



Minority Educational Society's

Adarsh Education College

NCTE Approved and Affiliated to Sant Gadge Baba Amravati University

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2.4.5 Adequate skills are developed in students for effective use of ICT for teaching learning process in respect of

1. Preparation of lesson plans
2. Developing assessment tools for both online and offline learning
3. Effective use of social media/learning apps/adaptive devices for learning
4. Identifying and selecting/ developing online learning resources
5. Evolving learning sequences (learning activities) for online as well as face to face situations



Pamteke
Principal

Adarsh Education College
Yavatmal

Q-1] Types of ICT's community used in education?

⇒ common types of information and communication Technologies (ICTs) used in education includes.

1. Learning Management System (LMS) :- platform like Moodle, canvas or black board facilities online course management, content delivery and interaction between students and instructors.
2. Video Conferencing Tools :- Application such as zoom, microsoft teams, or google meet enable virtual classrooms, webinars and collaboratives discussing among educators & students.
3. Online collaboration Tools :- platforms like google workspace, microsoft 365 or slack support collaborative document editing, file sharing and communication.
4. Educational apps and Software :- Various applications and software designed for educational purposes, ranging from language learning app to interactive stimulation, enhance learning experience.
5. Social Media Platform :- Educational communities often use platform like facebook group, twitter, Reedit for communication.

6. E-Learning platform :- Website like Khan-Academy, coursera offer online courses.
7. Mobile learning :- utilizing smartphones or tablets for educational
8. Online Assessment Tools :- platforms for conducting quizzes, format exams or assessment in digital format ensuring efficient and timely evaluation of students.
9. Podcast and webinars :- Audio and video content such as educational podcast and webinars.
10. Interactive Whiteboards :- Digital white board and interactive displays in classrooms facilitates dynamic teaching, allowing educators to integrate multimedia content.

These technologies contribute to creating a more interactive, accessible and flexible learning environment in educational communities.







Q-2]

Using radio and TV broadcasting in education?

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Radio and TV broadcasting can be powerful tools for education, reaching wide audiences. They are effective for delivering information, educational experiences. These mediums are particularly beneficial in remote areas with limited access to traditional educational resources, helping bridge educational gaps and providing diverse content.

One of the key advantage of radio and TV broadcasting lies in their unparalleled ability to reach vast audiences. In remote or underserved areas where access to conditional educational resources may be limited these mediums become invaluable conduits for delivering educational content. The simplicity of radio receivers and penetration making them television sets ensures a wide penetration making them accessible to a broad spectrum of learners irrespective of their technological literacy.



Q-3] Teleconferencing and its educational uses?

=> Teleconferencing with its real-time communication capabilities has become a concern in modern education, fostering collaboration connectivity and innovative learning experiences.

One prominent uses of teleconferencing in education is virtual classrooms. Through platform like zoom, microsoft Teams, educators can conduct live interactive session with students regardless of their physical location. This is especially beneficial for distance learning programs, enabling students to participate in real-time discussion, ask question and receive immediate feedback.

Accessibility is a key advantage of teleconferencing in education. Students with diverse needs including those with physical disabilities or those in remote locations can access educational resources and participate in classes without facing any kind of traditional barrier.



Q-4] Using ICT's to help expand access to education.

⇒ ICT's play a crucial role in expanding access to education by.

1. Online - learning platforms :- offering courses and resources online allows learner to access educational materials from anywhere, promoting inclusivity.
2. Remote learning :- ICT's enable remote education allowing individuals in remote or underserved areas to participate in learning without the need for physical presence.
3. Digital content :- creating and disseminating digital educational content makes it easier for students to access up to date information and resources.
4. Mobile learning :- Leveraging mobile devices for education enables learning on the go especially in regions where traditional infrastructure may be lacking.



5. Collaborative Tools : - ICT tools facilitate collaboration among students and educators, fostering a global learning community and breaking down geographical barriers.
6. Adaptive Learning Systems : - personalized learning through adaptive technologies tailors educational content to individual needs promoting a more individual needs promoting a more inclusive educational experience.
7. Open Educational Resources (OER) : - Sharing educational materials freely online increases accessibility, making quality resources available to a wider audience.

