

Outline of Technology Examined in the Examination Departments

(2018.4.23)

Outline of Technology Examined in the Examination Department(Physics, Optics, Social infrastructure and Design)

Division/Subdivision(Code)	IPC	
Measurement Division(2F)	G01F	
	G01G	
	G01K	
	G01L	
	G01P	
	G01D	
	G04BCDFGR	
	G06M	
	G08C	
	G12B	
	A99ZB99ZC99ZD99ZE99ZF99ZG99ZH99Z	
Distance and Electricity Measurement Sub-Division(2S)	G01B	
	G01C(1/-15/, 19/)	
	G01S	
	G01R	
Physical Properties Measurement Sub-Division(2W)	G01JM(11/) N(21/-24/, 27/00-27/10, 27/14-27/24, 27/60-29/)	
Applied Physics Division(2G)	G21CD	
	G01T(1/00-1/16, 1/167-7/)	
	G21FGHJK	
	G21B	
	H05H	
	H01J(1/-21/, 29/00-29/34, 29/46-31/06, 31/10-31/24, 61/-99/) K	
	H01J(23/-27/, 29/36-29/45, 31/08, 31/26-49/)	
	G03B(27/) D	
	G03F(1/-5/, 7/20-7/24, 9/)	
	H01L(21/027-21/033, 21/30, 21/46)	
	B82BY	
	Display Apparatus Sub-Division(2I)	G03B21/-25/, 33/
		G09F(9/)
		H01L27/32
G09G		
Material Analysis and Medical Diagnosis Division(2J)	G01N(1/-19/, 25/, 35/-37/)	
	G01HM(1/-10/, 13/-99/) QVW	
	G01N(27/12, 27/26-27/49, 30/-33/)	
	C40B(20/-30/00, 30/04-30/10, 60/04, 60/10-60/12)	
	B01J(20/281-20/292)	
	A61B(1/-5/05, 5/06-5/22, 7/, 9/-10/)	
Medical Diagnosis Sub-Division(2Q)		
Diagnostic Imaging Sub-Division(2U)	H05G	
	G01T(1/161-1/166)	
	A61B(5/05. 300-5/05. 400, 6/, 8/)	
Applied Optics Division(2H)	B41M(5/, 99/)	
	B44C(1/16-1/175)	
	G03F(7/00-7/18, 7/26-7/42)	
	G03C(1/, 3/00. 301, 5/-11/)	
	G03G(5/-11/)	
	Optical Apparatus Sub-Division(2V)	G02B(7/-25/)
		G03B(1/-19/, 29/-31/, 35/-43/) C(3/00, 3/00. 351-3/02)
Optical Elements and EL Devices Sub-Division(2O)	G02B(1/-5/) C	
	G03H	
	H05B(33/)	
	H01L(51/50-51/56)	

Division/Subdivision(Code)	IPC	
Optical Devices Division(2K)	H01L (33/)	
	H01L (31/, 51/42-51/48)	
	H02S	
	H01S	
	Optical Control Sub-Division(2L)	G02B (6/00-6/34, 6/36-6/54)
G02B (6/35, 26/-27/)		
G02F (1/00-1/125, 1/21-7/)		
G02F (1/13-1/19)		
Business Machinery Division(2C)	G03G (13/-15/00. 303, 15/00. 550-21/)	
Printing Presses and Printers Sub-Division(2P)	B41BCDFGKLM (1/-3/, 7/-9/) N	
	B41J (1/-9/, 17/-35/)	
Natural Resources Division(2B)	A01BCDF	
	B02B	
	A01K (1/-67/00. 501, 67/033, 67/033. 502-99/) L	
	B68BC	
	B27DHJKLMN	
	A01GM	
	A23K	
	E02D	
	E02F	
	E21BC	
	E01BCDFH	
	E21DF	
	E02BC	
	E03BF	
	Education and Game Sub-Division(2D)	A63BCD
		A63GJK
		A63F (7/00, 7/04-7/40)
		A63F (9/-13/)
		A63H
		B42BCDF
B43KLM		
G09B		
G09DF (1/-7/, 11/-27/)		
Amusement Division(2T)	A63F7/02	
Amusement Machine Sub-Division(2X)	A63F7/02	
General Amusement Sub-Division(2N)	A63F (1/-5/)	
Construction Division(2E)	E04BC	
	F16S	
	E04G	
	E06C	
	A45F	
	E04H	
	H02S (20/00-20/21, 20/30-20/32)	
	E04DF	
	H02S (20/22-20/26)	
	Housing Equipment Sub-Division(2R)	A47H
E05BCDFG		
E06B		
A47B		
A47K		
E03CD		

