KNOWLEDGE TEST & SKILLS LIST

IntelliVue Patient Monitor

MP5/MP5T
Release G.0 with Software Revision G.0x.xx

Patient Monitoring

PHILIPS
Competency

Competency can be defined as having the knowledge, skill and attitude to perform given tasks correctly or according to standards. Continuing competency can also be defined as performance of job tasks consistently according to standards.

Based on this definition, this book contains a knowledge test to determine the user’s knowledge of the MP5/M P5T patient monitor after completing the MP5/M P5T Training Guide. In addition, a Skills Checklist has been included that can be used to determine the clinical user’s ability to perform basic monitor tasks.

The tasks in the Skills Checklist should be performed with the monitor in Monitoring mode using a patient simulator. If you don’t have a patient simulator, you may want to place the monitor into Demo mode to see some data. Demo mode provides a simple simulation of waves and numerics with fixed values.

**WARNING**

Demo mode is for demonstration purposes only. Never use Demo mode when a patient is attached to the monitor. When you enter Demo mode, all stored trend information and patient demographics are deleted from the monitor’s memory. When you have completed your training tasks, always exit Demo mode. When you exit Demo mode, all stored trend information and patient demographics are deleted from the monitor’s memory, and the monitor is reset to its default settings.

**To place the monitor in Demo mode**

1. Select the **Main Setup** key on the Main Screen to open the **Main Setup** menu.
2. From the **Main Setup** menu, select **Operating Modes** and then **Demo**.
3. Enter the password (14432) and select **Enter**.

**To exit Demo mode**

- Turn the monitor off and on again.
Knowledge Test

Name: ________________________________ Test Date: ______________________________
Title: _________________________________ Unit: _________________________________
Score: _________________________________

1. Fill in the blanks with the correct number from the picture to match the definition.
   a. _____ On/Standby switch
   b. _____ Measurement connectors
   c. _____ Alarm Lamps
   d. _____ ECG Out (not all models)
   e. _____ Power and battery indicators

2. A measurement setup menu allows the user to:
   (More than one answer may be correct)
   a. Turn off the measurement alarm
   b. Change the alarm limits
   c. Turn the measurement off
   d. Change the color of the waveform and numeric

3. To change settings related to a measurement wave:
   a. Select the Change Wave SmartKey
   b. Select the wave on the Screen
   c. Select the Monitor Information Line
   d. Waveforms cannot be changed

4. What happens when you select the Silence key?
   a. All active alarms are acknowledged and silenced
   b. All alarms are silenced for 10 minutes
   c. All alarms are switched off for 2 minutes
   d. All alarms except life threatening alarms are suspended for 2 minutes

5. The following symbol displayed in the Monitor Information Line indicates:
   (More than one answer may be correct)
   a. Paced mode is enabled, pacing alarms are active
   b. Paced mode is disabled, pacing alarms are not active
   c. If patient is paced, pace pulses will be displayed on the ECG
6 What is an INOP alarm?
   a. An alarm condition that only occurs IN the Operating room
   b. A technical alarm that indicates an INOPERATIVE condition has occurred
   c. An alarm that occurs when the user changes the operating mode

7 The Pause Alarms key:
   a. Turns off all yellow alarms
   b. Turns off all alarms for 1, 2 or 3 minutes depending on configuration
   c. Turns off all non critical alarms for 2 minutes

8 If you turn the SpO2 alarm off in the Spo2 setup menu or in the Alarm Limits menu, the alarm will remain off:
   a. Until you change the SpO2 alarm limits
   b. For 3 minutes
   c. For 5 minutes
   d. Until you turn it back on

9 To change the HR alarm limits: (More than one answer may be correct)
   a. Select the HR numeric to open the ECG setup menu
   b. Select the ECG waveform to open the ECG setup menu
   c. Select Main Setup key > Alarms > Alarm Limits > HR

Not MP5T 10 Which two ECG electrodes are used to produce the respiratory waveform from chest movement?
   a. Right Arm to Left Arm
   b. Right Arm to Left Leg
   c. Left Arm to Left Leg
   d. All three electrodes are used

Not MP5T 11 Manual respiratory detection mode: (More than one answer may be correct)
   a. Requires adjustment when the depth of respiration changes
   b. Should be used with patients with very weak respiratory signals
   c. Should be used when the respiratory rate is close to the heart rate
   d. Should be used when the patient is ventilated

12 Switching to a different Profile may change: (More than one answer may be correct)
   a. The displayed measurement waves on the Main Screen
   b. The patient category
   c. The alarm behavior
Why is it important to admit your patient to the monitor and the Information Center:
- The monitor will not alarm for unadmitted patients
- Patient data will not be stored for unadmitted patients
- Patient demographics such as name and MRN will be printed on recordings, reports and be available at the Information Center

Which of the following demographic data determines the measurement algorithm, safety limits, and alarm limit ranges?
- Weight
- Patient category
- Medical Record Number
- Date of birth

When you discharge the patient at the bedside monitor, what happens? (More than one answer may be correct):
- The information in the Patient Demographics window is cleared
- All settings are reset to the default Profile
- All patient data is cleared
- Monitor turns off

How are alarms indicated? (More than one answer may be correct):
- Alarm sounds
- Alarm messages are displayed
- Alarm lamps flash
- Numeric of the measurement in alarm flashes

Match each symbol with the correct description.

