

CBSE | DEPARTMENT OF SKILL EDUCATION

ELECTRONICS TECHNOLOGY (SUBJECT CODE 820)

CLASS XII (SESSION 2021-2022) MARKING SCHEME FOR TERM - II

Max. Time Allowed: 1½ Hours (90 min)

Max. Marks: 30

General Instructions:

1. Please read the instructions carefully
2. This Question Paper is divided into 03 sections, viz., Section A, Section B and Section C.
3. Section A is of 05 marks and has 06 questions on Employability Skills.
 - a) Questions numbers 1 to 4 are one mark questions. Attempt any three questions.
 - b) Questions numbers 05 and 06 are two marks questions. Attempt any one question.
4. Section B is of 17 marks and has 16 questions on Subject specific Skills.
 - a) Questions numbers 7 to 13 are one mark questions. Attempt any five questions.
 - b) Questions numbers 14 to 18 are two marks questions. Attempt any three questions.
 - c) Questions numbers 19 to 22 are three marks questions. Attempt any two questions
5. Section C is of 08 marks and has 03 questions.
 - a) Questions numbers 19 to 21 are four marks questions. Attempt any two questions.
6. Do as per the instructions given in the respective sections.
7. Marks allotted are mentioned against each section/question.

SECTION A - Employability Skills

(3 + 2 = 5 marks)

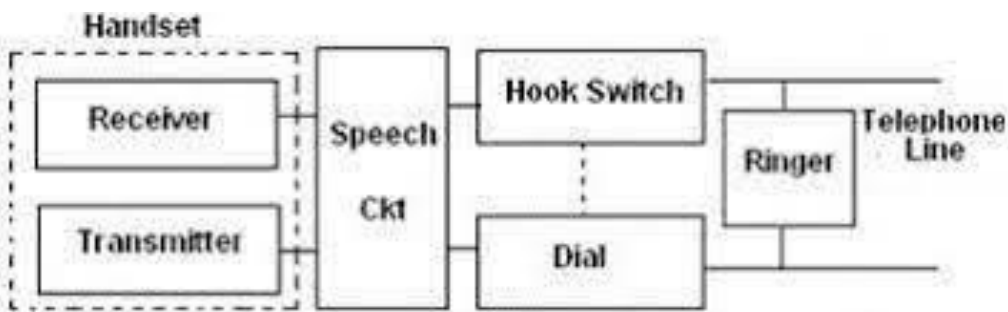
Answer any 03 questions out of the given 04 questions		1 x 3 = 3
Q.1	Any two points 1. Entrepreneur should be Disciplined. 2. Entrepreneur should be Creative. 3. Entrepreneur should be Confident. 4. Entrepreneur should be Self Starter.	1
Q.2	No, because Vijay works for Manoj. Vijay is a salaried person. He is not a Entrepreneur.	1
Q.3	Disposal of waste is done by reusing scrap material.	1
Q.4	Any one example Some example of greenhouse gases are Carbon di oxide , methane , nitrous oxide and ozone	1