Outline of Technology Examined in the Examination Department (Mechanical Technology)

Division/Subdivision(Code)	IPC	
Automatic Control Division(3H)	B60LM	
	B61L	
	G08G	
	G01C (17/, 21/-25/)	
	H01M (8/04-8/06)	
	Fluid Control Sub-Division(3O)	B67D
		F03BCD
		F04BCDF
		F15BCD
		F16KT
Dynamo-Electronic Machines and Control Sub-Division(3V)	B06B	
	H02KN	
	H02P	
Motive Machinery Division(3G)	F01L	
	F02B (1/-23/) D (31/-39/) F	
	F02N	
	F02D (1/) M (37/-71/)	
	A62BC	
	B60K (35/-37/06)	
	F01N	
	Turbine and Engine Component Sub-Division(3S)	F01DK
		F02CGK
		F23R
		F01BC
		F02B (53/-79/)
		F03G
		F01MP
	F02B (25/-51/) M (1/-35/) P (1/-5/14, 5/16-23/)	
	Drive Control Sub-Division(3Z)	F02D (3/-29/, 41/-45/) P (5/145-5/155)
		B60K (6/20-6/547) W (20/)
B60K (31/) W (10/-10/30, 30/-50/16)		
B60DR (19/)		
B62D (17/-39/)		
B60FPV		
Transportation Division(3D)	B62BCD (41/-67/)	
	B60K (1/-6/12, 7/-15/, 25/-28/)	
	F16M	
	B61BCDFGJK	
	B62HJKM	
	B63BCGHJ	
	B64BCDFG	
	F03H	
	F41ABCFGHJ	
	F42BCD	
	Vehicle Control Sub-Division(3Q)	B60BC (23/-99/)
		B60G
		B60JR (1/-17/)
		B60R (21/-99/) S
		B62D (1/-15/)
		B60K (17/-23/)
	General Machinery Division(3J)	F16H (61/26-61/36, 63/-63/38)
G05G		
F16CN		
F16D (1/-47/)		
F16G		
F16H (1/-57/)		
F16H (59/-61/24, 61/38-61/64, 63/40-63/)		
Brakes and Engineering Elements Sub-Division(3W)		B60T
		B61H
		B62L
		F16D (49/-71/)
	F16B	
	F16FP	
	F16J	

Division/Subdivision(Code)	IPC	
Production Machinery Division(3C)	B23BCDFGP (5/-17/, 23/-25/) Q (1/-13/, 16/-41/)	
	B24BCD	
	B25BCDFGH	
	B26B	
	Processing Machinery Sub-Division(3P)	B21D (1/-45/)
		B21D (47/-55/) FGHJKL
		B30B
		B23H
		B23K (1/-25/, 28-33/, 37/)
		B23K (26/)
		B26DF
		B27BCFG
		B28D
		B44BC (1/-1/14, 1/18-7/) DF
	B81BC	
Robotics Sub-Division(3U)	B23Q (15/)	
	G05B (19/18-19/416, 19/42-19/46)	
	B25J	
	G05B (1/-19/16, 21/-99/) D	
	G05B (19/418)	
Logistics Division(3F)	B23P (19/-21/)	
	H05K (3/30, 13/)	
	B07C	
	B65G (1/-69/)	
	B66BCDF	
	Terminal Parts Sub-Division(3T)	H01R
		H01HT
		H02BG (5/)
		H05F
	Textile Processing and Packaging Machinery Division(3B)	A41BCDFH
A42BC		
A44B		
A61F (13/-17/) L (15/)		
B41J (11/-15/)		
B65H		
G03G (15/00, 400-15/00, 481)		
D01BCGH		
D02H		
D03CD (29/-51/) J		
D04B (3/-19/, 23/-39/)		
D05BC		
Containers and Packaging Sub-Division (3N)		B31BCDF
		B65BC
		B67BC
		B65D (1/-55/)
		B65D (57/-85/)
		B65D (88/-91/)
	F17BC	

