

[UKSSSC-JE (ME) MACHINING]

[SET-II]

1. With increasing angle of shear, the force on punch
 - a) Increases linearly
 - b) Decreases linearly
 - c) Decreases as square of shear angle
 - d) Increases as square of angle of shear
2. Flank wear occurs mainly on
 - a) Nose part, front relief face and side relief face
 - b) Nose part and top face
 - c) Cutting edges
 - d) All of the above
3. Average cutting speed in machining cast iron by a single point cutting tool of H.S.S. is
 - a) 6 m/ mt
 - b) 11 m / mt
 - c) 22 m / mt
 - d) 33 m / mt
4. Ceramic tools can be used at cutting speed which as compared to high speed steel tools is
 - a) 10 times
 - b) 20 times
 - c) 30 times
 - d) 40 times
5. Best coolant and lubricant for steel and wrought iron is
 - a) Water soluble oil or sulphur-based and mineral oils
 - b) Mineral and fatty oils
 - c) Soluble oils
 - d) Dry
6. Crater wear occurs mainly due to
 - a) Abrasion
 - b) Diffusion
 - c) Oxidation
 - d) Adhesion
7. Which of the following tool materials has highest cutting speed
 - a) Carbon steel
 - b) Tool steel
 - c) HSS
 - d) Carbide
8. Heat generated in metal cutting can be conveniently determined by
 - a) Installing thermocouple on tool
 - b) Installing thermocouple on job
 - c) Using radiation pyrometer
 - d) a, b & c
9. Poor surface finish results due to
 - a) heavy depth of cut
 - b) low cutting speed
 - c) high cutting speed
 - d) coarse feed
10. Large jobs on shaper are held with the help of
 - a) Vice
 - b) Clamps, and T-bolts
 - c) Magnetic vise
 - d) Clamps, bolts and squares
11. Flat thin work is held on planer by
 - a) C-clamp and angle plate
 - b) Toe fogs and stops
 - c) Magnetic vice
 - d) Puppets and toe dogs
12. Cylindrical parts held on planer by
 - a) V- blocks and arrestors
 - b) T-bolts and camps
 - c) Angle plates
 - d) Magnetic vise
13. A standard ground drill has a point angle of
 - a) 90°
 - b) 100°
 - c) 118°
 - d) 120°
14. For harder materials, the point angle of drill is
 - a) Increased
 - b) Decreased
 - c) Kept at 118°
 - d) None of the above
15. For ferrous materials, the helix angle of drill is taken as
 - a) 30°
 - b) 45°
 - c) 60°
 - d) 90°
16. In metal coming at speed above 20 rpm, maximum heat is carried by
 - a) Work
 - b) Tool
 - c) Chip
 - d) Equally by all of the above
17. Satellite is the trade name for
 - a) Ceramics
 - b) Ferrous cast alloys
 - c) Cemented carbide
 - d) Non-ferrous cast alloy
18. Correct order for machinability of metals is
 - a) Magnesium alloys, grey cast iron, low carbon steel, monel metal
 - b) Grey cast iron, low carbon steel, grey cast iron, monel metal
 - c) Magnesium alloys, low carbon steel, grey cast iron, monel metal
 - d) Magnesium alloys, grey cast iron, monel metal, low carbon steel
19. For particular cutting speed, the tool materials in order of tool life are
 - a) H.S.S., cemented carbides, ceramics and oxides
 - b) Ceramics and oxides, cemented carbides, H.S.S.
 - c) H.S.S., ceramics and oxides, cemented carbides

