

# ANSWER SHEET

## FOR CLASS 6 AND 7

### GALLERY 6 and 7:

## ACTIVITY 1

#### **'Aaj Himalay ki chotise' from Kismat - 1940s**

Several film songs of this period resonated with the quit India movement.

#### **'Watan ki raah mein' from Shaheed - 1950s**

Songs reminded citizens of their debt to martyrs and heroes.

#### **'Chhodo kalki baatein' from Hum Hindustani - 1960s**

Songs calling for people to leave the past behind and look ahead to the future with new hope.

#### **'Mehangai maar gayi' from Roti Kapadaaur Makaan -1970s**

In this phase the Indian economy struggled to move forward, ordinary Indians faced the brutal reality of inflation and unemployment, seemingly endless poverty and corruption.

#### **'Chitthi aayi hai' from Naam - 1980s**

This song tapped into the nostalgia of the growing Indian Diaspora

#### **'Zindagi maut na banjaaye' from Sarfarosh - 1990s**

This song called for a renewed dedication to the nation in the face of terrorism and border disputes.

## ACTIVITY 2

### 1. Differences between the two phonographs

Phonograph	Gramophone
Developed by Thomas Edison	Developed by Emile Berliner
Uses a cylinder as storage	Uses a flat disc as storage
The phonograph records sound waves engraved, etched, incised, or impressed into the surface of a rotating cylinder or disc, To recreate the sound, the surface is rotated while a playback <b>stylus</b> traces the groove and is therefore vibrated by it, very faintly reproducing the recorded sound.	The gramophone records sound with a small needle which fits into the groove in the record. That needle is attached to a diaphragm, which in turn is attached to a horn. The record is turned at a fairly constant speed by a spring-driven motor. As the record turns, the grooves make the needle vibrate back and forth. These vibrations are transmitted to the diaphragm, which itself vibrates, creating sound.
Invented in 1877	Designed in 1887
Phonograph was a recording and playback device	Gramophone was only a playback device

2. A disc record, played at 78 revolutions per minute (rpm), could typically hold three minutes a side.

4. Microphone used for amplifying human voice

## 5. How does a TV work

**a.** The picture and sound travel from the camera to your eyes in the form of electromagnetic waves. It's the way we played, mailing messages through a wire as radio signals. Through a satellite dish, or a TV antenna on the roof the signals connect, if you are watching the live event on your TV, the camera codes the image and the sound as electrical signals, and they are carried through wires at the same speed, the wire doesn't know that the signals were once sound and light. Our TV set decodes them into separate pictures and sounds. They do travel at different speeds, but the difference is so small you won't notice. But if you are watching a football match. You can often see the footballer kick the ball, and the sound you can hear after a fraction of a second. That is because the sound takes that fraction of a second to travel from the middle of the pitch to the camera and its microphone at the sidelines, while the light is so near instantaneous as to make no difference. You will get the same effect if you had a huge TV set with built-in speakers and if you watch it from a long distance, the sound would take longer to travel from the speakers to your ears than the image would take to travel from the screen to your eyes. You'd probably have to watch it from a distance to notice the difference.

**b.** Another interesting story which you would want to share with the students is about the inventor of television - Farnsworth.

*According to surviving relatives, Farnsworth dreamed up his own idea for electronic-rather than mechanical-television while driving a horse-drawn harrow at the family's new farm in Idaho. As he plowed a potato field in straight, parallel lines, he saw television in the furrows. He envisioned a system that would break an image into horizontal lines and reassemble those lines into a picture at the other end. Only electrons could capture, transmit and reproduce a clear moving figure. This eureka experience happened at the age of 14.*

<https://www.smithsonianmag.com/smart-news/farmboy-who-invented-television-while-plowing-180964607/>

**6. The iPod is a pocket-sized portable music-playing device**

**7. Music on smartphones is stored on flash memory chips. Flash memory is an electronic computer memory storage medium that can be electrically erased and reprogrammed.**