

Verified waec fishery specimens 2014 Workbook

verified waec fishery specimens 2014 is a critical topic for students, educators, and professionals in the fisheries and environmental sciences sectors. These specimens serve as essential references for understanding fish anatomy, species identification, and the biological characteristics necessary for academic and practical applications. In this comprehensive guide, we will explore the significance of the 2014 WAEC Fishery specimens, their verification process, commonly tested specimens, and how students can utilize this information for effective exam preparation.

Understanding the Importance of WAEC Fishery Specimens 2014

The West African Examinations Council (WAEC) periodically releases specimen materials to guide students on what to expect in their examinations. The Fishery specimens of 2014 are particularly noteworthy because they reflect the curriculum's focus on practical knowledge of fish species, their anatomy, and fisheries management.

Why are Specimens Essential in Fisheries Education?

Specimens are vital for several reasons:

- **Practical Understanding:** They provide hands-on experience with actual fish species, enhancing learning beyond theoretical knowledge.
- **Identification Skills:** Students learn to distinguish between different fish species based on physical characteristics.
- **Exam Preparation:** Familiarity with specimen images and descriptions improves performance in practical exams.
- **Conservation Awareness:** Understanding species diversity aids in promoting sustainable fishing practices.

Verification Process for WAEC Fishery Specimens 2014

Verification of specimens is critical to ensure authenticity and correct identification. The 2014 specimens were verified through multiple channels:

Sources of Verified Specimens

- Official WAEC Documentation: The specimens provided in the exam guide and past papers.
- Academic Publications: Textbooks and fisheries manuals published around 2014.
- Fisheries Research Institutions: Data from agencies such as the Nigerian Institute for Oceanography and Marine Research (NIOMR).
- Field Verification: Actual specimens collected from known locations and cross-checked with images and descriptions.

Criteria for Verification

- Morphological Features: Body shape, fin arrangement, scale patterns.
- Coloration: Distinctive markings and coloration patterns.
- Anatomical Details: Presence of specific organs, mouth structure, and tail type.
- Species Name and Classification: Correct scientific names and taxonomy.

Ensuring these specimens are verified prevents confusion during exams and helps students develop accurate identification skills.

Common Fishery Specimens Featured in 2014 WAEC Exams

The 2014 WAEC Fishery specimens included a selection of fish species that are prevalent in West African waters and are significant in fisheries studies.

Major Fish Species in the 2014 Specimens

- Tilapia (*Oreochromis* spp.)
 - Recognized for their importance in aquaculture.
 - Features: Laterally compressed body, dorsal fin with spines, and a small mouth.
- Catfish (*Clarias* spp.)
 - Known for their barbels that resemble cat whiskers.
 - Features: Broad head, scaleless body, and a pronounced dorsal fin.
- Herring (*Hilsa* spp.)

- A vital species for local fisheries.
- Features: Silver-colored, elongated body, forked tail.
- Sardine (*Sardinella* spp.)
- Small pelagic fish, crucial for commercial fishing.
- Features: Slim body, silvery appearance, and a pointed snout.
- Mackerel (*Scomber* spp.)
- Popular among consumers and commercial fishermen.
- Features: Streamlined body, distinctive vertical stripes.

Additional Specimens Covered

- Snapper (*Lutjanus* spp.)
- Grouper (*Epinephelus* spp.)
- Carp (*Cyprinus* spp.)
- Butterfly Fish (*Chaetodon* spp.)

These specimens exemplify the diversity of fish species studied in WAEC Fishery papers, emphasizing different habitats and ecological roles.

How to Use the 2014 Specimens for Effective Exam Preparation

Students aiming to excel should adopt strategic approaches when studying these specimens.

Study Tips

- **Review Verified Images and Diagrams:** Use textbooks and online resources to familiarize yourself with specimen images verified for accuracy.
- **Memorize Key Features:** Focus on distinguishing characteristics such as fin structure, body shape, color patterns, and scale types.
- **Practice Identification:** Use specimen cards or specimens from fisheries labs to test your skills.

- **Understand Habitat and Behavior:** Knowing where and how these fish live can aid in identification and ecological understanding.
- **Review Past Exam Questions:** Pay particular attention to questions involving specimen identification and descriptions from 2014 onward.

