



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Carpenter Skills

3rd Semester, 1st In-Sem. Examination

B. Voc. Program, Winter Semester (2018-19)

Course Code: SCS1301

Time: 1 Hour

Course Name: Advanced Handy Machine

Max. Marks: 20

Instruction:

1. Answer all questions from section A, each question carries one mark.
2. Answer all questions from section B, each question carries two marks.
3. Answer all questions from section C, each question carries three marks.

Section – A

05X01 = 05 Marks

Q.1. Which one of the following is the materials of Tool used for processing hard wood and soft wood?

- (A) High Performance high speed steel (HS or HSS) (B) Tungsten Carbide (HW)
(C) Aluminum (Al) (D) Both (A) & (B)

Q.2. Which one of the following is the accessory of the Router to guide along a forming template?

- (A) Side stop (B) Guide rail
(C) Coping ring (D) Both (B) & (C)

Q.3. Which one of the following is the Handy machines used for making a back wall groove?

- (A) Cord less drill (B) Hand router
(C) Jig saw (D) Domino

Q.4. Which one of the following is the correct procedures for feeding the tool of hand router for safe and efficient work?

- (A) Push-cut direction (B) Climb cut direction
(C) Both (A) & (B) (D) None of these

Q.5. Which one of the following is the thicknesses of riving knife used in Hand circular saw?

- (A) Thicker than the tooth thickness (B) Thinner than the blade body
(C) Average thickness of cutting width & blade body (D) None of these



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Section – B

03X02 = 06 Marks

Q.6. What are the two types of Hand circular saw? Explain it.

Q.7. Why is it necessary to use vacuum cleaner while using handy machine? Give two reasons.

Q.8. What are the parts of Tool holder of hand router? Explain any two parts with the help of diagram.

Section – C

03X03 = 09 Marks

Q.9. Why is it necessary to attach riving knife behind the saw blade in hand circular saw?

Give three reasons and also mention the distance between saw blade and riving knife with a help of the diagram.

Q.10. What are the steps for cutting straight with the help of Guide rail by hand circular saw?

Q.11. What are the types of feed direction of hand router? Make a diagram and name its part accordingly.

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Section – A

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- (A) Side stop (B) Guide rail
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Q.3. Which one of the following is the Handy machines used for making back wall groove?

- (A) Cordless drill (B) Hand router
(C) Jig saw (D) None of these (B)

Q.4. Which one of the following is the correct procedures for feeding the tool of hand router for safe and efficient work?

- (A) Push-cut direction (B) Climb cut direction
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Q.5. Which one of the following is the thickness of riving knife used in Hand circular saw?

- (A) Thicker than the tooth thickness (B) Thinner than the blade body
(C) Average thickness of cutting width & blade body (D) None of these (C)

Section – B

03X02 = 06 Marks

Q.6. What are the types of Hand circular saw? Explain it.

ANS: Types of hand circular saw are described below:

1. Hand circular saw with dipping saws: - In this type of Hand circular saw, the saw blade is at rest with the table flush. When sawing, the saw blade is lowered by actuating the unlocking mechanism.
2. Hand circular saw with swing protective hood: - In this type of Hand circular saw, sawing protective hood for circular saws with anti-away hood, the lower part of

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the saw blade is concealed by a movable guard, which is only pushed back by the latter when it penetrates into the work piece.

Q.7. What is it necessary to use vacuum cleaner while using handy machine? Give two reasons.

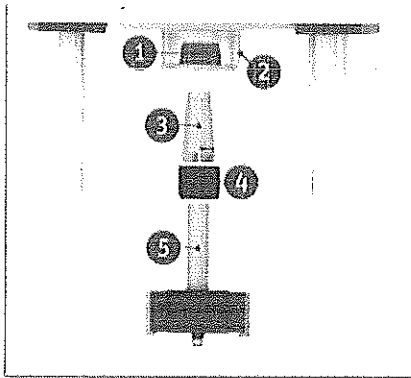
ANS: It is necessary to use vacuum cleaner while using handy machine are described below:

1. It makes the environment dust free.
2. It prevents dust which goes into our eyes and lungs while machining.

Q.8. What are the parts of Tool holder of hand router? Explain any two parts with the help of diagram.

ANS: Parts of tool holder of hand router are:

1. Spindle locking button.
2. Motor spindle.
3. Collect chuck.
4. Collect nut.
5. Cutter shank



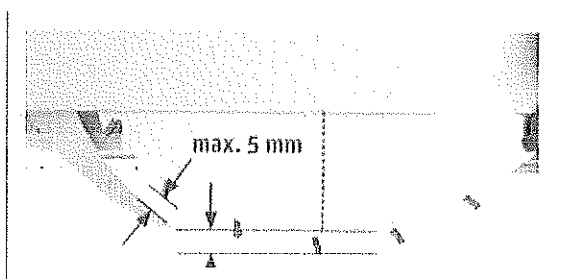
Section – C

03X03 = 09 Marks

Q.9. Why is it necessary to attach riving knife behind the saw blade in hand circular saw? Give three reasons and also mention the distance between saw blade and riving knife with the help of a diagram.

ANS: Riving knife is attached behind the saw blade in hand circular saw due to following reasons:

- A. It keeps the kerf open in separating cuts.
- B. If the riving knife is missing, the joint can be closed by tension in the wood. This allows the descending part of the sprocket to grasp the work piece, accelerate it and spin it back.
- C. It prevents from kick back of work piece while cutting.



Q.10. What are the steps for cutting straight with the help of Guide rail by hand circular saw?

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ANS: Steps for cutting straight with the help of guide rail by hand circular saw are:

1. Align rail to marked line: - ensure that there is nothing in the cutting area (e.g. work stands) and position the rail on the right side of the mark.
2. Set the cutting depth: - select according to the work piece.
3. Secure the rail: - fix at the ends with the corresponding screw clamps.

Q.11. What are the types of feed direction of hand router? Make a diagram and name its parts accordingly.

ANS: Types of feed direction are:

- A. Push cut direction.
- B. Climb cut direction.

