## **JOURNAL-BASED LEARNING - BJBS**

## REGULATIONS

- To obtain credits for journal-based learning (JBL), you must be registered on the Institute of Biomedical Science CPD scheme. A CPD registration form is available from the CPD section at the IBMS office.
- Deadline for submission of a completed answer card: Wednesday 3 October 2012.
- The pass mark will be 17 questions answered correctly out of 20.
- Five CPD credits will be awarded for each set of questions passed.

## **BRIEF INSTRUCTIONS**

- Use a pencil or black/blue pen.
- Enter your membership number and the assessment number as indicated.
- For each question (A-T), mark either T (true) or F (false).
- · Use a new card if you make a mistake.
- Enter your name and address, and affix a postage stamp for return of the results.
- Post the card in an envelope addressed to the CPD Department, Institute of Biomedical Science, 12 Coldbath Square, London EC1R 5HL.
- · This activity is also available online at www.ibms.org

## A history of blood glucose meters and their role in self-monitoring of diabetes mellitus

Clarke SF, Foster JR. Br J Biomed Sci 2012; 69 (2): 83–93. Assessment No: 069912 (please enter on JBL card or on website)

**FALSE** 

**FALSE** 

A	Towards the end of the 20th century a quantitative blood sugar method was published which used copper reduction and gravimetric measurement.	TRUE
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- B Banting and colleagues TRUE FALSE succeeded in identifying insulin in 1931.
- C Benedict's copper reagent TRUE FALSE required heat for colour development.

TRUE

- D Hydrogen peroxide is catalysed by peroxidase for the oxidation of orthotolidine to a deep blue chromogen.
- E Glycated haemoglobin TRUE FALSE measurement as an index of the quality of glycaemic control was introduced in the 1970s.

F Dextrostix was a 'dip and read' TRUE urine reagent strip.

**FALSE** 

**FALSE** 

TRUE

- G Variation in the assessment of colours across a glucose concentrations was the trigger to develop an automatic, electronic glucose test strip reader.
- H Launched in 1980, the TRUE FALSE Dextrometer, was the first meter with a digital display.
- I The first enzyme electrode strips TRUE FALSE were introduced towards the end of the 1990s.
- J Boehringer Mannheim marketed TRUE FALSE its Reflolux meter as the Accu-Chek in Europe.
- K The oxygen electrode for the measurement of pO<sub>2</sub> was the forerunner of the biosensor electrode.
- L First-generation blood glucose TRUE FALSE systems required no operator input.
- M In 1996 the ADA lowered TRUE FALSE the target variation to 15% between glucose meters and the laboratory method.
- N A study to assess the value of socalled 'memory' meters indicated improved patient motivation and glycaemic control.
- O At least five variations of the electrochemical OneTouch meter system have been produced.
- P Coulometric strip performance TRUE FALSE is adversely affected by high concentrations of paracetamol, uric acid and vitamin C.
- Q Electrode biosensor strips now TRUE FALSE dominate the market.
- R Patients need to be educated and trained to use monitoring systems competently.
- S The MHRA monitors the safety, TRUE FALSE quality and performance of blood glucose meters, test strips, lancing devices and lancets.
- T The prevalence of diabetes in TRUE FALSE the UK in 2010 was 8.2% (4.3 million).

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