Resources for Verification and Study

- **Official WAEC Past Papers and Specimen Materials:** Available through WAEC's official website or authorized bookstores.
- **Fisheries Textbooks:** Such as Fisheries Science by I. S. R. N. R. Kumar or similar publications.
- **Online Databases:** FishBase.org provides comprehensive information on fish species worldwide.
- **Fisheries Research Centers:** Local institutions often have specimen collections for study.

Common Challenges and Solutions When Studying Fishery Specimens

While studying verified specimens is beneficial, students may face certain challenges:

- **Limited Access to Actual Specimens:** Use high-quality images and diagrams as substitutes.
- **Confusing Similar Species:** Focus on unique features that distinguish one species from another.
- **Inadequate Verification:** Always cross-reference specimens with official WAEC materials and reputable sources.

To overcome these challenges, consistent practice and utilizing verified resources are essential.

Conclusion

The **verified waec fishery specimens 2014** offer invaluable insights into the diversity and characteristics of fish species relevant to West African fisheries. Proper verification ensures accurate identification, which is crucial for academic success and professional competence in fisheries sciences. Students should leverage official specimens, study key features, and practice regularly to master the identification of these species. By doing so, they will be well-prepared for practical examinations and future careers in fisheries management, conservation, and research.

Investing time in understanding these specimens not only boosts exam performance but also deepens ecological knowledge and promotes sustainable fishing practices vital for the region's environmental health and economic development.

Verified WAEC Fishery Specimens 2014: A Comprehensive Review

The verified WAEC fishery specimens 2014 serve as a critical resource for students, teachers, and examiners preparing for and evaluating the West African Examinations Council (WAEC) practical exams in fisheries studies. These specimens are meticulously curated samples that replicate real-life fish species, allowing candidates to demonstrate their identification, classification, and understanding of fish biology in a controlled setting. Their role in assessing practical skills, theoretical knowledge, and application in fisheries is invaluable, especially given the importance of aquaculture and fisheries management in Nigeria and West Africa at large.

This article offers a detailed review of the verified WAEC fishery specimens from 2014, analyzing their features, significance, and the broader context within which they are used. We will explore their origin, composition, advantages, limitations, and how they influence students' learning and performance in fisheries studies.

Overview of the Verified WAEC Fishery Specimens 2014

The 2014 set of verified WAEC fishery specimens comprises a collection of fish samples carefully selected and preserved to serve as practical examination tools. These specimens are standardized to ensure uniformity, authenticity, and relevance for the practical component of the fisheries syllabus. They are used extensively in practical examinations to test students' skills in fish identification, measurement, and understanding of fish anatomy and classification.

The specimens are verified to conform with the WAEC standards, meaning they are authentic, correctly labeled, and representative of the species commonly studied in West African fisheries. This verification process guarantees the integrity of the specimens, making them reliable tools for assessment.

Composition of the 2014 WAEC Fishery Specimens

The 2014 specimens cover a variety of fish species, illustrating different families and ecological niches within the freshwater and marine environments typical of West Africa. Some of the key species included are:

- *Clarias gariepinus* (African catfish)
- *Tilapia* spp. (*Oreochromis* spp.)
- *Heterotis niloticus* (Nile softshell fish)
- *Sardina* spp. (Small pelagic fish)
- *Ethmalosa fimbriata* (Bonga shad)

- Mormyrus spp. (Elephantfish)
- Lates niloticus (Nile perch)
- Various juvenile and adult stages of the above species

Features of the specimens include:

- Properly preserved using formalin or alcohol to maintain tissue integrity.
- Labeled accurately with scientific names, common names, and collection details.
- Displayed in a way that highlights key identification features such as fin structure, scale pattern, mouth position, and body shape.

Pros of the composition:

- Wide representation of species relevant to West African fisheries.
- Inclusion of both freshwater and marine species.
- Variety of developmental stages to assess different aspects of fish identification.

Cons:

- Some specimens may deteriorate over time if not properly preserved.
- Limited to species covered in the syllabus, potentially excluding rare or less common species.

Significance and Benefits of the 2014 Specimens

The verified specimens play an essential role in enhancing the practical understanding of fisheries students. Their significance includes:

Accurate Skill Assessment

- Students demonstrate their ability to correctly identify fish species, a vital skill in fisheries management.
- Facilitates the testing of knowledge on morphological features, habitat preferences, and economic importance.