Division/Subdivision(Code)	IPC
Living related Machinery Division(3K)	A45D (1/-7/, 19/-20/)
	A47L (5/-9/, 15/-21/)
	D06F (1/-51/, 58/-95/)
	A47L (1/-4/, 11/-13/, 23/-25/)
	B08B
	B65F
	D06F (53/-57/)
	A47F
	A41G
	A43BCD
A44C	
A45BCD (8/, 24/-44/, 97/)	
A45F (3/)	
A46BD	
A47G	
A61C (17/)	
B29D (35/)	
Nursing and Service Apparatus Sub-Division(3R)	A47CD
	B60N
	B68G
	A61F(5/-6/)G(1/-15/,17/-99/)H(33/-37/)
G07BCDFG	
Lighting Sub-Division(3X)	B60Q
	F21HKLSV
	H05B (31/, 35/-43/)
Heating, Refrigerating and Air-conditioning Engineering Division(3L)	A21BC
	A22BC
	A23NP
	H05C
	A24BCDF
	A47J
	F22BDG
	F16L
	F17D
	F24BC
	F24DHVTS
	F26B
	H05B (1/-11/)
	F23BCDGHJKLMNQ
	B60H
	F24F (1/-5/, 11/)
F24F (6/-9/, 12/-13/)	
F25B	
F25CD	
F28BCDFG	
Medical Device Division(3E)	A61C (1/-17/, 19/) F (7/) G (15/14-15/18) H (1/-31/, 39/-99/) JM (21/)
	A61F (2/82-2/97) M (3/-19/, 25/-36/08, 37/-99/)
Surgical and Therapeutic Device Sub-Division(3I)	A61B (13/-18/18, 34/-90/) DF (2/01) N (7/)
	A61B (18/20-18/28) M (36/10-36/14) N (1/-5/)
	A61F (2/00, 2/02-2/80, 3/-4/, 9/-11/), M (1/)

Outline of Technology Examined in the Examination Department(Chemistry, Life Science and Material Science)

Division/Subdivision(Code)	IPC
Inorganic Chemistry Division(4G)	C01BCDFG C40B (40/18) B01J (21/-38/)
Ceramics Sub-Division(4T)	C04B B28BC C03BC
Vapor Deposition and Single Crystal Growth Technology Sub-Division(4G)	C23C (14/-16/) C30B
Material Processing Division(4E)	B21B B21C B22CD B22F C23C (exclude 14/-16/) DFG C25BCDF C21BC C22B C22C (1/, 3/, 26/, 29/, 33/, 47/-49/)
Resin Processing Sub-Division(4R)	B29B (7/-11/14, 13/-15/06) B29C (31/-43/, 45/-67/08, 67/24, 69/-71/02, 73/) B29D (1/-29/, 33/, 99/) B33Y
Metals and Electrochemistry Division(4K)	B23K (35/) C21D C22C (5/-25/, 27/-28/, 30/, 35/-45) F F27BD
Electrochemistry Sub-Division(4X)	H01M (2/)
Batteries Sub-Division(4X)	H01M (exclude 2/, 8/04-8/06, 10/42-10/667), H01G (9/20)
Medical Science Division(4C)	A61K (31/-33/) P
Pharmaceutical Preparations Sub-Division(4C)	A61K (6/, 9/, 47/), A61L (15/-33/)
Biopharmaceutical Sub-Division(4U)	A61K (35/-45/, 48/-51/)
Biotechnology Division(4B)	C12N (15/) C40B (10/, 40/02, 40/06-40/10, 50/06) C12MN (exclude 15/) PQ A01HK (67/02-67/027, 67/033, 501)
Foods and Microorganisms Sub-Division(4N)	A01J A21D A23BCDFGJL C12CFGHJL C13BK
Protein Engineering Sub-Division(4B)	C07GK