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- d) Cemented carbides, ceramics and oxides, H.S.S.
20. Tool cutting forces, with increase in cutting speed
- More or less remain constant
 - Increase linearly
 - Decrease linearly
 - Unpredictable
21. Chips are broken effectively due to which of the following property
- Stress
 - Elasticity
 - Toughness
 - Work hardening of work material
22. An important parameter of specification of milling machine is
- Size of table
 - Spindle size
 - Arbor size
 - Horse power
23. Power requirement, with increase in cutting speed
- More or less remains constant
 - Increase linearly
 - Decrease linearly
 - Unpredictable
24. Centering can be done most accurately on
- Four-jaw chuck
 - Three-jaw chuck
 - Collet chuck
 - Magnetic chuck
25. In gang milling
- Several jobs can be performed in one set-up
 - One job is completed on several milling machines located together
 - Two or more cutters are mounted on the arbor and all of them, remove the metal simultaneously
 - None of the above
26. Spot facing is the operation of
- Enlarging the end of a hole cylindrically
 - Cone-shaped enlargement of the end of a hole
 - Smoothing and squaring the surface around a hole
 - Sizing and finishing a hole
27. When a work-piece requires several operations such as drilling, counter boring, reaming etc, then machine which should be used is
- Radial drilling machine
 - Multi spindle drilling machine
 - Hand drilling machine
 - Gang drilling machine
28. For fast metal removal rate on lathe, it is recommended to
- Increase speed
 - Use hot machining
 - Use carbide tool
 - Use coughing cut
29. Machinability tends to decrease with
- Increase in hardness and increase in tensile strength
 - Increase in strain-hardening tendencies
 - Increase in carbon content, hard oxide and carbide
 - Decrease in grain -size
30. Shear angle varies with
- Different materials and with tool geometry
 - Cutting speed
 - Feed
 - Machine used
31. Chip breakers are provided on cutting tools
- For safely of operator
 - To minimize heat generation
 - Permit easy access of coolant at tool point
 - Permit short segmented chips
32. Wear limit on cutting tool is of the order of
- 0.2 mm
 - 0.8 mm
 - 1.6 mm
 - 205 mm
33. To remove maximum material per minute with the same tool life
- Increase depth of cut
 - Increase feed rate
 - Decrease cutting speed
 - Increase cutting speed
34. With increase in cutting speed, the finish
- Improves considerably
 - Improves slightly
 - Remains same
 - None of the above
35. When turning a long shaft on a lathe, its bending can be prevented the use of
- Low feed
 - Low depth of cut
 - Steady rest
 - Sturdy machine
36. In oblique cutting system, the chip thickness is
- Maximum at middle
 - Maximum at sides
 - Maximum in middle
 - Maximum at sides
37. Finish is more affected by
- Cutting speed
 - Depth of cut
 - Feed-rate
 - Lubricant
38. For turning mild steel, type of tool used is
- Left hand type
 - Right hand type
 - Any one of the above two
 - Depends on cutting angles and tool material