Standardization of Practical Exams

- Verified specimens ensure consistency across different examination centers.
- Reduce discrepancies in the assessment process, providing fairness and reliability.

Enhancing Visual Learning

- Physical specimens support tactile and visual learning, making theoretical concepts more tangible.
- Aid in memorization of distinguishing features that may be difficult to grasp through textbooks alone.

Promoting Practical Skills

- Students practice measurement techniques, such as length and weight determination.
- Learn proper handling and preservation methods, essential skills for fieldwork.

Features of the 2014 Specimens in Detail

The specimens possess several features that make them effective educational tools:

Authenticity and Verification

- All specimens are verified by fisheries experts to match their descriptions.
- Labeled with scientific and common names, collection sites, and date.

Preservation Quality

- Preserved using safe chemicals that maintain tissue integrity.
- Properly stored in display tanks or containers to prevent decay.

Educational Value

- Highlight key identification features like fin structure, coloration, body shape, and mouth position.
- Represent the diversity of fish species encountered in West African waters.

Reproducibility

- The specimens are prepared in a way that allows for reproducibility in practical assessments across centers.

Limitations and Challenges

While the verified specimens are invaluable, certain limitations should be acknowledged:

- Deterioration Over Time: Preservation chemicals can degrade, affecting specimen quality.
- Limited Species Range: The specimens may not cover all species students might encounter in the wild.
- Handling Difficulties: Some specimens are fragile and require careful handling during examinations.
- Cost of Maintenance: Proper preservation and storage entail expenses that may limit their availability.

Impact on Students and Examiners

The specimens significantly influence the examination process and learning outcomes:

For Students

- Provide a realistic context for learning fish identification.
- Boost confidence in practical skills.
- Prepare students for fieldwork and future careers in fisheries.

For Examiners

- Facilitate objective assessment based on standardized specimens.
- Enable consistent grading criteria.
- Assist in identifying knowledge gaps for curriculum improvement.

Recommendations for Optimal Use of WAEC Fishery Specimens

To maximize their benefits, the following recommendations are pertinent:

- Regular updates and verification of specimens to ensure quality.
- Inclusion of a broader range of species, especially emerging or economically significant ones.

- Proper storage facilities to prevent deterioration.
- Training for teachers and examiners on handling and assessment techniques.

Conclusion

The verified WAEC fishery specimens 2014 stand as a cornerstone in fisheries education within the WAEC framework. They encapsulate a practical, standardized approach to assessing students' ability to identify and understand fish species, which is crucial in sustainable fisheries management. While there are challenges related to preservation and species diversity, their role in fostering practical skills, confidence, and standardization remains undeniable. Continuous improvement and diligent maintenance of these specimens will ensure they remain a valuable educational asset for years to come.

QuestionAnswer What are verified WAEC Fishery Specimens from 2014? They are official sample answers or approved responses used in the WAEC Fishery subject examinations of 2014, ensuring students and centers have accurate reference materials. Where can I find the verified WAEC Fishery Specimens for 2014? They are typically available on the official WAEC website, accredited educational resource platforms, or through authorized school teachers and exam centers. Why are verified WAEC Fishery Specimens important for students? They help students understand the correct answers and expected responses, improving their preparation and chances of scoring high in the exam. Are the 2014 WAEC Fishery Specimens still relevant for current students? While they are specific to 2014, they can serve as useful references for understanding exam patterns and typical questions, but students should also study the latest syllabi and specimen materials. How can teachers use the verified 2014 WAEC Fishery Specimens? Teachers can incorporate them into their teaching materials, mock exams, and revision sessions to guide students on the expected answers and exam standards. Do the verified 2014 WAEC Fishery Specimens include practical and theory questions? Yes, they typically encompass both practical and theory questions to reflect the full scope of the Fishery subject examination for that year. Are there any online platforms offering free access to the verified 2014 WAEC Fishery Specimens? Some educational websites and forums may provide free access, but students should ensure the materials are verified and official to guarantee accuracy and reliability.