Division/Subdivision(Code)	IPC	
Environmental Chemistry Division(4D)	C02F (1/00-1/42, 1/46-11/20)	
	B01D (21/)	
	B01J (39/-49/)	
	B01D (53/22, 61/-71/)	
	C02F (1/44)	
	B02C	
	A61K (8/) Q	
	Separation Sub-Division(4Q)	B01D (9/-19/, 23/-51/, 57/-59/)
		B03BCD
		B04BC
B07B		
B01F (1/-15/)		
A62D		
A61L (9/)		
B01D (53/00-53/18, 53/24-53/96)		
B01B		
B01D (1/-8/)		
B01J (2/-12/, 14/-20/)		
F25J		
B01L		
Organic Chemistry Division(4H)	C07BCF	
	C40B (40/00, 40/04, 40/16, 50/00, 50/04, 50/08-60/02, 60/06-60/08, 60/14-99/00)	
	Heterocyclic Compounds Sub-Division(4P)	C07D (201/-421/)
		C07D (451/-521/)
		C07HJ
	Agrochemicals and Dyes Sub-Division(4H)	C08B
		C40B (40/12)
		D06P
	Applied Organic Chemicals Division(4V)	A61L (2/, 11/-12/)
		B01F (17/)
B01J (13/)		
B09BC		
B29B (17/)		
C08J (11/)		
C10BCFGHJKL		
C06BCDF		
C05BCDFG		
C09FG		
C10M		
C11BCD		
C09K		
H01B (1/, 3/, 5/, 17/, 19/)		
Coatings and Adhesives Sub-Division(4Z)		C09D (exclude 11/-17/)
		C09J
		C09CD (11/-17/)
Polymer Division(4J)	C08F	
	C08G	
	C08C	
	C08H	
	C09H	
	C40B (40/14)	
Polymer Composition Sub-Division(4W)	C08KL	

Division/Subdivision(Code)	IPC
Plastic Engineering Division(4F)	B29B (11/16, 15/08-15/14) C (71/04), C08J (3/-9/, 99/)
	B29C44/00-44/60, B29C67/20
	B29D30/00-30/72, B60C (1/-19/)
Textiles and Layered Products Sub-Division(4S)	B05BCD
	B32B
	B68F
	C14BC
	D03D (1/-27/)
	D04B (1/, 21/) CDGH
	D06N
	D01DF
	D02GJ
	D06BCGHJLMQ
D07B	
D21BCDFGHJ	

Outline of Technology Examined in the Examination Department(Electronic Technology)

