VA conduction	1%
10. Artifacts	3%
a. EMI	
b. Undersensing	
c. Oversensing	
d. Myopotentials	
11. Triggered ventricular pacing	1%
12. T-wave oversensing	1%
13. Pacemaker-mediated tachycardia; VA conduction	2%
C. 12-lead	1%
1. Bundle branch block	
2. CRT pacing	
3. AV block	
4. Preexcitation	
5. His bundle pacing	

2. Device & Lead Function	28%
A. Timing cycles and modes	7%
1. PVARP	
2. Blanking period	
3. Safety pacing	
4. Mode recognition	
5. CRT timing	
6. Synch AV, adaptive bi-V	
7. Upper rate behavior	
8. AV hysteresis	
9. Rate hysteresis	
10. Minimized RV pacing algorithms	
11. Fusion	
12. Pseudofusion/pseudopseudofusion	
B. Malfunction	12%
1. Loss of capture	2%
a. Physiologic	
b. Nonphysiologic	
c. Capture management	
2. Lead failure	4%
a. Fracture	
b. Physiologic threshold increase	
c. Insulation failure	
d. Polarity/lead safety switch	
e. High-voltage/low-voltage	
3. Undersensing	2%
a. Inappropriate tracking	
b. Physiologic loss of capture (atrial, ventricular)	
4. Oversensing	4%
a. Far-field	
b. EMI	
c. Myopotentials	
d. T-wave	
e. Inappropriate mode switching	
f. Lead integrity alert	
g. Loose set screw	
C. ICD-Specific Function	9%
1. Detection/discrimination	4%
a. Sudden onset	
b. Rate stability	
c. Morphology/wavelet	
d. 1:1 VA association	

e. PR relationship	
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2. Device & Lead Function (cont.)	
f. Detection zones	
g. High-rate timeout	
h. Aborted shocks/redetection	
i. Detection duration	
j. Subcutaneous ICD	
2. Tachycardia therapies	5%
a. Shock therapy (effective/ineffective, DFT)	
b. ATP algorithms (burst, ramp, etc)	
c. Failure to detect	
d. Dynamic therapy	

3. Remote Service Management	14%
A. Connectivity	2%
1. Manual vs automatic	
2. Troubleshooting	
B. Alert management	7%
1. Diagnosis-based alert settings	
2. Actionable device/lead issues	
3. Actionable rhythm issues	
4. Tachycardia therapies disabled	
C. Battery follow-up management	3%
1. ERI/recommended replacement time (RRT)	
2. EOL	
3. Transmission interval	
4. Capacitor reform time	
5. Battery voltage curve	
D. Advisory follow-up management	2%
1. Boston minute ventilation oversensing	
2. St. Jude battery depletion	
3. Boston low-voltage capacitor failure	

4. Diagnostic Monitoring	14%
A. Heart failure	4%
1. Chest wall impedance monitoring	
2. Heart Logic (generic name TBD)	
3. LV pacing percentage	
B. Rhythm & rate monitoring	10%
1. Graph interpretation	
2. Atrial fibrillation/oral anti-coagulation	
3. Duration of monitoring statistics	
4. Histogram/Cardiac Compass (generic TBD) interpretation	
5. Atrial fibrillation/rapid response	
6. Ventricular tachyarrhythmias	
7. Change in pacing percentage	
8. Management of symptomatic episodes	

5. Device Technology	6%
A. Rate response sensors	2%
1. Activity	
2. Minute ventilation	
3. Closed loop stimulation	
B. Basic Electronic & Energy Concepts	4%
1. Ohm's Law	
2. Strength duration curve	
3. Battery impedance	
4. Shocking vectors	
5. Pacing polarities (LV vectors, high-voltage leads, brady leads)	
6. Magnet effects	
7. MRI safe modes	
TOTALS	100%