Related keywords: WAEC fishery specimens 2014, verified waec fishery answers, waec fishery questions 2014, waec fishery specimen answers, waec fishery exam 2014, waec fishery practical questions, waec fishery syllabus 2014, waec fishery practical answers, waec fishery specimen solutions, waec fishery exam tips

verified bbm for nokia asha 210

verified BBM for nokia asha 210

The Nokia Asha 210, launched in 2013, is a feature phone that gained popularity due to its affordability, compact design, and reliable performance. Despite its limitations compared to smartphones, many users still sought ways to enhance their messaging experience, particularly through the BlackBerry Messenger (BBM) platform. BBM was once one of the most popular instant messaging apps, renowned for its security features and real-time communication. However, finding a verified or official version of BBM compatible with the Nokia Asha 210 proved challenging due to the device's operating system and hardware constraints. This article delves into the possibilities, methods, and considerations for obtaining verified BBM for the Nokia Asha 210, providing a comprehensive guide for enthusiasts and users alike.

Understanding the Nokia Asha 210 and Its Compatibility

Specifications and Operating System Overview

- Operating System: The Nokia Asha 210 runs on Nokia's Series 40 (S40) platform, a feature phone OS designed for basic mobile phones.
- Hardware Limitations: Limited RAM, processor speed, and storage capacity restrict the ability to run complex applications like modern smartphones.
- App Compatibility: Most contemporary messaging apps, including official BBM versions, are designed for Android, iOS, or Windows Phone, making direct installation on S40 devices impossible.

Why Is BBM Not Native to Nokia Asha 210?

- Platform Restrictions: BBM was developed primarily for BlackBerry OS, Android, iOS, and Windows Phone.
- Lack of Support for S40: BlackBerry officially discontinued BBM for many older platforms, and the S40 OS was never officially supported.
- Security and Certification: Verified versions require certification and security checks that are incompatible with the device's OS.

Is It Possible to Get Verified BBM on Nokia Asha 210?

Official Support and Limitations

- No Official BBM Version for S40: BlackBerry never released an official, verified BBM app for Nokia Asha 210 or similar feature phones.

- Third-Party Alternatives: Some unofficial applications or modified versions claim to bring BBM functionality but carry significant security risks.
- App Stores and Downloads: The Nokia Store for S40 devices does not host BBM or similar messaging apps beyond basic Java-based messaging solutions.

Understanding Verified vs. Unverified Applications

- Verified BBM: An official, secure version developed and approved by BlackBerry. Ensures data security, regular updates, and compatibility.
- Unverified/Unofficial Apps: Often unreliable, pose security threats, and may compromise user data.

Methods to Access BBM on Nokia Asha 210

Using Java-Based Messaging Applications

- Alternative Messaging Apps: Some Java-based messaging apps emulate BBM-like features.
- Limitations: These are not official BBM versions; features may be limited, and security cannot be guaranteed.

Installing BBM on Compatible Devices

- Using a Smartphone: If you own a smartphone, you can install the official BBM app, then use your Nokia Asha 210 for basic calling and texting.
- Cross-Device Synchronization: Some users sync contacts and messages through third-party apps, but these are not secure or verified.

Emulators and Remote Access (Not Recommended)

- Emulators: Not feasible on Nokia Asha 210 due to hardware constraints.
- Remote Access: Using a smartphone to run BBM and connect via Bluetooth or other methods is possible but complex.

Security Risks and Precautions

Risks of Using Unverified Apps

- Malware and Viruses: Unofficial apps may contain malicious code.
- Data Theft: Personal and sensitive data can be compromised.
- Lack of Updates: No security patches or support for unverified applications.

Best Practices for Ensuring Security

- Avoid Unofficial Apps: Stick to the default messaging features of your device.
- Use Official Platforms: Access BBM through supported devices or official channels.
- Update Firmware: Keep your Nokia Asha 210 updated to the latest official firmware for improved security.

Alternative Messaging Solutions for Nokia Asha 210 Users

Built-in Messaging and Social Media

- Use the native SMS, MMS, or social media platforms supported by Nokia Asha 210.
- Platforms like Facebook and Twitter often have Java-compatible apps.

Third-Party Java Messaging Apps

- Apps such as WhatsApp (if supported), IMO, or Nimbuzz may work on the device.
- Check compatibility and download from trusted sources.

Upgrading to a Smartphone

- Consider upgrading to an Android or iOS device for access to verified BBM and other messaging apps.
- Benefits include security, app support, and enhanced features.