Preparing the skin for electrode placement is important because:
- It reduces skin resistance and provides a good ECG signal
- It prevents skin irritation from electrodes
- It allows electrodes to adhere to the skin for 3 or more days
19 The **Apnea Time** can:
   a. Not be changed
   b. Be changed only in the **Resp setup menu**
   c. Be changed in the **Alarm Limits menu**
   d. Be changed both in the **Resp setup menu** and the **Alarms Limit menu**

20 The **SpO₂ desaturation alarm**: (More than one answer may be correct)
   a. Is a red level alarm
   b. Is a yellow level alarm
   c. Sounds immediately if the current SpO₂ is less than the **Desat Limit**
   d. Sounds if the current SpO₂ is less than the **Desat Limit** and the **Desat Delay** time has elapsed

21 You are measuring NBP in **Auto mode**. What happens, when you select the **NBP Start/Stop SmartKey** during an NBP measurement?
   a. The ongoing measurement and the automatic NBP cycle is stopped
   b. Only the ongoing measurement is stopped, the next automatic measurement will occur

22 NBP **STAT mode** takes continuous pressures for:
   a. 15 minutes
   b. 10 minutes
   c. 5 minutes
   d. 1 minute

23 You disconnect your patient from the monitor to go to X-ray. The best way to prevent alarms without losing patient data is to:
   a. Turn the monitor off
   b. Turn off all the individual alarms
   c. Place the monitor into **Monitor Standby**

24 Match the type of recording with the correct description.
   a. Records a set time period prior to and after initiating the recording
   b. Records only post request and continues until stopped
   c. Covers a selected time period with a selected interval

   1 ___ Realtime Recording
   2 ___ Delayed Recording
   3 ___ Vital Signs Recording
25. For each alarm text, enter the type of alarm (Red, Yellow or INOP).
   a. ASYSTOLE ___________
   b. SpO₂ SENSOR OFF ___________
   c. HR140>120 ___________
   d. APNEA ___________

26. The extreme bradycardia alarm limit is:
   a. Adjusted during monitoring in the Alarms Limits menu
   b. Adjusted during monitoring in the Setup HR menu
   c. Automatically set by subtracting the configured ΔExtrBrady from the HR low alarm limit
   d. Always 25 beats below the HR low alarm limit

27. When using predictive temperature measurements it is important to verify the patient category for which type of measurement?
   a. Oral
   b. Rectal
   c. Axillary
   d. All of the above

28. To view the Vital Signs values for your patient, select:
   a. Graph Trend SmartKey
   b. Vitals Trend SmartKey
   c. Vital Signs from the Main Setup menu
   d. Change the Screen

29. Screen trends can be viewed as:
   a. Graphical
   b. Tabular
   c. Horizon
   d. All of the above

Not MP5T 30. When you change to a different pressure label, what pressure settings may change? (Select all that apply)
   a. Color of the wave and numerics
   b. Alarm limits
   c. Wave scale
   d. Zero and calibration data
Selecting Optimum Scale in the pressure setup window:

a. Causes the monitor to select the best scale for the current wave
b. Should always be used to view pressure waveforms
c. Causes the monitor to select the best scale for the current wave and to automatically adjust the scale as the pressure changes
d. Selects a scale that is 20mmHg above and below the current pressure
## Skills Checklist

Name: ________________________________  Test Date: ______________________________
Title: _________________________________  Unit: _________________________________
Observer: ____________________________  Title: _________________________________