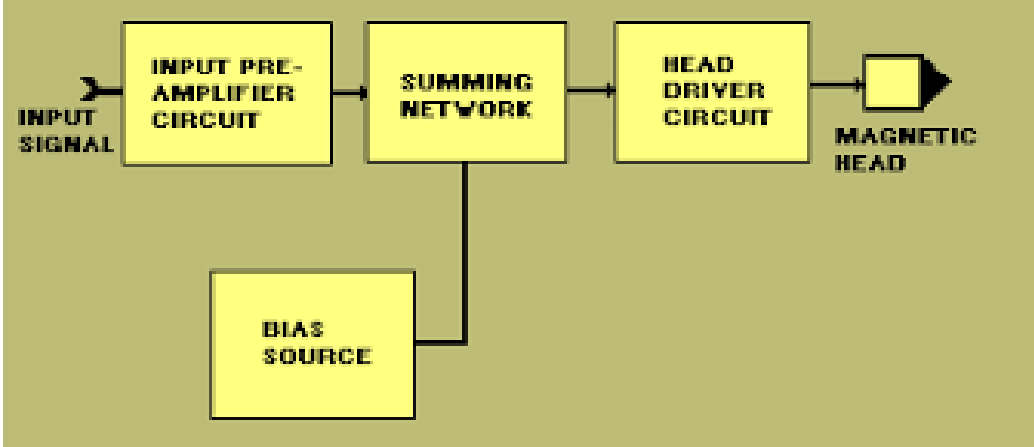


Answer any 01 question out of the given 02 questions		1 x 2 = 2
Q.5	<p>Green jobs in transportation sector are:</p> <p>(Any two points)</p> <p>(a) Use of energy-efficient vehicles and alternate fuels like Compressed Natural Gas (CNG) can help minimize greenhouse gas emissions.</p> <p>(b) The new biofuel Policy announced by the Government of India on 10 August 2018 focusses on initiatives for enhanced use of biomass so as to improve the availability of ethanol through starch and sugar-based feedstock, develop ethanol technologies and increase the production of biodiesel for blending.</p> <p>(c) Biofuels produced directly or indirectly from organic material, including Bio CNG, Biomethanol, etc., can generate green jobs.</p>	2
Q.6	<p>Any two of the following characteristics:</p> <p>(a) Systematic planning</p> <p>(b) Creativity and innovation</p> <p>(c) Risk taking and Risk Management</p> <p>(d) Problem solving</p> <p>(e) Persistence</p> <p>(f) Quality performance</p> <p>(g) Information management</p> <p>(h) Persuasion and influencing abilities</p>	2

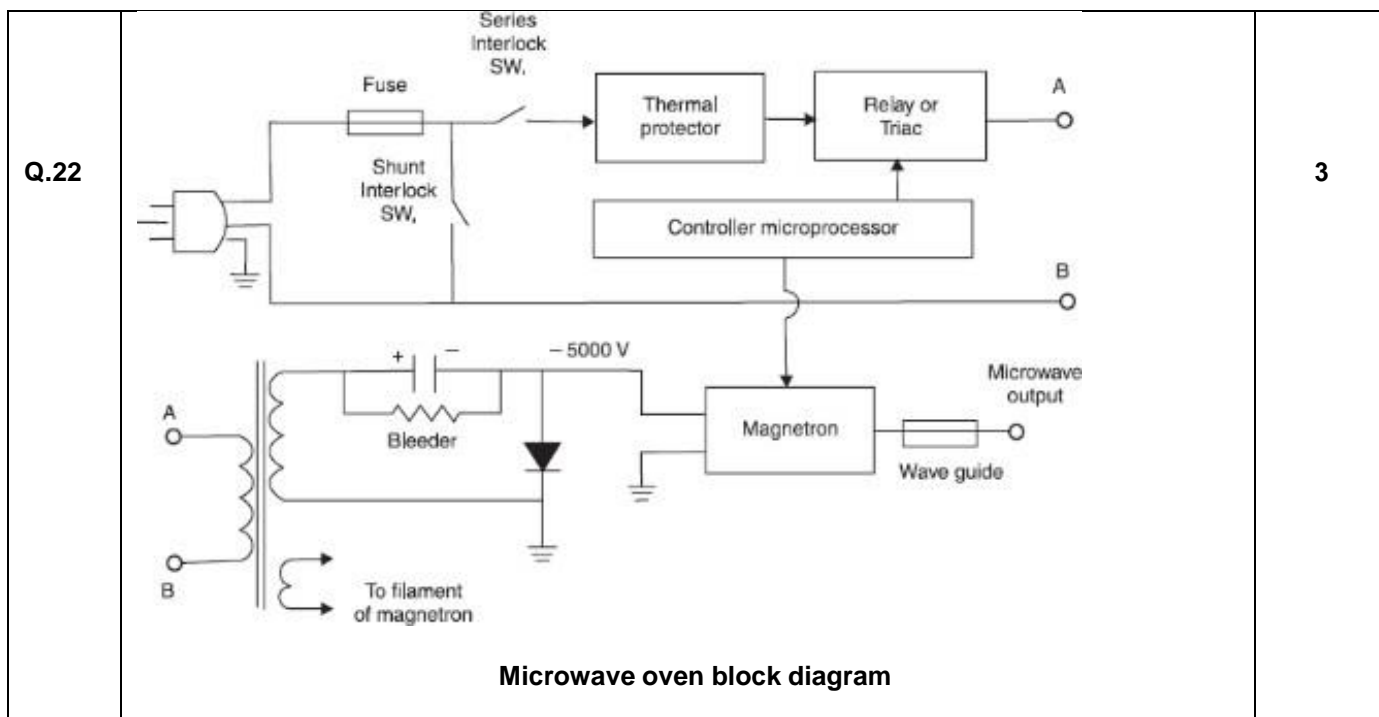
SECTION B
SUBJECT SPECIFIC SKILLS

(5 + 6 + 6 = 17 marks)