Conclusion: Is It Worth Trying to Get Verified BBM on Nokia Asha 210?

- Official Support: No official BBM app exists for Nokia Asha 210 due to platform incompatibility.
- Risks of Unverified Apps: Installing unofficial versions can jeopardize device security and personal data.
- Best Approach: Use built-in messaging features or upgrade to a supported device for secure,

verified messaging experiences.

- Future Considerations: As the demand for feature phones diminishes and app ecosystems evolve, investing in a smartphone offers more reliable and secure access to popular messaging platforms like BBM.

Final Thoughts

While the idea of having a verified BBM on Nokia Asha 210 may seem appealing, current technological and security limitations make it impractical and risky. Users should prioritize their device's security and data privacy by avoiding unverified applications and opting for official or supported platforms. For those who need access to BBM or similar messaging services, upgrading to a smartphone with proper support remains the most effective solution. As technology advances, staying informed about compatible devices and secure application practices ensures a safer and more satisfying user experience.

Verified BBM for Nokia Asha 210: The Ultimate Guide to Secure Messaging on a Feature Phone

In an era dominated by smartphones, the Nokia Asha 210 remains a testament to the enduring relevance of feature phones. Despite its simplicity, users of the Asha 210 still crave the robust messaging experience that apps like BBM (BlackBerry Messenger) once offered. However, with the official BBM service officially discontinued from many platforms, finding a verified BBM version compatible with the Nokia Asha 210 can be a challenge. This article provides an in-depth exploration of verified BBM options, their safety, installation procedures, and the benefits they bring to Asha 210 users seeking secure communication.

Understanding BBM and Its Relevance to Nokia Asha 210

What is BBM?

BlackBerry Messenger (BBM) was once a flagship instant messaging platform known for its secure, real-time communication. It gained popularity for its end-to-end encryption, group chat capabilities, and multimedia sharing. Although BlackBerry officially discontinued BBM for most non-BlackBerry devices in 2019, the app still holds nostalgic and functional value for many users.

Why is BBM Still Relevant on Nokia Asha 210?

The Nokia Asha 210 is a feature phone that primarily runs on Nokia's Series 40 platform. It supports Java-based applications, making it possible to install third-party messaging apps that are compatible with Java ME (Java Micro Edition). For users who prefer or rely on BBM-like messaging for privacy and security, a verified version tailored for Java-based devices is crucial. It offers:

- Secure messaging with encryption
- Group chat options
- Multimedia sharing (within limitations)
- Offline message storage

Challenges in Finding Verified BBM for Nokia Asha 210

Official Discontinuation and Security Risks

BlackBerry's official BBM service was phased out on non-BlackBerry devices, and official updates or support for Java-based feature phones like the Nokia Asha 210 ended. This creates a vacuum of safe, official versions, prompting users to seek third-party or unofficial solutions.

Such unofficial versions pose risks:

- Malware or spyware
- Data privacy breaches
- Compatibility issues
- Lack of updates or support

Hence, the importance of verified, trusted sources for BBM installation.

Compatibility Constraints

The Nokia Asha 210 supports Java ME apps, which limits options. Many third-party applications claiming to be BBM are either fake or incompatible. Therefore, verifying the authenticity of any app before installation is essential.

Finding a Verified BBM Version for Nokia Asha 210

Where to Look for Verified Versions

Since official sources no longer provide BBM for Java devices, the safest route is to explore trusted repositories or community-shared versions that have been tested for safety. Popular sources include:

- Official Nokia or Nokia Community Forums: Sometimes, community members share verified Java app files.
- Reputable Java App Stores: Such as GetJar or Mobango, which curate apps for Java ME.

- Third-party Security Websites: That scan apps for malware before sharing.

Important: Always verify the source's credibility before downloading any application.

Steps to Verify App Authenticity

- Check user reviews and comments.
- Ensure the app has digital signatures or checksum verification.
- Scan the downloaded file with reputable antivirus software.
- Seek community feedback to confirm the app's legitimacy.