<table>
<thead>
<tr>
<th>Pass</th>
<th>Needs Review</th>
<th>Not Applicable</th>
<th>Skill</th>
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<tbody>
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<td>Overview</td>
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<td>Identify the alarm lamps and front panel LEDs</td>
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<td>Connect patient cables</td>
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<td>Switch the monitor On and Off</td>
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<td>Basic Operation</td>
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<td>Identify the alarm message fields on the Main Screen</td>
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<td>Identify the Pause Alarms and Silence permanent keys</td>
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<td>Identify the Paced status on the Main Screen</td>
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<td>Access measurement and monitor settings from the Main Setup menu</td>
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<td>Use the Main Screen key to close all windows and return to Main Screen</td>
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<td>Open the Setup menu and scroll up and down in the menu</td>
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<td>Open the ECG Setup menu from the Main Screen</td>
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<td>Change to a different Screen</td>
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<td>Change to a different Profile</td>
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<td>Adjust the speed of measurement waves</td>
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<td>Freeze and unfreeze a waveform</td>
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<td>Enter measurement values manually</td>
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<td>Identify how much battery life is available</td>
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<td>Alarms</td>
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<td>Identify the alarm indicators</td>
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<td>Silence an alarm</td>
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<td>Pause all patient alarms</td>
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<td>Review alarms</td>
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<td>Switch off an alarm for a measurement</td>
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<td>Adjust the alarm volume</td>
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<td>Open the Alarm Limits window</td>
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<td>Managing Patients</td>
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<td>Admit a Patient</td>
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<td>Change or add information to the Patient Demographics</td>
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<td>Change the Patient Category</td>
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<td>Change the Paced mode</td>
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<td>Discharge the patient</td>
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<td>Place the monitor in Standby</td>
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<td>Resume monitoring from Standby</td>
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<td>Perform an EndCase</td>
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<td><strong>ECG</strong></td>
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<td>Perform a skin prep</td>
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<td>Place electrodes accurately - according to lead diagrams</td>
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<td>Change the lead placement to EASI (not MP5T)</td>
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<td>Change the lead displayed and used for arrhythmia analysis</td>
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<td>Adjust the High and Low HR alarm limits</td>
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<td>Identify the active alarm source</td>
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<td>Adjust the QRS volume</td>
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<td>Change the size of the ECG wave</td>
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<td>Activate an Arrhythmia relearn</td>
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<td><strong>Pulse Rate</strong></td>
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<td>Identify the source of the System Pulse</td>
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<td>Select Pulse as the active alarm source</td>
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<td>Adjust the High and Low alarm limits</td>
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<td><strong>Respiration (not MP5T)</strong></td>
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<td>Place electrodes for optimal detection of breathing</td>
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<td>Change the respiration detection mode to Manual</td>
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<td>Adjust the manual detection level</td>
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<td>Adjust the High and Low alarm limits</td>
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<td>Adjust the Apnea Time</td>
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<td><strong>SpO₂</strong></td>
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<td>Select an appropriate measurement site</td>
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<td>Select an appropriate sensor</td>
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<td>Adjust the High, Low and Desat alarm limits</td>
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<td>Evaluate the quality of the SpO₂ signal</td>
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<td><strong>Non-invasion Blood Pressure (NBP)</strong></td>
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<td>Select the appropriate blood pressure cuff</td>
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<td>Apply the NBP cuff correctly</td>
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<td>Start and stop a manual NBP measurement</td>
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<td>Change the NBP measurement mode from Auto to Manual</td>
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<td>Change the Auto measurement interval</td>
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<td>Set up an NBP measurement sequence</td>
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<td>Start and stop an automatic NBP measurement cycle</td>
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<td>Start an NBP STAT measurement</td>
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<td>Select the NBP alarm source</td>
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<td>Adjust the High and Low alarm limits</td>
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<td>Perform a Temp measurement using a standard temperature probe (not M P5T)</td>
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<td>Perform a Temp measurement using the predictive temperature method</td>
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<td><strong>Invasive Pressure (not M P5T)</strong></td>
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<td>Select a pressure label for monitoring</td>
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<td>Zero the pressure transducer</td>
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<td>Select the appropriate pressure scale</td>
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<td>Select the NBP alarm source</td>
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<td>Adjust the High and Low alarm limits</td>
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<td>Use the wave cursor to manually enter a pressure value</td>
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<td><strong>Trends</strong></td>
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<td>Open and review tabular Vital Signs trend</td>
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<td>Open and review Graph Trends window</td>
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<td>Switch to a different trend group</td>
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<td>Print or record the trend in view</td>
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<td><strong>Recordings</strong></td>
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<td>Initiate a delayed recording</td>
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<td>Initiate a continuous real-time recording of ECG</td>
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<td>Extend a running recording</td>
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<td>Stop a running recording</td>
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<td>Replace the paper in the recorder</td>
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</table>
Knowledge Test Answers

1. d-1, a-4, b-2, c-1, d-3, e-5
2. a, b, c
3. b
4. a
5. a, c
6. b
7. b
8. d
9. a, c
10. b
11. a, b, c
12. a, b, c, d
13. c
14. b
15. a, b, c
16. a, b, c, d
17. a-3, b-1, c-2, d-4
18. a
19. b
20. a, d
21. b
22. c
23. c
24. a-2, b-1, c-3
25. Red, IN O P, Yellow, Red
26. c
27. d
28. b
29. d
30. a, b, c
31. a