Answer any 05 questions out of the given 07 questions		1 x 5 = 5
Q.7	A TV Remote control has _____ 10 _____ meter range	1
Q.8	Three-color system used in India is _PAL_ color system	1
Q.9	Advantages of LED TV are less power consumption and _Free from Angle viewing_ .	1
Q.10	Speed of a Laser Printer speed is expressed by _Pages per minute	1
Q.11	In a microwave oven, microwaves are generated by Magnetron	1
Q.12	A H.D. TV has _ HIGH _____ resolution.	1
Q.13	A photosensitive drum is used in DOT MATRIX _____ printer.	1

Answer any 03 questions out of the given 05 questions		2 x 3 = 6
Q.14	A TV tuner allows a person to receive signals on his or her television, and therefore receive different channels. It converts signals into pictures and sounds. The oldest type of tuner was simply the dial used to change channels and allow the television to pick up different analog signals broadcast over the air. Sometimes, in order to get certain cable channels, a TV needs a special box purchased or rented from a cable company	2
Q.15	Programmers scramble broadcast signals so that they cannot be picked up while being transferred to local cable companies, who act as retailers and sell the programming, after they have unscrambled it, to consumers.	2
Q.16	The capacitor is still used in series with ring IC input to make only AC pass to the ring chip. The electronic ringing circuits are not sensitive to the ringing voltage and they easily ring with ring signal frequencies between 16 Hz and 60 Hz.	2
Q.17	Always try to avoid sitting while working with bare components since moving around in a chair can generate more than adequate static charge to damage electronic components. It is highly recommended not to work in any carpeted area when touching bare components.	2
Q.18	Compactness. One of the most important factors to consider in a home printer is how much room it will take up in your office. ... Value. ... Paper and ink capacity. ... Scanning and copying. ... Photo and color printing. ... Stylish design. ... All-in-one printers.	2
Answer any 02 questions out of the given 04 questions		3 x 2 = 6
Q.19	 <p>The diagram shows the internal components of a telephone set. A dashed box labeled 'Handset' contains a 'Receiver' and a 'Transmitter'. The 'Receiver' is connected to a 'Speech Ckt' (circuit). The 'Transmitter' is also connected to the 'Speech Ckt'. The 'Speech Ckt' is connected to a 'Hook Switch' and a 'Dial'. The 'Hook Switch' is connected to a 'Ringer' and the 'Telephone Line'. The 'Dial' is also connected to the 'Telephone Line'.</p> <p>Block Diagram of Telephone Set</p> <p>BLOCK DIAGRAM OF TELEPHONE SET</p>	3