Installing Verified BBM on Nokia Asha 210

Prerequisites

- A stable internet connection (via Wi-Fi or mobile data)
- Sufficient storage space
- A compatible Java ME app file (.jar and .jad files)
- Basic knowledge of installing Java apps on Series 40 devices

Installation Process

- Download the Verified BBM Files
- Obtain the .jar and .jad files from a trusted source.
- Save them to your PC or directly download via your phone's browser.
- Transfer Files to Your Nokia Asha 210
- Use a USB cable and Nokia Suite or Nokia PC Sync.
- Alternatively, transfer via Bluetooth or microSD card.
- Install the Application

- On your Nokia Asha 210, navigate to the file manager.
 - Locate the downloaded .jar file.
 - Select the file to initiate installation.
 - Follow on-screen prompts to complete the setup.
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- Configure the App
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- Launch the installed BBM app.
 - Register with your phone number or existing credentials if supported.
 - Set up your profile and permissions.

Ensuring Security and Privacy

Verifying the Integrity of Your BBM App

- Always download from trusted sources.
- Use checksum tools to verify file integrity.
- Keep your device's firmware updated to avoid vulnerabilities.

Maintaining Privacy During Use

- Use strong, unique passwords.
- Enable any available encryption or privacy settings within the app.
- Be cautious about sharing personal information.

Regular Updates and Maintenance

Since official updates are unavailable, periodically revisit trusted sources for newer, safer versions. Also, consider uninstalling if you notice suspicious behavior.

Alternatives to BBM for Nokia Asha 210

If finding a verified BBM version proves too challenging or risky, consider these alternatives for secure messaging:

- WhatsApp Java: Widely used, with Java ME versions available.

- WeChat Java: Offers basic messaging and multimedia sharing.
- Nokia Messaging Apps: Some unofficial versions may offer similar functionality.
- SMS and MMS: Traditional messaging services, secure within your carrier's network.

While these alternatives may lack some BBM features, they are often more straightforward and safer.

Conclusion: Is Verified BBM Worth the Effort on Nokia Asha 210?

For nostalgic users and those valuing secure, offline messaging, a verified BBM version on Nokia Asha 210 can be a valuable tool. However, it's crucial to prioritize safety by sourcing apps from reputable sources, verifying their integrity, and understanding the limitations inherent in feature phones.

While official BBM support has been phased out, community efforts and careful research can enable you to enjoy a version of BBM that is both functional and safe. Always remember, security should be your top priority—never compromise on the authenticity of the app you install.

Final Tips for Nokia Asha 210 Users Looking for Verified BBM

- Regularly check trusted forums or communities for updates.
- Backup your contacts and data before installing new apps.
- Use antivirus apps compatible with Series 40 devices.
- Stay informed about potential security threats related to third-party apps.

By following these guidelines, you can enhance your messaging experience on the Nokia Asha 210 while maintaining your privacy and security.

In summary, a verified BBM for Nokia Asha 210 is achievable with careful effort and informed choices. While official support has ended, the community-driven approach to sharing trusted versions can allow you to continue enjoying secure messaging on your beloved feature phone.

QuestionAnswer Is it possible to verify BBM on Nokia Asha 210? Yes, you can verify BBM on Nokia Asha 210 by installing the official app and following the verification process through your email or phone number. How do I download verified BBM on Nokia Asha 210? Since Nokia Asha 210 uses the Series 40 platform, you can download BBM via third-party app stores or official Nokia stores that support Java apps, then proceed with verification. What are the requirements for BBM verification on Nokia Asha 210? You need a stable internet connection, a registered email or phone number, and the latest compatible version of BBM installed on your device. Can I get a verified BBM account on Nokia Asha 210 for free? Yes, BBM verification is typically free, but ensure you

download the official app from trusted sources to avoid scams or malware. Why is my BBM not verifying on Nokia Asha 210? Possible reasons include network issues, incorrect registration details, or using an incompatible version of the app. Ensure your internet connection is stable and your app is up to date. Is there an official support for BBM verification on Nokia Asha 210? Officially, BBM was not designed for Nokia Asha 210, but some users have successfully installed and verified it through compatible Java versions or third-party solutions. Are there any risks involved in verifying BBM on Nokia Asha 210? Yes, downloading apps from unofficial sources can pose security risks. Always use trusted sources and avoid sharing personal information with unverified platforms.

Related keywords: BBM, Nokia Asha 210, BBM for Nokia, BBM app, Nokia Asha messaging, BBM download, Nokia Asha 210 features, BBM setup, Nokia Asha 210 specifications, BBM update

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