By leveraging these ICT strategies education becomes more accessible reaching individuals who might face geographical, economic or other barriers to traditional learning.





Q-5] Using ICT's to help improve the quality of education ?

⇒ Implementing Information and Communication Technologies (ICTs) in education can enhance the quality of learning by providing access to a wealth of resources, interactive tools and collaborative platforms. It enables personalized learning facilities, real-time feedback and fastens digital literacy skills among students. Additionally ICT's can support remote learning, making education more accessible and flexible.

ICT's also facilitates access to a vast array of educational resources, breaking down geographical barriers and ensuring that students can explore a wealth of information beyond traditional textbooks. The integration of multimedia elements, simulations and virtual reality further enriches the education content making complex concepts more tangible and accessible.

In the long term, the development of digital literacy skills becomes inherent, equipping students with the ability to critically evaluate information.



Q-6

Using ICT's to help transform learning environments into one that is learner - centered environment by offering interactive and personalized learning experience. Technologies like online resources, collaborative platforms and adaptive learning tools empower students to engage actively in their education tailoring the learning process to individual needs and preferences.

Integrating Information and Communication (ICT's) into educational setting can be transformative strategy for establishing learner centered environments. The integration of ICTs not only enhances accessibility to information but also cultivates a dynamic and responsive learning environment that caters to the unique needs and preference of each learners.



Q-7] Influence of ICT's in Shaping and enhancing learning?

⇒ Information and Communication Shaped and enhanced Technologies (ICTs) have significantly shaped and enhanced learning by providing access to a wealth of information, interactive learning platforms and collaborative tools. ICT's facilitate personalized learning experiences, promote digital learning literacy and offer diverse resources that cater to different learning styles. They break down geographical barriers, enabling remote and online education, fostering a globalized approach to learning. Additionally, ICT's empower educators with tools for efficient and ~~at~~ instructional delivery and assessment, contributing to a more dynamic and engaging learning environment.

Information and Communication Technologies (ICT's) have fundamentally transformed education by revolutionizing ~~the~~ the way we teach and learning. The integration of ICT's in education ~~has~~ brought about a paradigm shift, moving away from traditional one size fits all approach to more personalized and adaptive learning experiences.



Q8] Using computers and internet for teaching and learning.

⇒ Computers and the internet have transformed education by providing access to vast amount of information interactive information learning sources and collaborative tools. They enable online courses virtual classrooms and a wide range of educational apps making learning more flexible and accessible. Additionally technology facilitates communication between students and teachers fostering a global learning community.

Certainly leveraging computers and the internet in educational offers an extended period enables continuous access to a wealth of educational resources. This approach supports asynchronous learning, accommodating diverse schedule and learning paces.

However, it's crucial to address digital literacy, ensure equitable access and balance screen time for effective and inclusive teaching and learning experience.



सराव पाठ क्रमांक : 1 दिनांक : 30-1-2019 तारिका क्रमांक : 7 वेळ : 3-25-07-33

विद्यालयाचे नांव Chhree Narayanrao Makade High School वर्ग 8th तुकडी A

विषय : Biology घटक : Life process in living organisms.

उपघटक : Transportation of water in plants

शैक्षणिक साहित्य :- chart, chalk, Black board, Rolling board,
diagram

१. अपेक्षित पूर्वज्ञान : student know about the transportation in plants. and some other activity having a absorption of water in plants.

२. प्रस्तावना : a) teacher ask some question

a) which type of tissue present in plant?

→ xylem and phloem

b) which cell control the opening and closing of stomata

→ Guard cell.

c) on which plant part stomata is present.

→ leaf (But where on upper part or lower

part) Ans :- Lower part.

d) dumb-bell shaped stomata can be observed in which leaf?

→ maize plant.

३. हेतुकथन : Today we learn about transportation of water in plants.