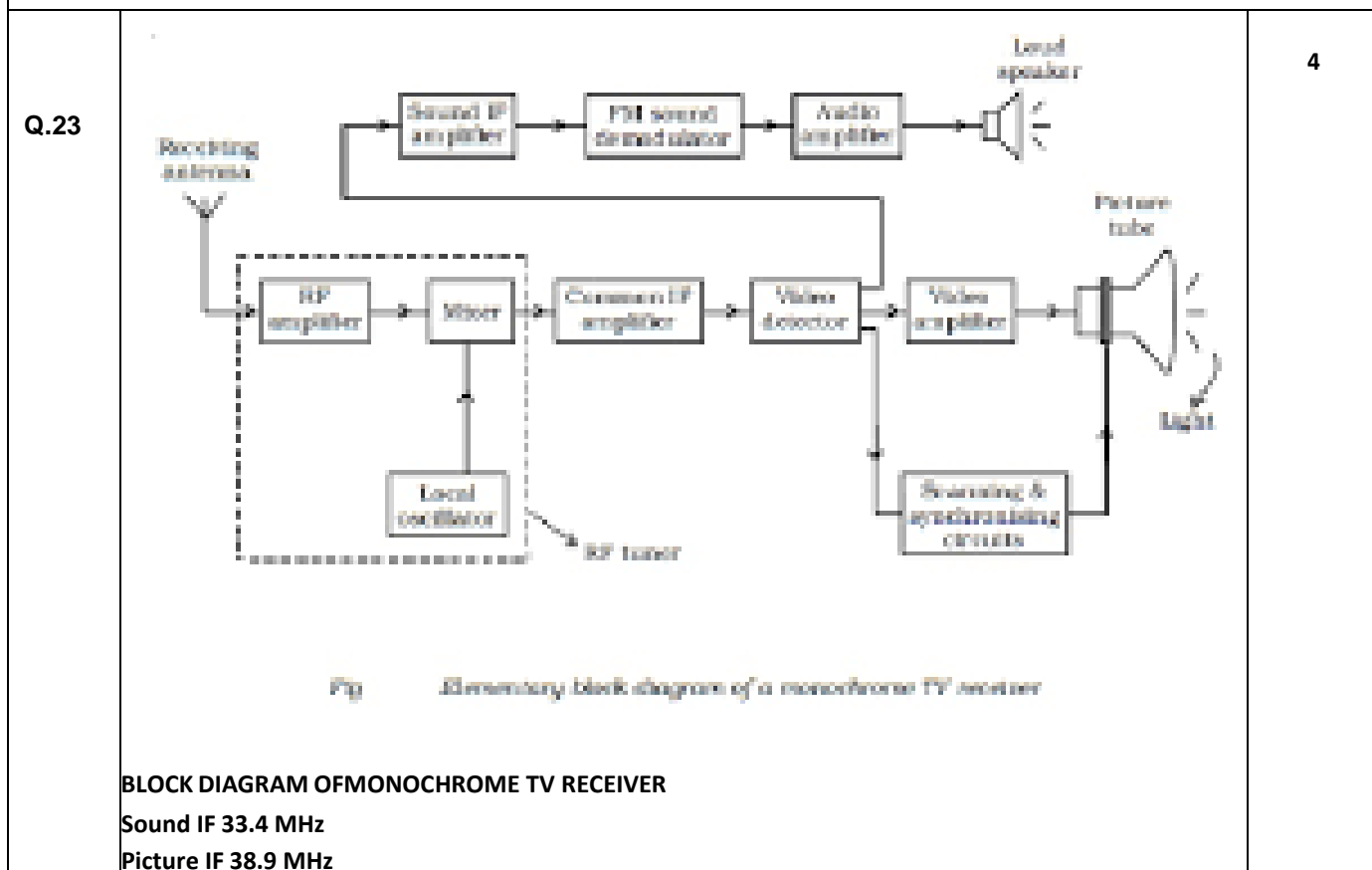
Q.20	<p>Most Common Printer Problems and Their Solutions</p> <p>Paper Jams. Paper jams are perhaps the most loathsome of all printer problems. ...</p> <p>Poor Print Quality. When it comes to smudges, faded type and poor imagequality, there are a couple of issues that could be going on. ...</p> <p>Nothing is Printing. ...</p> <p>WiFi Printing Takes too Long.</p>	3
Q21	 <p>Block diagram Tape Recorder</p> <p>Transmitter section</p>  <p>Receiver Section</p>  <p>Block Diagram of Infrared Remote Control Switch</p> <p>BLOCK DIAGRAM OF INFRARED REMOTE CONTROL</p>	3



SECTION C

(2 x 4 = 8 marks)

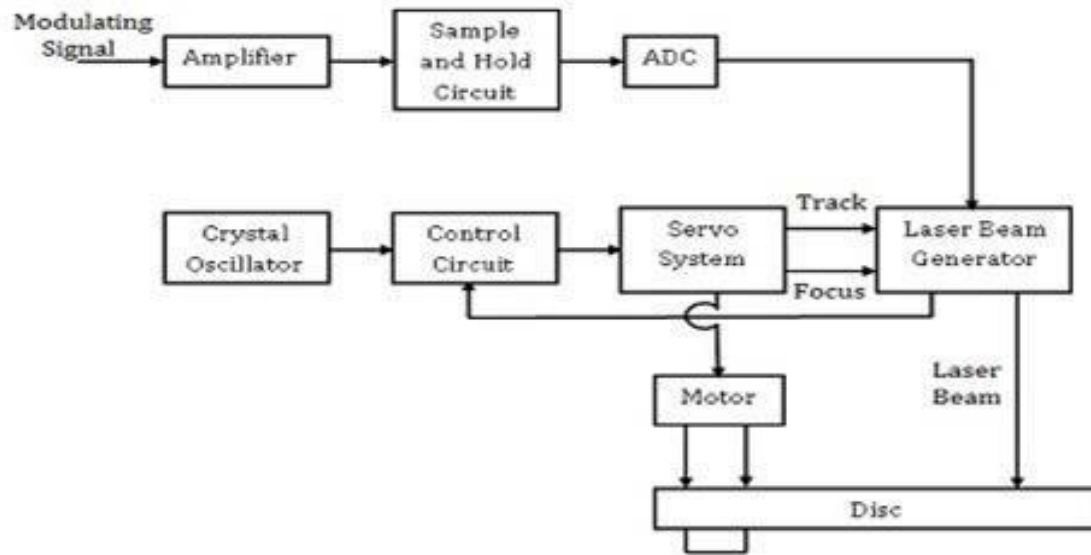
Answer any 02 questions out of the given 03 questions