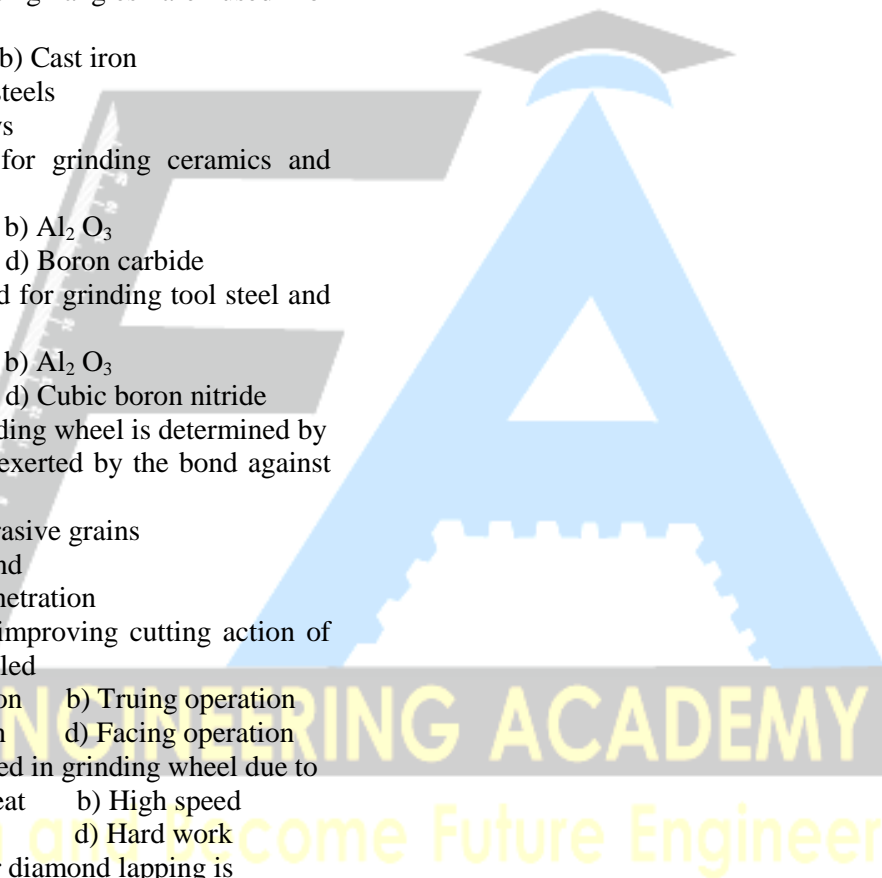
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39. A grinding wheel gets glazed (shining cutting edges) due to
- a) Wear of abrasive grains
 - b) Breaking up of abrasive grains
 - c) Wear of bond
 - d) Cracks on grinding wheel
40. In grinding operation, for grinding softer materials
- a) Coarse grain size is used
 - b) Fine grain size is used
 - c) Medium grain size is used
 - d) Any grain size may be used
41. Maximum cutting angles are used for machining
- a) Mild steel
 - b) Cast iron
 - c) Free machining steels
 - d) Aluminium alloys
42. Abrasive used for grinding ceramics and tungsten carbide is
- a) Diamond
 - b) Al_2O_3
 - c) Si C
 - d) Boron carbide
43. Abrasive selected for grinding tool steel and high speed steel is
- a) Diamond
 - b) Al_2O_3
 - c) Si C
 - d) Cubic boron nitride
44. Hardness of grinding wheel is determined by
- a) The resistance exerted by the bond against grinding stress
 - b) Hardness of abrasive grains
 - c) Hardness of bond
 - d) Its ability to penetration
45. The process of improving cutting action of grinding wheel is called
- a) Dressing operation
 - b) Truing operation
 - c) Cutting operation
 - d) Facing operation
46. Crack is developed in grinding wheel due to
- a) Generating of heat
 - b) High speed
 - c) Slower speed
 - d) Hard work
47. Material used for diamond lapping is
- a) HSS
 - b) Copper
 - c) Aluminium oxide
 - d) High carbon steel
48. Hardness of a grinding wheel is specified by
- a) BHN
 - b) Rockwell hardness number
 - c) VPN
 - d) Letter of alphabet
49. In grinding operation, for faster removal of material
- a) Fine grain size is used
 - b) Medium grain size is used
 - c) Coarse grain size is used
 - d) Any grain size may be used
50. Part of a universal grinding machine which can be swiveled with respect to table travel is
- a) Grinding wheel
 - b) Table
 - c) Headstock
 - d) Table slide



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SET-II ANSWER-KEY	
1. b	31. d
2. a	32. b
3. c	33. a
4. d	34. b
5. a	35. c
6. b	36. a
7. d	37. c
8. a	38. a
9. d	39. a
10. d	40. a
11. b	41. d
12. c	42. a
13. c	43. d
14. a	44. a
15. a	45. a
16. c	46. b
17. d	47. b
18. a	48. d
19. b	49. c
20. c	50. c
21. d	
22. c	
23. b	
24. a	
25. c	
26. c	
27. d	
28. a	
29. b	
30. b	