Division/Subdivision(Code)	IPC
Electronic Commerce Technology Division(5L)	G06F (19/00) , G06Q (10/, 30/, 50/-99/)
	G06F (19/10-19/28)
	G40B (30/02, 50/02)
Fintech Sub-Division	G06F (17/40) , G06Q (20/, 40/)
Database and Language Processing Sub-Division(5M)	G06F (17/30)
	G06F (17/20-17/28)
Interface Division(5E)	G06F (3/01-3/0489, 3/14-3/16)
	H03M (11/)
	G06F (1/, 3/05, 3/09-3/13)
	G06CDEGJ
	G06F (5/-7/)
Storage Management Sub-Division (5N)	G06K (1/-7/, 11/-21/)
	G06F (12/00, 550-12/12, 12/16, 13/16-13/18)
	G11C
Data Processing Division(5B)	G06F (9/22-9/42, 9/45, 150-9/54, 15/00-17/18)
	G06F (8/00-8/77, 9/00-9/06, 9/44-9/455, 100)
	G06F (11/)
	G06N
Image Processing Sub-Division(5H)	G06K (9/) T (1/00, 280-9/)
	G06T (1/00-1/00, 200, 11/-19/)
	G06F (17/50)
Information Security Sub-Division(5S)	G06F (12/14, 21/00-21/88)
	G09C
	H04KL (9/)
	G06F (3/00, 3/06-3/08, 3/18, 12/00-12/00, 549, 13/00 - 13/00, 301, 13/10-13/14, 13/20-13/42)
Transmission Systems Division(5J)	H04MQ
	H03J (9/)
	G08B
Mobile Communications Systems Sub-Division(5J)	H04B (7/24-7/26) W
Transmission Circuitry Sub-Division(5W)	H03B (1/-29/) CJ (1/-7/) L (1/-9/) D (1/-99/) H (1/-21/) FG (1/-99/) K (3/-99/) M (1/)
Electric Power Systems Division(5G)	H01B (7/-15/)
	H02G (1/-3/, 7/-15/)
	G05F
	H02M
Electric Power Distribution Sub-Division(5T)	H01M (10/42-10/667)
	H02HJ
Digital Communications Division(5K)	H03M (3/-9/, 13/-99/)
	H04B (1/69-1/719, 7/00, 7/02-7/12) J (1/-13/, 99/) L (1/, 5/00-5/18, 5/22-7/, 25/, 27/)
	H04B (1/00-1/68, 1/72-1/76, 3/, 5/, 7/005-7/015, 7/14-7/22, 10/-17/)
	H04HJ (14/) L (5/20, 15/-23/)
	H01PQ
Data Networks Sub-Division(5X)	H04L (12/, 13/, 29/)
	G06F 13/00, 351 - 13/00, 680
Video Systems Division(5C)	H04N (5/38-5/46, 5/76-5/956, 7/10-7/173, 7/20-7/56, 9/79-9/898, 19/, 21/)
	G11B
Television Sub-Division(5P)	H04N (5/00, 5/222-5/257, 5/66-5/74, 7/00-7/088, 7/18, 9/00, 9/12-9/43, 11/-17/)
Still Picture Sub-Division(5V)	H04N (1/, 3/, 5/04-5/217, 5/262-5/378, 5/50-5/655, 9/04-9/11, 9/44-9/78)

Division/Subdivision(Code)	IPC
Electronic Components Division(5D)	H01CFG(exclude 9/20)
	H05K(1/-3/28, 3/32-3/46)
	H05K(5/, 7/, 9/, 10/, 11/)
	H01L(21/54, 23/, 25/)
Acoustic Systems Sub-Division(5Z)	G10BCDFGHL
	H04RS
	G10K
Electronic Device Division(5F)	H01L(21/334-21/338, 21/82-21/822, 21/8232-21/8238, 21/8249-21/8258, 27/00-27/04, 27/06, 102-27/06, 331, 27/07, 102, 27/085-27/092, 27/118, 27/13, 27/28, 29/76, 29/78-29/78, 301, 29/786, 51/00-51/40)
	H01L(21/328-21/332, 21/8222-21/8228, 21/8248, 27/06-27/06, 101, 27/07-27/07, 101, 27/08-27/082, 27/095-27/098, 27/118, 101, 27/18, 29/00-29/38, 29/66-29/749, 29/772-29/778, 29/78, 651-29/78, 658, 29/80-29/812, 29/86-29/96, 39/)
Applied Electronic Device Sub-Division(5F)	H01L(21/339, 27/14-27/16, 27/30, 29/762-29/768, 35/00-37/04)
	H01L(21/62, 21/8229, 21/8239-21/8246, 27/10-27/11597, 27/20-27/26, 29/788-29/792, 29/82-29/84, 41/-49/)
Electronic Device Manufacturing Process Sub-Division(5O)	H01L(21/18-21/20, 21/22-21/288, 21/3205-21/326, 21/34-21/36, 21/38-21/445, 21/477-21/479, 21/70-21/768, 21/84-21/86, 21/88-21/90, 27/12, 29/40-29/51)
	H01L(21/203-21/208, 21/302, 21/306-21/32, 21/363-21/368, 21/461, 21/465-21/4763, 21/86)
	H01L(21/00-21/16, 21/304, 641-21/304, 651, 21/447-21/449, 21/48-21/52, 21/56-21/607, 21/64-21/66, 21/98)
	H01L(21/301, 21/304-21/304, 631, 21/463, 21/78-21/786)
	H01L(21/67-21/687)