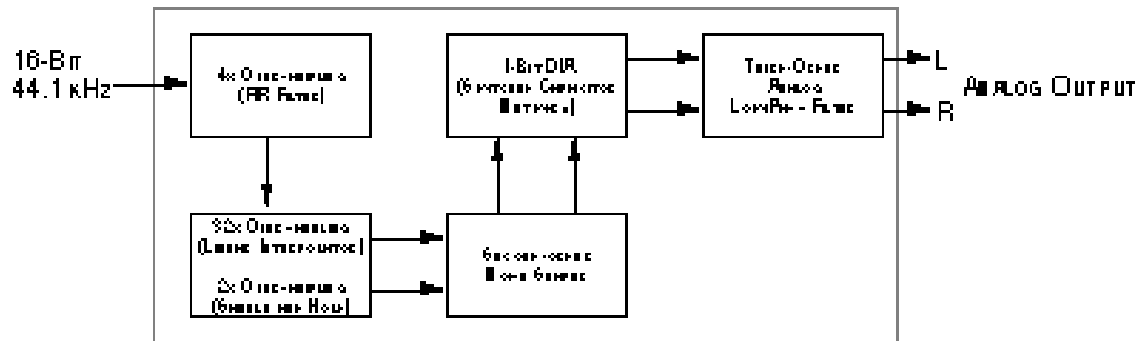
Q.24	<p>1. Toner is smearing or not adhering to the page If your printer toner is not sticking to the paper, this is usually either due to an old fuser assembly or defective toner cartridge. Before you rush to replace your toner cartridge, first try removing it and carefully shaking it side-to-side. (Not a hard shake!) Put it back inside the printer. Does that fix the problem? If that doesn't resolve it, then a wise next step is to install fresh toner. Once you replace the toner cartridge, restart your printer.</p> <p>2. Paper Jams This is a common laser printer problem. Primary causes include grime, dust, worn rollers, or incorrect paper weight. The most basic way to prevent paper jams is simply through regular cleaning of your printer. Also, replace parts as needed. Finally, check the weight of paper your printer is rated for.</p> <p>3. Faded print/poor print quality This is caused by low toner, print density settings, or some other printer setting error. Make sure your printer isn't set to an ink-saving or "draft" mode.</p> <p>4. Nothing is printing These steps may seem obvious, but seriously — verify that you actually sent the print job to the right printer. You may very well be printing dozens of documents in the next department, or to some virtual printer or document imaging software! If that was the problem, then check your printer setting on your desktop to ensure your main printer is set as your default. Next, check that there's enough (and the correct type) of paper in the tray. While you're at it, double check that your printer is on. It's possible someone accidentally turned it off. Maybe the IT department did a system update that shut down the printer and never brought it back online. You never know. When in doubt and if all else fails – REBOOT. Begin by restarting your software application. If that doesn't work, reboot your computer. Lastly, turn off your printer for a few minutes before powering it back up. You'd be surprised how many common laser printer problems can be solved with a restart.</p> <p>5. Wrong Font If your document is displaying a different font than what you formatted, the problem could simply be a communication error. First, go back and reprint. If the incorrect font prints again, it's time to dig deeper. Next, check that the most updated drivers are installed. Finally, ensure the software on the computer and the printer are compatible with the selected fonts.</p> <p>6. Wrinkled paper / Skewed images Have a look in the paper tray. See if the paper is properly aligned inside the paper guides and tabs. If it's just a little off, the results on the way out of the printer can be very problematic.</p> <p>7. Low toner / no toner warning Sorry to say, these warning messages and errors are not reliable. Even after installing a new toner cartridge, many printers will continue flashing and beeping to indicate you need to replace the toner. There is always a slight chance the cartridge itself is damaged or defective. But, in most scenarios, just resetting your printer should easily fix this annoying situation. Not everyone has an IT department or technical 'go-to' person for your office equipment issues. But when it comes to laser printers, it's often not rocket science. Therefore, no special training is required to resolve</p>	4
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Q.25

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CD RECORDING BLOCK DIAGRAM



CD PLAYER/REPRODUCTION BLOCK DIAGRAM