विषय प्रतिपादन

(अध्ययन)

पाठ्य मुद्दे	उद्दिष्टे व स्पष्टीकरणे (अपेक्षित वर्तन बदल)	शैक्षणिक - अनुभूती शिक्षक कृती
Transpo rtation of water in plant	knowledge student know about the transportation of water in plants	Today we learn about topic transportation. By the process of transportation a substances either synthe- sized or absorbed in one part of the body reaches another.
	- <u>Comprehension</u> - student try to give some more example in our daily life of transportation.	Most animals move from place to place but plants do not, there are many dead cells in the plant body they need less energy as compare d, to animals. plants need inorganic substa- nces, like nitrogen, phosphorus magnesium magnase. sodium etc.
	- <u>Application</u> - students come to know about how to use proper transportation water in plant.	Roots of plants absorbed these substances from the soil and transport them. there are specific types of tissue to perform this function, the xylem conducts the water whereas the phloem conducts the food.
	<u>Skill</u> student collect to infor- m about transpor- tation of water in plant	ask question,

अनुभव)

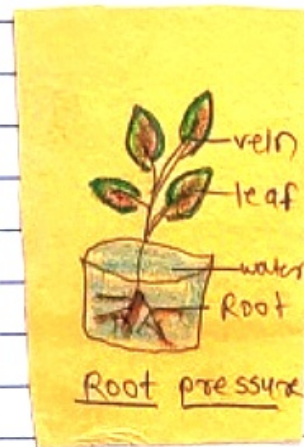
विद्यार्थी कृती

शैक्षणिक साधने

फलक कार्य

student listen
carefully

class 8th A
sub: Biology
unit: Life
process in
living
organisms.
sub-unit
transportation of
water in
plants.



Ascent of
sap



upward pull
of water
minerals.



Absorption
of water
minerals



loss of
water in
transpiration

student listen
carefully



विषय प्रतिपादन

(अध्ययन)

पाठ्य मुद्दे	उद्दिष्टे व स्पष्टीकरणे (अपेक्षित वर्तन बदल)	शैक्षणिक - अनुभूती शिक्षक कृती
		① Teachers ask question a) which type of tissue present in a plant?
• <u>Transpiration pull</u>	<p>knowledge - student know about the type of tissue of plant.</p> <p>understanding - student try to give some more example transp- iration pull.</p> <p>Application - students come to how to respire the plant by stomata.</p> <p>- skill - student collect the more infor- mation a different kind of plant.</p>	<p>• Roots cells are contact with water and mineral in the soil water and mineral enter the cells on the root surface due to differentes in concentration on.</p> <p>plants give out water in the form of vapour through the stomata on their leaves two cells called guard cell are present around the stomata. these cells control the opening and closing of stomata. these cells control the opening and closing of stomata. transpiration occurs through these stomata.</p> <p>transpiration helps in absorbtion of water and mineral and all parts of the plant whereas root pres- sure perform the important role of pushing the water up during the night time.</p> <p>• Teacher ask question a) To plant respire?</p>



अनुभव)

विद्यार्थी कृती

शैक्षणिक साधने

फलक कार्य

student response.

Ans: xylem and phloem these specific tissue present in a plant.

class 8th A
sub-biology
unit:- life process in living organisms
sub-unit transportation of water in plant and transpiration pull.

student listen carefully.



student response.

Ans: with the help of stomata.



4) पुनरावलोकन (Repetition) -

- What is meant by transpiration & translocation in plants.
- What is the function of xylem?
- What is the function of phloem?
- From where do the plants get inorganic substances other than carbon dioxide and oxygen?

4) मूल्यमापन/उपयोजन (Evaluation) - fill in the blanks.


- Due to the effect of root pressure, water and minerals reach xylem of roots.
- Guard cells are present around the stomata.
- Guard cells of dicot stomata are kidney shaped.
- Dumb-bell shaped stomata can be observed in maize.

4) गृहपाठ (Home - Work) -

- Write a short note on :
 - transportation in water.
 - Respiration in plant.

फलक लेखन (सारांश)

इयत्ता व तुकड़ी दिनांक विषय

transportation in plant	structure of stomata
<p>* all part of plant body</p> <p>↑</p> <p>Root</p> <p>↑</p> <p>water</p>	

निरिक्षणे व प्रत्याभरण :

विषय प्रभारी



पर्यवेक्षकाची स्वाक्षरी

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